

Massive resource - multiple growth pathways...

ASX ANNOUNCEMENT 12 JULY 2022

Drilling Extends Manganese Mineralisation at Butcherbird

- Exploration drilling results extend manganese mineralisation beyond defined resources.
- Assay data confirms multiple extensions to known manganese mineralisation.
- Significant manganese mineralisation intersected where there is no EM response, the tool used for historical target generation.
- Suggests potential for future discoveries not based on traditional EM signature.
- New information will be included in the next resource model update for global resource at Butcherbird.
- Further drilling being planned to infill and better define mineralisation extensions and evaluate further extensions to mineralised trends.



Element 25 Limited (E25 or Company) (ASX:E25) is pleased to announce that assay results have now been received for exploration drilling completed in the March 2022 quarter.

A reverse circulation drilling programme comprising 34 holes for 904m was completed in the first quarter of 2022 targeting areas where there was no historical drilling. The programme was designed to test for extensions to the known manganese resource areas. The drilling primarily targeted the areas to the west and south of the Ilgarari Ridge deposit.

Manganese mineralisation was logged multiple drillholes and assays have now confirmed commercially significant grades and widths of manganese in multiple holes. Several holes were drilled to sterilise potential infrastructure locations as part of the planning for the proposed expanded production at Butcherbird, however a number these holes also intersected significant manganese mineralisation forcing a re-evaluation of the proposed layout.

E52/2350	
No Holes	22
Total m Drilled	610
Metres Sampled	600
E52/3606	
No Holes	12
Total m Drilled	294
Metres Sampled	288
Total	
No Holes	34
Total m Drilled	904
Metres Sampled	888

Table 1. Exploration drilling summary

COMPANY SNAPSHOT

Market Summary

ASX code: E25
 Shares on issue: 153M
 Share price: \$0.56

Board of Directors:

Seamus Cornelius Chairman
 Justin Brown MD
 John Ribbons NED

Element 25 Limited is developing the world class Butcherbird Manganese Project in Western Australia to produce high quality manganese concentrate and high purity manganese products for traditional and new energy markets.

Geology

The Butcherbird Project area is situated in the Bangemall Basin adjacent to the eastern unconformable boundary of the Savory Basin, in central Western Australia. The Bangemall Basin contains three major stratigraphic units of which the Ilgarari Formation is of primary commercial interest.

Element 25 has undertaken numerous drilling programmes in the region prior to this programme and identified extensive supergene manganese mineralisation which is currently being commercially exploited within mining lease M52/1074 to produce a high silica manganese oxide concentrate for export to international customers.

The geological information recorded as part of the current drilling programme compare favourably with the existing drilling data in terms of geology and mineralised widths and grades of the ore zone, confirming the robustness of the current understanding of the manganese mineralisation in the area. The drilling further confirms that further extensions to the known manganese mineral resources at the Butcherbird Project are likely once this new information is incorporated into the resource model.

Assays

As in previous drilling at Butcherbird, this programme has identified broad widths of near surface supergene enriched manganese oxide mineralisation similar in style the currently mined areas at the Yanneri Ridge deposit to the south.

Economic manganese mineralisation at Butcherbird typically comprises interacted bands of siliceous manganese and waste clay material. This habit lends itself to mechanical upgrading via crushing, washing and ore-sorting in line with current mining and processing operations. There is nothing visually different about the newly discovered mineralisation in this programme.

Hole ID	Northing	Easting	Elevation	Azimuth	Dip
BBRC00246	7,305,367	772,355	616	0	-90
BBRC00247	7,305,005	772,228	621	0	-90
BBRC00248	7,304,870	772,184	625	0	-90
BBRC00249	7,304,575	772,067	628	0	-90
BBRC00250	7,304,399	772,024	617	0	-90
BBRC00251	7,304,201	771,952	620	0	-90
BBRC00252	7,303,997	771,883	624	0	-90
BBRC00253	7,303,795	771,815	623	0	-90
BBRC00254	7,303,594	771,745	629	0	-90
BBRC00255	7,304,394	768,856	620	0	-90
BBRC00256	7,304,456	769,105	619	0	-90
BBRC00257	7,304,520	769,303	621	0	-90
BBRC00258	7,304,597	769,503	622	0	-90
BBRC00259	7,304,486	769,691	619	0	-90
BBRC00260	7,303,315	767,209	614	0	-90
BBRC00261	7,303,102	767,212	621	0	-90
BBRC00262	7,302,903	767,145	613	0	-90
BBRC00263	7,301,700	764,590	622	0	-90
BBRC00264	7,301,600	764,796	617	0	-90
BBRC00265	7,301,423	764,966	616	0	-90
BBRC00266	7,301,257	765,193	617	0	-90
BBRC00267	7,301,106	765,388	617	0	-90
BBRC00268	7,301,125	765,597	621	0	-90
BBRC00269	7,301,172	765,803	632	0	-90
BBRC00270	7,301,192	765,999	622	0	-90
BBRC00271	7,302,848	772,747	607	0	-90
BBRC00272	7,303,098	772,810	627	0	-90
BBRC00273	7,303,090	773,376	642	0	-90
BBRC00274	7,299,803	775,170	633	0	-90
BBRC00275	7,299,908	775,175	626	0	-90
BBRC00276	7,300,094	775,200	624	0	-90
BBRC00277	7,303,405	775,515	620	0	-90
BBRC00278	7,303,597	775,537	623	0	-90
BBRC00279	7,303,838	775,547	617	0	-90

Table 2. Drillhole collar locations

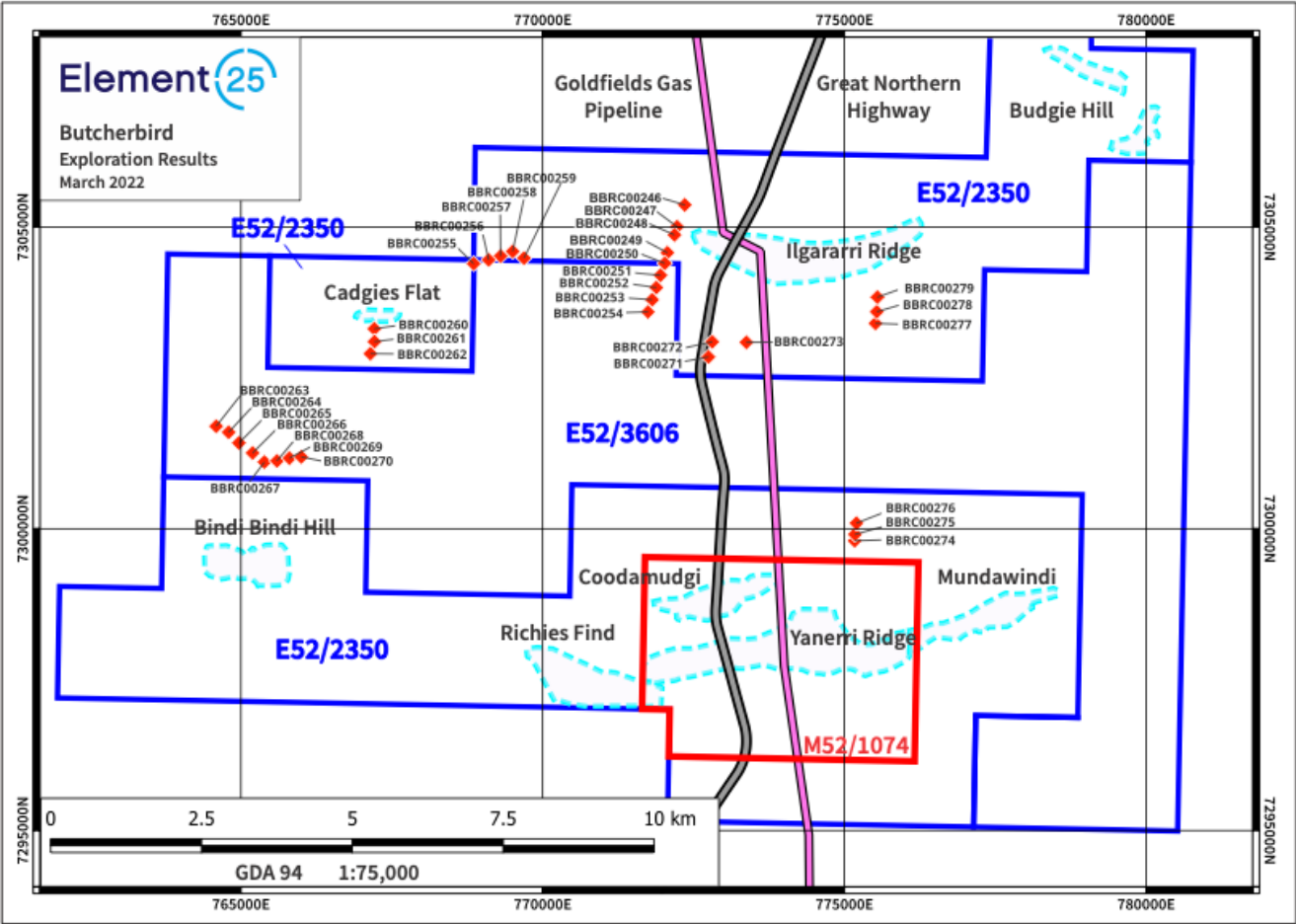


Figure 1. Drillhole collar location plan



Figure 2. Lateritic manganese mineralisation intercepted in exploration drilling at the Butcherbird Project

Hole ID	From	To	Mn %	Fe %	SiO2 %	Al2O3 %	P %	LOI %	Width	Mn %	Fe %
BBRC00246	No significant results										
BBRC00247	13	14	5.1	7.1	55.8	15.50	0.056	5.10	6	5.2	8.9
	14	15	5.7	8.7	53.9	14.40	0.075	5.21			
	15	16	3.0	10.3	55.3	15.30	0.047	4.61			
	16	17	5.2	9.4	53.8	14.90	0.048	5.16			
	17	18	4.6	8.2	55.8	15.00	0.050	5.05			
	18	19	7.4	9.5	50.7	13.80	0.060	5.63			
BBRC00248	11	12	18.6	10.2	37.0	9.94	0.042	8.00	18	10.4	13.4
	12	13	8.3	14.9	45.4	11.10	0.091	6.45			
	13	14	9.6	11.7	48.0	11.60	0.101	6.16			
	14	15	9.7	10.2	48.6	12.20	0.074	6.40			
	15	16	9.6	13.4	46.0	11.20	0.138	6.00			
	16	17	7.7	9.3	51.8	13.40	0.094	6.02			
	17	18	10.8	10.2	47.2	11.80	0.127	6.67			
	18	19	4.8	13.1	51.6	12.80	0.117	5.38			
	19	20	10.5	12.1	45.7	11.80	0.131	6.47			
	20	21	11.9	17.8	38.3	9.20	0.094	6.32			
	21	22	8.8	10.3	50.3	12.30	0.172	5.59			
	22	23	10.8	15.0	42.2	10.40	0.175	6.17			
	23	24	10.0	12.4	46.8	11.00	0.121	5.85			
	24	25	15.9	17.7	32.4	8.61	0.264	7.41			
	25	26	15.7	12.0	40.6	9.31	0.222	6.81			
	26	27	10.3	21.5	37.2	8.37	0.159	5.62			
	27	28	7.5	13.5	48.6	11.40	0.176	5.51			
	28	29	6.4	16.1	47.1	11.20	0.115	5.54			
	31	32	9.9	5.6	47.0	12.50	0.046	13.74			
BBRC00249	13	14	14.2	9.7	42.5	11.30	0.099	7.23	4	10.2	10.9
	14	15	13.3	12.6	40.3	10.60	0.192	7.27			
	15	16	5.4	10.1	52.1	13.90	0.091	6.32			
	16	17	8.0	11.3	48.6	12.40	0.100	6.45			
	19	20	9.0	10.5	48.2	12.00	0.110	6.66			
	20	21	11.7	13.0	42.1	10.60	0.152	7.23			
	24	25	6.6	10.8	50.8	12.60	0.262	5.45			
	25	26	7.4	12.9	48.1	12.30	0.091	5.82			
	30	31	5.4	9.4	55.6	13.30	0.094	4.97			
	31	32	5.5	17.0	46.5	11.10	0.175	5.41			
	32	33	6.7	15.7	46.5	11.10	0.143	5.49			
	33	34	10.2	14.9	42.9	10.70	0.091	6.03	4	7.0	14.2
BBRC00250	4	5	6.0	11.6	51.1	12.50	0.102	6.39	6	7.0	10.2
	5	6	7.3	7.6	53.4	14.20	0.094	5.62			
	6	7	5.4	9.3	54.7	13.60	0.083	5.50			
	7	8	8.7	11.6	48.0	12.20	0.126	5.83			
	8	9	7.6	9.8	50.3	13.20	0.172	6.00			
	9	10	7.2	11.5	49.8	12.80	0.098	5.44			
	12	13	8.1	11.0	49.3	12.00	0.116	5.59			
	13	14	8.7	13.4	46.2	11.50	0.076	5.70			
	14	15	5.8	13.5	49.7	12.40	0.100	5.20			
	15	16	4.3	16.2	48.6	12.20	0.093	4.90			
	16	17	7.2	10.6	52.6	11.90	0.100	5.10			
	17	18	10.6	13.2	44.0	11.10	0.133	5.89			
	18	19	8.6	10.9	49.0	11.90	0.194	5.64			
	19	20	7.4	10.3	52.6	12.10	0.083	5.12			
	21	22	5.0	13.6	50.7	12.00	0.178	5.94	8	7.6	12.4
BBRC00251	0	1	7.9	10.2	52.3	11.40	0.051	6.17			
	3	4	7.6	9.8	52.9	10.40	0.179	5.66			
	4	5	7.1	12.7	49.7	11.60	0.135	5.12			
	6	7	6.8	11.2	50.5	12.20	0.341	5.08			

Hole ID	From	To	Mn	Fe	SiO2	Al2O3	P	LOI	Width	Mn	Fe				
	7	8	14.2	10.7	43.0	10.40	0.121	6.33	4	9.3	10.6				
	8	9	9.9	9.8	48.5	12.50	0.085	5.83							
	9	10	6.3	10.8	51.9	12.40	0.317	5.29							
	12	13	6.1	12.3	51.5	12.20	0.216	5.29							
	13	14	5.2	13.8	50.2	12.30	0.242	5.33							
	14	15	10.3	11.6	46.6	11.60	0.114	6.02							
	15	16	12.4	12.1	42.9	10.60	0.192	6.93							
BBRC00252	0	1	8.1	5.9	58.7	11.30	0.032	6.14	4	8.2	8.7				
	1	2	6.7	9.2	56.0	11.40	0.051	5.52							
	2	3	7.2	10.1	54.0	11.50	0.061	5.23							
	3	4	10.9	9.7	48.5	11.30	0.086	5.84							
	5	6	5.2	11.1	52.7	13.60	0.072	4.93	4	7.2	10.9				
	6	7	8.1	8.6	52.2	13.50	0.071	5.35							
	8	9	7.0	8.5	53.9	13.50	0.069	5.14							
	9	10	9.2	9.5	49.9	12.90	0.115	5.61							
	10	11	5.2	9.3	55.2	13.50	0.136	4.97							
	13	14	6.3	10.6	52.4	12.90	0.111	5.17							
	14	15	9.4	11.0	47.6	11.90	0.176	5.85							
	15	16	7.4	10.7	50.7	12.80	0.109	5.43							
	16	17	5.7	11.4	51.9	13.00	0.095	5.26							
	18	19	9.9	13.2	45.4	11.10	0.109	5.99							
BBRC00253	7	8	10.7	9.1	48.7	12.20	0.071	5.93							
	8	9	13.6	9.7	44.5	11.20	0.169	6.49							
	9	10	11.3	12.1	43.9	11.60	0.217	6.14							
	11	12	6.9	9.8	51.2	13.50	0.184	5.54							
	12	13	5.6	10.5	52.2	13.70	0.097	5.47							
	14	15	6.0	11.7	50.6	13.10	0.099	5.63							
	15	16	5.3	14.0	48.9	12.90	0.116	5.34							
	19	20	5.9	10.3	52.3	12.30	0.223	5.46							
	20	21	9.6	13.1	44.7	10.90	0.114	6.17							
BBRC00254	10	11	8.1	10.9	48.5	12.70	0.119	6.15	4	8.1	11.7				
	15	16	9.3	11.6	45.8	11.90	0.128	6.38							
	16	17	6.6	10.7	50.6	13.10	0.105	5.51							
	17	18	7.5	12.4	47.7	12.00	0.132	5.71							
	18	19	8.9	12.1	44.9	11.80	0.235	6.40							
	BBRC00255	2	3	6.0	10.4	56.7	10.80	0.053				5.05	4	8.9	11.6
		4	5	9.6	11.5	48.6	10.90	0.091				5.76			
		5	6	8.4	11.7	47.7	12.50	0.102				5.71			
		6	7	10.1	13.7	43.8	11.20	0.134				6.18			
7		8	7.5	9.5	51.8	13.40	0.095	5.60							
10		11	11.3	11.2	44.7	11.70	0.086	6.57							
11		12	5.1	8.4	54.3	14.70	0.055	5.61							
12		13	7.2	10.3	49.4	12.70	0.063	6.91							
13		14	7.7	9.8	49.6	12.70	0.108	6.55							
BBRC00256	0	1	5.1	8.0	59.3	12.00	0.029	5.51	11	9.0	13.2				
	1	2	5.7	9.3	56.2	12.30	0.042	5.85							
	2	3	7.6	11.9	50.5	11.50	0.054	5.68							
	3	4	6.2	10.6	52.5	13.40	0.060	5.12							
	4	5	9.6	15.7	42.7	10.60	0.080	6.53							
	5	6	8.1	11.6	48.9	12.60	0.058	5.43							
	6	7	7.3	17.9	43.4	11.00	0.081	5.35							
	7	8	14.2	12.2	41.4	10.40	0.098	6.48							
	8	9	11.6	17.1	39.2	9.73	0.097	6.16							
	9	10	12.9	12.4	42.7	10.60	0.082	6.38							
12	13	10.9	10.3	47.4	11.80	0.082	5.84								

Hole ID	From	To	Mn	Fe	SiO2	Al2O3	P	LOI	Width	Mn	Fe
	13	14	13.3	12.5	42.4	10.20	0.106	6.24			
	15	16	6.8	7.8	54.4	13.70	0.046	5.39			
BBRC00257	0	1	5.6	6.3	61.0	12.60	0.036	5.04			
	1	2	5.3	10.0	57.0	12.10	0.055	5.08			
	2	3	10.3	13.7	44.3	11.00	0.107	5.97			
	3	4	6.7	14.1	47.5	12.60	0.129	5.48			
	4	5	6.8	8.7	52.6	14.30	0.062	5.72			
	5	6	7.0	10.4	51.0	13.50	0.084	5.61			
	6	7	11.6	8.9	46.6	12.60	0.119	6.53			
	7	8	7.0	13.2	48.0	12.80	0.127	5.53			
	8	9	11.4	12.6	43.3	11.20	0.112	6.70			
	9	10	11.2	11.9	44.5	11.10	0.144	6.76			
	10	11	10.8	14.4	42.3	10.60	0.101	6.74			
	11	12	11.3	11.2	44.3	11.30	0.114	7.24			
	12	13	14.5	13.0	38.4	9.27	0.198	8.47			
	13	14	11.2	13.7	42.2	9.91	0.170	7.72			
	14	15	12.7	14.8	38.7	9.08	0.208	8.16			
	15	16	13.6	16.0	37.1	8.62	0.181	8.08			
BBRC00258	0	1	14.2	10.5	45.3	8.98	0.052	7.27			
	3	4	10.2	10.3	49.2	11.10	0.094	5.82			
	4	5	7.8	11.1	49.4	13.20	0.111	5.51			
	6	7	7.9	11.0	49.9	12.60	0.128	5.32			
	7	8	8.5	8.3	51.8	13.00	0.103	6.01			
	8	9	5.1	10.4	54.6	13.10	0.067	5.65			
	9	10	9.2	9.2	50.8	12.40	0.056	6.08			
	10	11	11.5	14.7	41.5	10.30	0.095	7.00			
	11	12	11.0	13.4	42.4	10.90	0.129	7.06			
	12	13	8.5	10.3	49.3	12.90	0.090	6.41			
	13	14	11.3	13.8	41.9	10.50	0.129	7.52			
	14	15	14.5	17.0	35.0	8.44	0.166	8.03			
	15	16	23.8	11.1	29.6	7.25	0.190	8.89			
	16	17	8.5	16.4	42.6	10.30	0.218	7.37			
BBRC00259	7	8	11.6	16.2	39.7	10.50	0.101	6.55			
	8	9	11.7	11.3	44.7	11.60	0.083	6.46			
	16	17	10.7	13.5	44.5	10.40	0.128	6.11			
BBRC00260	1	2	5.0	9.0	53.6	14.80	0.049	6.85			
	2	3	10.7	9.9	45.3	12.90	0.074	7.78			
	3	4	11.4	8.2	43.7	10.50	0.129	9.12			
	4	5	7.4	17.9	43.4	10.70	0.137	5.39			
	5	6	13.1	9.1	45.8	11.80	0.079	6.30			
	9	10	6.5	13.2	47.7	13.50	0.118	6.26			
	12	13	8.5	15.8	39.8	10.70	0.205	10.30			
BBRC00261	3	4	6.6	5.9	58.0	14.10	0.041	5.16			
	4	5	9.5	8.9	50.0	13.40	0.067	5.55			
	5	6	8.1	12.5	48.3	12.70	0.065	5.19			
	6	7	9.0	14.4	45.2	11.80	0.132	5.22			
	7	8	5.5	16.5	47.3	12.20	0.110	4.72			
	8	9	5.4	16.8	46.9	12.10	0.145	4.55			
	9	10	14.7	10.7	42.6	10.70	0.149	6.43			
	10	11	10.9	14.8	43.0	10.60	0.134	5.71			
	11	12	14.8	9.5	43.5	11.00	0.114	6.53			
	12	13	8.3	13.8	46.8	11.80	0.131	5.33			
	13	14	9.1	5.8	55.1	13.70	0.056	5.45			
	14	15	8.7	7.1	52.1	14.80	0.068	5.59			
	16	17	6.3	17.3	44.8	11.90	0.154	5.55			
	17	18	10.1	19.2	37.9	10.10	0.140	6.56			
	18	19	6.7	13.1	45.7	12.40	0.158	8.91			
BBRC00262	7	8	5.3	7.0	57.0	15.10	0.037	5.30			
	8	9	14.2	11.0	41.6	11.40	0.038	6.57			
	12	13	14.0	8.4	45.2	11.80	0.051	6.66			

Hole ID	From	To	Mn	Fe	SiO2	Al2O3	P	LOI	Width	Mn	Fe
	13	14	5.8	8.0	55.5	14.40	0.038	5.08	5	13.1	13.6
	15	16	13.0	12.8	42.4	10.00	0.047	6.00			
	18	19	8.7	16.6	43.2	10.90	0.103	5.80			
	19	20	12.6	12.4	42.1	11.50	0.092	6.29			
	20	21	14.6	14.7	37.5	9.93	0.088	6.69			
	21	22	16.6	11.3	38.5	10.40	0.088	7.05			
BBRC00263	8	9	6.7	9.5	52.5	13.50	0.081	5.69			
	9	10	7.0	10.2	50.7	13.40	0.096	6.07			
	10	11	6.1	9.5	52.9	13.70	0.084	5.69			
	11	12	7.4	10.3	50.3	13.10	0.082	6.03			
	12	13	8.1	9.5	50.0	13.40	0.075	5.67			
	13	14	5.5	9.3	53.9	14.10	0.081	5.25			
	14	15	5.0	13.2	49.8	13.30	0.170	5.49			
BBRC00264	6	7	7.5	10.3	50.3	13.00	0.116	5.71			
	7	8	6.2	11.6	50.7	13.20	0.093	5.24			
	8	9	6.1	12.4	48.9	12.80	0.406	5.32			
	10	11	5.6	12.3	50.5	13.40	0.148	5.49			
	11	12	6.9	8.6	52.3	13.60	0.227	5.76			
	12	13	5.1	14.1	48.2	13.30	0.136	6.14			
	14	15	5.3	5.8	52.6	14.30	0.073	10.76			
BBRC00265	4	5	6.1	9.5	52.7	13.50	0.081	5.66	1	15.0	11.5
	5	6	5.1	9.9	53.4	13.60	0.124	5.75			
	6	7	6.6	10.6	50.7	13.20	0.123	5.90			
	9	10	15.0	11.5	38.3	10.90	0.149	7.60			
	10	11	6.6	9.6	50.4	14.10	0.128	6.05			
BBRC00266	No significant results										
BBRC00267	3	4	6.1	9.5	53.9	10.60	0.035	6.28			
	5	6	6.3	9.8	54.2	12.00	0.095	5.29			
	7	8	8.5	10.9	50.5	10.70	0.115	5.58			
BBRC00268	No significant results										
BBRC00269	6	7	5.7	7.0	54.7	15.20	0.074	5.17			
BBRC00270	10	11	5.1	9.8	53.5	14.20	0.084	5.09			
BBRC00271	3	4	6.4	12.3	50.3	12.70	0.094	5.08			
	4	5	6.3	15.5	47.4	11.60	0.167	5.24			
	5	6	6.7	13.4	49.4	12.00	0.113	5.14			
	6	7	7.3	13.3	48.0	12.10	0.148	5.41			
	7	8	9.9	9.7	49.4	12.10	0.081	5.70			
	9	10	9.7	9.6	49.2	12.50	0.114	5.68			
	10	11	12.3	8.9	46.7	11.70	0.130	6.15			
	13	14	5.0	8.3	55.8	14.50	0.105	4.93			
	14	15	12.6	9.6	45.2	11.60	0.141	6.36			
	15	16	6.5	10.2	52.0	13.80	0.114	5.09			
BBRC00272	2	3	5.5	12.3	46.6	11.40	0.097	7.64			
	4	5	5.6	8.5	50.6	11.50	0.075	8.49			
	6	7	5.1	11.3	50.3	12.40	0.091	6.65			
	7	8	6.1	14.6	39.8	9.75	0.179	9.89			
	8	9	6.3	13.8	48.8	12.10	0.130	5.27			
	10	11	6.8	10.9	51.2	13.20	0.084	5.46			
	11	12	7.0	11.7	49.7	12.80	0.122	5.45			
	13	14	5.4	9.4	52.9	14.40	0.139	5.56			
BBRC00273	16	17	5.0	14.4	48.0	12.90	0.181	6.18			
	0	1	12.1	14.1	41.5	9.50	0.047	8.12			
	1	2	8.1	8.8	54.8	11.20	0.025	6.57			
	2	3	14.9	11.4	42.1	9.10	0.054	7.83			
	5	6	6.1	12.4	51.2	11.80	0.099	6.18			
	6	7	11.4	9.9	48.2	11.00	0.072	6.41			
	7	8	17.2	11.0	38.2	9.33	0.151	8.29			
	8	9	14.6	12.5	40.1	9.67	0.242	7.45			
	9	10	12.0	12.8	42.9	10.80	0.106	6.60			
	10	11	11.4	13.5	43.1	10.60	0.299	6.40			

Hole ID	From	To	Mn	Fe	SiO2	Al2O3	P	LOI	Width	Mn	Fe
	11	12	12.4	15.4	40.6	9.55	0.194	6.39			
	12	13	14.3	15.8	36.7	8.94	0.230	7.48			
	13	14	12.6	14.4	40.4	9.93	0.240	7.05			
	14	15	9.9	16.9	41.8	9.58	0.226	6.15			
	15	16	10.3	16.6	41.0	9.95	0.217	5.99			
	16	17	13.8	14.0	40.3	9.75	0.124	6.50			
	17	18	9.1	10.3	50.3	11.90	0.148	5.42			
	18	19	10.7	11.4	46.0	11.70	0.110	5.85			
	20	21	10.7	11.3	46.5	11.50	0.114	5.75	14	11.8	13.3
	21	22	12.7	12.3	43.0	11.00	0.088	6.14			
	22	23	15.1	15.9	36.2	8.71	0.173	6.45			
	23	24	6.4	11.9	50.1	13.00	0.160	4.99			
	24	25	10.1	11.8	46.8	11.50	0.177	5.62	5	11.0	12.6
BBRC00274	No significant results										
BBRC00275	No significant results										
BBRC00276	No significant results										
BBRC00277	No significant results										
BBRC00278	8	9	5.5	8.8	52.6	14.70	0.059	6.01			
	11	12	5.9	9.1	52.2	14.60	0.052	5.87			
	12	13	5.8	8.8	52.7	14.70	0.055	5.79			
	14	15	5.3	9.0	52.6	14.70	0.082	5.87			
	15	16	5.3	9.6	51.7	14.60	0.142	6.18			
BBRC00279	4	5	5.6	10.5	51.5	13.70	0.048	5.55			
	6	7	7.1	11.5	48.0	13.20	0.095	6.60			
	7	8	5.6	9.2	52.9	14.10	0.036	5.98			
	8	9	7.1	8.8	51.6	14.20	0.046	6.09			
	9	10	6.9	10.8	49.6	13.80	0.056	6.07			
	11	12	7.1	10.4	49.6	13.60	0.068	6.23			
	12	13	7.0	10.9	49.7	13.70	0.113	5.94			

Table 3. Assay results showing all manganese values greater than 5% Mn.

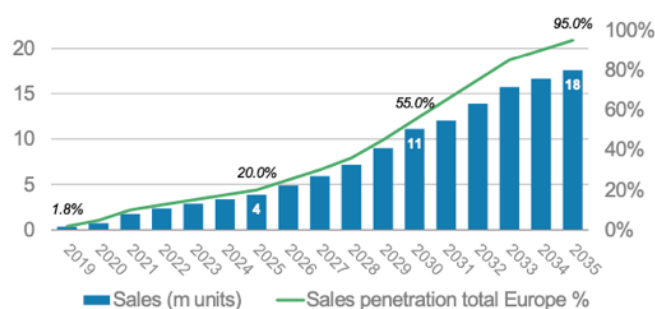
Project team focus

E25's Operations team continues to focus on delivering sustained nameplate production. The Business Development team is focussing on E25's multi-stage development strategy, including a Stage 2 expansion of the concentrate business in parallel with the Stage 3 development of a conversion facility to convert the concentrate material into HPMSM for electric vehicle EV batteries to power the global transition away from fossil fuel powered mobility.

Manganese is emerging as an increasingly important ingredient for EV batteries, with potential supply constraints for nickel and cobalt forcing battery manufacturers to look to high manganese cathodes to produce the vast amount of cathode material required by the EV industry in coming years¹.

The Project is ideally placed to feed this potential demand, with **advanced flowsheet development** work undertaken in 2019 and 2020 confirming a simple leach process for E25 ores which, when combined with offsets, will target the world's first **Zero Carbon Manganese** for EV cathode manufacture².

The Company released a Scoping Study (**Study**) in January 2022³ to update the market prior to the release of the Feasibility Study (**FS**) which is currently being completed.



Source: ACEA, Morgan Stanley Research estimates

Table 4. Europe BEV sales volumes (m) and penetration (%)

As battery electric vehicle (BEV) makers seek to increase the uptake of electric vehicles, one commercial driver is cost reduction. VW's Power Day suggested a 50% cost reduction for batteries with cell design (-15%), production process (-10%), **cathode/anode materials (-20%)** and battery systems (-5%) driving the change. Global BEV penetration is expected to rise to 15.2% by 2025 and 39.5% in 2030 – led by Europe and China, according to Morgan Stanley's latest report⁴. The main driver in the cathode materials is a shift to a high manganese cathode material for the volume production, which is expected to underpin strong demand growth for battery-grade manganese sulphate. Current estimates put demand by 2030 at 13 times current supply and a deficit of 1.3Mt even factoring in planned supply increases⁵.

¹ <https://thenextavenue.com/2021/01/22/svolt-opens-orders-for-its-nmx-nickel-manganese-batteries/>

² Reference: Company ASX release dated 12 February 2019

³ Reference: Company ASX release dated 18 January 2022

⁴ Morgan Stanley Research published 3 September 2021

⁵ Euromanganese company presentation dated September 2021

About the Butcherbird Manganese Project

E25's Butcherbird Manganese Project is a world-class manganese resource with current JORC resources of more than 263Mt of manganese ore⁶. In May 2020, the Company completed a Pre-Feasibility Study (PFS)⁷ with respect to developing the deposit to produce manganese concentrate for export to generate early cashflow with a modest capital requirement⁸. Stage 1 of the Project development plan is complete and E25 has commenced shipping ore to offtake partners.

The PFS also highlighted the Project's potential for significant growth beyond the initial Stage 1 production volumes (the studies examined the potential for a 2X and 3X expansion to Stage 1 within 12 months of initial commissioning), and the Company expects to expedite the expansion of the Project in 2H FY2022.

In addition to the concentrate export business, the Company has completed extensive research & development and laboratory test work into the production of high purity manganese products including battery grade manganese sulphate (**HPMSM**) and High Purity Electrolytic Manganese Metal (**HPEMM**). The work has highlighted that the Butcherbird ores are highly amenable to an ambient temperature, atmospheric pressure leach process, resulting in a very efficient extraction of the manganese into solution, the key requirement for the cost effective and sustainable production of HPMSM and HPEMM.

The Project straddles the Great Northern Highway and the Goldfields Gas Pipeline, providing turnkey logistics and energy solutions. The Company plans to integrate renewable energy into the power solution over time to target a zero-carbon footprint for the Project, which is expected to also reduce energy costs. A cleaner, lower carbon flowsheet and high penetration renewable energy will place Butcherbird at the forefront of sustainable high purity manganese production.

Mineral Resources

Category	Tonnes (Mt)	Mn (%)	Si (%)	Fe (%)	Al (%)
Measured	16	11.6	20.6	11.7	5.7
Indicated	41	10.0	20.9	11.0	5.8
Inferred	206	9.8	20.8	11.4	5.9
Total	263	10.0	20.8	11.4	5.9

Notes:

- Reported at a 7% Mn cut-off for the Measured and Indicated categories and an 8% Mn cut-off for the Inferred categories.
- All figures rounded to reflect the appropriate level of confidence (apparent differences may occur due to rounding)

⁶ Reference: Company ASX release dated 17 April 2019.

⁷ Reference: Company ASX release dated 19 May 2020.

⁸ Reference: Company ASX release dated 3 December 2020.

Mining Reserve

Based on the results of the Pre-Feasibility Study completed in May 2020, E25 has published a Maiden Ore Reserve for the Project of 50.55Mt in the Proved and Probable categories⁹.

Classification	Tonnes (Mt)	Grade (Mn%)	Contained Mn (Mt)	Recovered Mn (Mt)
Proved	14.4	11.5	1.65	1.35
Probable	36.2	9.8	3.56	2.92
Total	50.6	10.3	5.21	4.27

Justin Brown

Managing Director

Company information, ASX announcements, investor presentations, corporate videos and other investor material in the Company's projects can be viewed at: <http://www.element25.com.au>.

Competent Persons Statement

The company confirms that in the case of estimates of Mineral Resource or Ore Reserves, all material assumptions and technical parameters underpinning the estimates in the market announcements dated 17 April 2019 and 19 May 2020 continue to apply and have not materially changed. The company confirms that the form and context in which the competent person's findings are presented has not been materially modified from the original market announcements.

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr Justin Brown who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Exploration Results and Exploration Targets were compiled, Mr Brown was an employee of Element 25 Limited. Mr Brown is a geologist and has sufficient experience which is relevant to the style of mineralisation and type of deposit 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 Brown consents to the inclusion of this information in the form and context in which it appears in this report.

This announcement is authorised for market release by Element 25 Limited's Board of Directors.

⁹ Reference: Element 25 Limited Reserve Statement lodged with ASX 19 May 2020.

Appendix 1 - JORC Code, 2012 Edition – Table 1 – Butcherbird Project Exploration Drilling

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement 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 (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. 	<ul style="list-style-type: none"> Samples were selected for analysis based on visual logs of manganese content. The geology of the manganese mineralisation at Butcherbird comprises interlayered bands of manganese and non manganese clay and shale. Samples selected for assay were split using a riffle splitter from whole metre samples to provide a representative sub-sample for assaying.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Reverse circulation face sampling hammer.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 1m samples were collected using a cyclone into plastic bags to ensure the entire sample was collected for each metre.
Logging	<ul style="list-style-type: none"> 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 quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All samples have been logged to a level of detail to support the interpretation of potentially economic manganese plant feed and to justify resource domaining. Qualitative: Lithology, alteration, mineralisation. The entire length of the hole is geologically logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Samples were collected using a riffle splitter from the 1m samples collected from the drilling rig.. QAQC is limited to the internal lab procedures. Duplicates were not collected for this sampling programme. The samples are believed to be representative for the purposes for which they were collected.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 (eg standards, blanks, duplicates, external 	<ul style="list-style-type: none"> Samples were sent to a certified laboratory for standard XRF assay processing.

Criteria	JORC Code explanation	Commentary
	laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All assay data has been reviewed by multiple in house technical personnel. The drilling is in areas where there were no previous drillholes. The data is presented in an excel spreadsheet provided from the assay laboratory.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> All collar coordinates were collected using handheld GPS in MGA 94 – Zone 51. A regional scale DTM is used for topography.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Based on previous drilling at the project and resource estimation work undertaken based on that drilling, the drill density of the current programme is expected to be sufficient for a future Mineral Resource Estimate.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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 sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> All drill holes are drilled vertically as the stratigraphy is generally sub-horizontal. There is no known sample biasing.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> The samples were transported to a Perth laboratory via a reputable transport company.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> The data and sampling techniques are reviewed internally.

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Butcherbird Project consists of granted exploration licenses E52/2350 and 3606 and Mining Lease M52/1074. The tenure is 100% owned by Element 25 Ltd.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The historical exploration data has been collected by Element 25 Limited and has been reported to high standards. The methods of exploration and techniques used are considered appropriate for the deposit types sought (Mn)

Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> • Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> • The geological target is supergene enriched zones of a regional manganiferous subtidal marine shale.
Drill hole Information	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ◦ 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. 	<ul style="list-style-type: none"> • These details are provided in tabulated form in the body of this report.
Data aggregation methods	<ul style="list-style-type: none"> • 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. • 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. 	<ul style="list-style-type: none"> • Widths and grades are reported based on established experience with mining at the Butcherbird Project which has typically used a 7% resource cut-off for economic mineralisation. • No top-cut is applied as it is not appropriate for this style of mineralisation.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • 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'). 	<ul style="list-style-type: none"> • The mineralisation is flat lying, the drilling is vertical and the intersections are true width.
Diagrams	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Supplied.
Balanced reporting	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • All significant assays have been reported.
Other substantive exploration data	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • All relevant geological information has been reported.
Further work	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • The next phase of exploration work is still in the planning stages.