

Form 603
Corporations Act 2001
Section 671B

Notice of initial substantial holder

To Company Name/Scheme Pilbara Minerals Limited
ACN/ARSN 112 425 788

1. Details of substantial holder (1)

Name Vanguard Group (The Vanguard Group, Inc. and its controlled entities including those listed in Annexure A)
ACN/ARSN (if applicable) N/A
The holder became a substantial holder on 18 September 2023

2. Details of voting power

The total number of votes attached to all the voting shares in the company or voting interests in the scheme that the substantial holder or an associate (2) had a relevant interest (3) in on the date the substantial holder became a substantial holder are as follows:

Class of securities (4)	Number of securities	Person's votes (5)	Voting power (6)
Ordinary	150,980,830	150,980,830	5.020%

3. Details of relevant interests

The nature of the relevant interest the substantial holder or an associate had in the following voting securities on the date the substantial holder became a substantial holder are as follows:

Holder of relevant interest	Nature of relevant interest (7)	Class and number of securities
Vanguard Group	Vanguard Group is the manager of various Mutual funds and accounts and in that capacity has the power to dispose of the shares. The other members of Vanguard Group have a relevant interest under section 608(3) of the Corporations Act.	Ordinary – 150,980,830

4. Details of present registered holders

The persons registered as holders of the securities referred to in paragraph 3 above are as follows:

Holder of relevant interest	Registered holder of securities	Person entitled to be registered as holder (8)	Class and number of securities
Vanguard Group	Brown Brothers Harriman	Various funds and other accounts of Vanguard Group	Ordinary – 8,995,003
Vanguard Group	BNY Mellon	Various funds and other accounts of Vanguard Group	Ordinary – 9,308,329
Vanguard Group	JP Morgan Chase Bank, N.A.	Various funds and other accounts of Vanguard Group	Ordinary – 106,359,133
Vanguard Group	State Street Bank and Trust Company	Various funds and other accounts of Vanguard Group	Ordinary – 26,318,365

5. Consideration

The consideration paid for each relevant interest referred to in paragraph 3 above, and acquired in the four months prior to the day that the substantial holder became a substantial holder is as follows:

Holder of relevant interest	Date of acquisition	Consideration (9)	Class and number of securities
See Annexure A			

6. Associates

The reasons the persons named in paragraph 3 above are associates of the substantial holder are as follows:

Name and ACN/ARSN (if applicable)	Nature of association
N/A	N/A

7. Addresses

The addresses of persons named in this form are as follows:

Name	Address
Vanguard Group	P.O. Box 2600, V26 Valley Forge, PA 19482 USA

print name Shawn Acker capacity Compliance Manager

sign here  date 21 September 2023

DIRECTIONS

- (1) If there are a number of substantial holders with similar or related interests (eg. a corporation and its related corporations, or the manager and trustee of an equity trust), the names could be included in an annexure to the form. If the relevant interests of a group of persons are essentially similar, they may be referred to throughout the form as a specifically named group if the membership of each group, with the names and addresses of members is clearly set out in paragraph 7 of the form.
 - (2) See the definition of "associate" in section 9 of the Corporations Act 2001.
 - (3) See the definition of "relevant interest" in sections 608 and 671B(7) of the Corporations Act 2001.
 - (4) The voting shares of a company constitute one class unless divided into separate classes.
 - (5) The total number of votes attached to all the voting shares in the company or voting interests in the scheme (if any) that the person or an Associate has a relevant interest in.
 - (6) The person's votes divided by the total votes in the body corporate or scheme multiplied by 100.
 - (7) Include details of:
 - (a) any relevant agreement or other circumstances by which the relevant interest was acquired. If subsection 671B(4) applies, a copy of any document setting out the terms of any relevant agreement, and a statement by the person giving full and accurate details of any contract, scheme or arrangement, must accompany this form, together with a written statement certifying this contract, scheme or arrangement; and
 - (b) any qualification of the power of a person to exercise, control the exercise of, or influence the exercise of, the voting powers or disposal of the securities to which the relevant interest relates (indicating clearly the particular securities to which the qualification applies).
- See the definition of "relevant agreement" in section 9 of the Corporations Act 2001.
- (8) If the substantial holder is unable to determine the identity of the person (eg. if the relevant interest arises because of an option) write "unknown".
 - (9) Details of the consideration must include any and all benefits, moneys and other, that any person from whom a relevant interest has acquired has, or may, become entitled to receive in relation to that acquisition. Details must be included even if the benefit is conditional on the happening or not of a contingency. Details must be included of any benefit paid on behalf of the substantial holder of its associate in relation to the acquisitions, even if they are not paid directly to the person from whom the relevant interest was acquired.

To Company	Pilbara Minerals Limited
ACN/ARSN	112 425 788
Substantial Holder Name	Vanguard Group
ACN/ARSN	N/A

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
22-May-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	4,179	4,179
23-May-23	The Vanguard Group, Inc.	BUY	4.72	Ordinary	19,482	19,482
23-May-23	The Vanguard Group, Inc.	BUY	4.72	Ordinary	8,371	8,371
23-May-23	The Vanguard Group, Inc.	BUY	4.72	Ordinary	5,572	5,572
23-May-23	The Vanguard Group, Inc.	BUY	4.77	Ordinary	36,066	36,066
24-May-23	The Vanguard Group, Inc.	BUY	4.63	Ordinary	9,132	9,132
24-May-23	The Vanguard Group, Inc.	BUY	4.63	Ordinary	5,572	5,572
24-May-23	The Vanguard Group, Inc.	BUY	4.69	Ordinary	6,113	6,113
24-May-23	The Vanguard Group, Inc.	SELL	4.80	Ordinary	(8,178)	(8,178)
24-May-23	The Vanguard Group, Inc.	BUY	4.80	Ordinary	83,168	83,168
26-May-23	The Vanguard Group, Inc.	BUY	4.63	Ordinary	16,235	16,235
31-May-23	The Vanguard Group, Inc.	SELL	4.41	Ordinary	(69,200)	(69,200)
31-May-23	The Vanguard Group, Inc.	BUY	4.41	Ordinary	378,651	378,651
31-May-23	The Vanguard Group, Inc.	BUY	4.41	Ordinary	66,359	66,359
1-Jun-23	The Vanguard Group, Inc.	BUY	4.34	Ordinary	1,041	1,041
1-Jun-23	The Vanguard Group, Inc.	BUY	4.42	Ordinary	86,486	86,486
2-Jun-23	The Vanguard Group, Inc.	BUY	4.47	Ordinary	3,010	3,010
2-Jun-23	The Vanguard Group, Inc.	BUY	4.47	Ordinary	307	307
7-Jun-23	The Vanguard Group, Inc.	BUY	4.64	Ordinary	1,210	1,210
13-Jun-23	The Vanguard Group, Inc.	BUY	4.74	Ordinary	7,071	7,071
13-Jun-23	The Vanguard Group, Inc.	BUY	4.74	Ordinary	2,776	2,776
13-Jun-23	The Vanguard Group, Inc.	BUY	4.77	Ordinary	284	284
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	27,936	27,936
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	11,305	11,305
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	46,557	46,557
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	583,478	583,478
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	5,819	5,819
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	82,240	82,240
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	464	464
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	232	232
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	49,639	49,639
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	80,270	80,270
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	17,374	17,374
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	745,846	745,846
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	99,698	99,698
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	404,060	404,060
16-Jun-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	11,854	11,854
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	7	7
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	13	13
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	1,253	1,253
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	1,175	1,175
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	2,026	2,026
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	14,719	14,719
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	300	300
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	2,075	2,075
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	18,815	18,815
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	286	286
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	439	439
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	706	706
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	148	148
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	10,193	10,193
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	615	615
16-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	2,516	2,516
16-Jun-23	The Vanguard Group, Inc.	SELL	4.89	Ordinary	(7,477)	(7,477)
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	1,837	1,837
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	31,483	31,483
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	147	147
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	14,702	14,702
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	3,743	3,743

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	8,822	8,822
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	235,530	235,530
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	25,971	25,971
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	3,570	3,570
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	73	73
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	184,256	184,256
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	127,598	127,598
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	25,348	25,348
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	5,487	5,487
19-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	15,676	15,676
20-Jun-23	The Vanguard Group, Inc.	BUY	4.94	Ordinary	3,592	3,592
20-Jun-23	The Vanguard Group, Inc.	BUY	4.94	Ordinary	1,796	1,796
21-Jun-23	The Vanguard Group, Inc.	BUY	4.91	Ordinary	93,909	93,909
21-Jun-23	The Vanguard Group, Inc.	BUY	5.05	Ordinary	1,347	1,347
23-Jun-23	The Vanguard Group, Inc.	BUY	4.90	Ordinary	1,347	1,347
23-Jun-23	The Vanguard Group, Inc.	BUY	4.99	Ordinary	99,747	99,747
23-Jun-23	The Vanguard Group, Inc.	BUY	4.99	Ordinary	103,924	103,924
26-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	1,796	1,796
26-Jun-23	The Vanguard Group, Inc.	BUY	4.85	Ordinary	35,006	35,006
26-Jun-23	The Vanguard Group, Inc.	BUY	4.85	Ordinary	7,610	7,610
26-Jun-23	The Vanguard Group, Inc.	BUY	4.85	Ordinary	74,547	74,547
27-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	611	611
27-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	36,069	36,069
28-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	611	611
29-Jun-23	The Vanguard Group, Inc.	BUY	4.78	Ordinary	98,491	98,491
29-Jun-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	1,347	1,347
30-Jun-23	The Vanguard Group, Inc.	BUY	4.89	Ordinary	2,694	2,694
30-Jun-23	The Vanguard Group, Inc.	SELL	4.89	Ordinary	(6,273)	(6,273)
5-Jul-23	The Vanguard Group, Inc.	BUY	5.18	Ordinary	79,454	79,454
5-Jul-23	The Vanguard Group, Inc.	BUY	5.18	Ordinary	1,347	1,347
5-Jul-23	The Vanguard Group, Inc.	BUY	5.18	Ordinary	611	611
5-Jul-23	The Vanguard Group, Inc.	BUY	5.18	Ordinary	2,245	2,245
6-Jul-23	The Vanguard Group, Inc.	BUY	4.95	Ordinary	7,610	7,610
6-Jul-23	The Vanguard Group, Inc.	SELL	5.07	Ordinary	(13,915)	(13,915)
6-Jul-23	The Vanguard Group, Inc.	BUY	5.07	Ordinary	616	616
7-Jul-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	2,245	2,245
7-Jul-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	11,132	11,132
7-Jul-23	The Vanguard Group, Inc.	BUY	4.94	Ordinary	57,904	57,904
10-Jul-23	The Vanguard Group, Inc.	BUY	4.92	Ordinary	383	383
10-Jul-23	The Vanguard Group, Inc.	BUY	4.92	Ordinary	20,179	20,179
10-Jul-23	The Vanguard Group, Inc.	BUY	4.99	Ordinary	14,459	14,459
11-Jul-23	The Vanguard Group, Inc.	BUY	5.03	Ordinary	5,519	5,519
11-Jul-23	The Vanguard Group, Inc.	BUY	5.07	Ordinary	11,415	11,415
12-Jul-23	The Vanguard Group, Inc.	BUY	4.92	Ordinary	5,566	5,566
12-Jul-23	The Vanguard Group, Inc.	BUY	5.01	Ordinary	7,600	7,600
13-Jul-23	The Vanguard Group, Inc.	BUY	5.15	Ordinary	26,160	26,160
14-Jul-23	The Vanguard Group, Inc.	BUY	5.08	Ordinary	1,347	1,347
18-Jul-23	The Vanguard Group, Inc.	BUY	5.18	Ordinary	1,347	1,347
19-Jul-23	The Vanguard Group, Inc.	BUY	5.13	Ordinary	4,764	4,764
19-Jul-23	The Vanguard Group, Inc.	BUY	5.13	Ordinary	2,694	2,694
21-Jul-23	The Vanguard Group, Inc.	BUY	4.90	Ordinary	11,370	11,370
21-Jul-23	The Vanguard Group, Inc.	BUY	4.90	Ordinary	22,820	22,820
21-Jul-23	The Vanguard Group, Inc.	BUY	4.90	Ordinary	26,080	26,080
24-Jul-23	The Vanguard Group, Inc.	BUY	4.64	Ordinary	17,434	17,434
25-Jul-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	5,566	5,566
31-Jul-23	The Vanguard Group, Inc.	BUY	4.84	Ordinary	4,764	4,764
1-Aug-23	The Vanguard Group, Inc.	BUY	4.85	Ordinary	1,796	1,796
2-Aug-23	The Vanguard Group, Inc.	SELL	4.80	Ordinary	(16,300)	(16,300)
2-Aug-23	The Vanguard Group, Inc.	BUY	4.87	Ordinary	1,796	1,796
3-Aug-23	The Vanguard Group, Inc.	BUY	4.83	Ordinary	77,879	77,879
3-Aug-23	The Vanguard Group, Inc.	BUY	4.93	Ordinary	19,560	19,560
3-Aug-23	The Vanguard Group, Inc.	BUY	4.93	Ordinary	59,510	59,510
4-Aug-23	The Vanguard Group, Inc.	BUY	4.90	Ordinary	98,687	98,687
4-Aug-23	The Vanguard Group, Inc.	BUY	4.97	Ordinary	23,498	23,498
4-Aug-23	The Vanguard Group, Inc.	BUY	4.99	Ordinary	1,347	1,347
4-Aug-23	The Vanguard Group, Inc.	BUY	4.99	Ordinary	898	898
4-Aug-23	The Vanguard Group, Inc.	BUY	4.99	Ordinary	1,036	1,036
7-Aug-23	The Vanguard Group, Inc.	BUY	5.18	Ordinary	1,796	1,796

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
7-Aug-23	The Vanguard Group, Inc.	BUY	5.21	Ordinary	13,644	13,644
8-Aug-23	The Vanguard Group, Inc.	BUY	5.32	Ordinary	1,796	1,796
8-Aug-23	The Vanguard Group, Inc.	BUY	5.32	Ordinary	616	616
8-Aug-23	The Vanguard Group, Inc.	BUY	5.32	Ordinary	1,796	1,796
10-Aug-23	The Vanguard Group, Inc.	BUY	5.37	Ordinary	9,143	9,143
11-Aug-23	The Vanguard Group, Inc.	BUY	5.30	Ordinary	86,980	86,980
14-Aug-23	The Vanguard Group, Inc.	BUY	4.99	Ordinary	7,146	7,146
16-Aug-23	The Vanguard Group, Inc.	BUY	4.72	Ordinary	19,644	19,644
16-Aug-23	The Vanguard Group, Inc.	BUY	4.72	Ordinary	11,370	11,370
17-Aug-23	The Vanguard Group, Inc.	BUY	4.70	Ordinary	3,143	3,143
17-Aug-23	The Vanguard Group, Inc.	BUY	4.70	Ordinary	449	449
18-Aug-23	The Vanguard Group, Inc.	BUY	4.71	Ordinary	6,505	6,505
18-Aug-23	The Vanguard Group, Inc.	BUY	4.73	Ordinary	1,796	1,796
18-Aug-23	The Vanguard Group, Inc.	BUY	4.73	Ordinary	97,833	97,833
21-Aug-23	The Vanguard Group, Inc.	BUY	4.88	Ordinary	12,886	12,886
22-Aug-23	The Vanguard Group, Inc.	BUY	4.90	Ordinary	99,573	99,573
22-Aug-23	The Vanguard Group, Inc.	BUY	4.90	Ordinary	74,333	74,333
22-Aug-23	The Vanguard Group, Inc.	BUY	4.92	Ordinary	11,370	11,370
22-Aug-23	The Vanguard Group, Inc.	BUY	4.92	Ordinary	22,918	22,918
23-Aug-23	The Vanguard Group, Inc.	BUY	4.99	Ordinary	1,222	1,222
23-Aug-23	The Vanguard Group, Inc.	BUY	4.99	Ordinary	1,347	1,347
23-Aug-23	The Vanguard Group, Inc.	BUY	5.02	Ordinary	18,865	18,865
23-Aug-23	The Vanguard Group, Inc.	BUY	5.02	Ordinary	5,889	5,889
24-Aug-23	The Vanguard Group, Inc.	BUY	5.11	Ordinary	898	898
28-Aug-23	The Vanguard Group, Inc.	BUY	4.54	Ordinary	7,704	7,704
29-Aug-23	The Vanguard Group, Inc.	BUY	4.74	Ordinary	1,796	1,796
30-Aug-23	The Vanguard Group, Inc.	SELL	4.64	Ordinary	(22,264)	(22,264)
30-Aug-23	The Vanguard Group, Inc.	BUY	4.64	Ordinary	611	611
30-Aug-23	The Vanguard Group, Inc.	SELL	4.64	Ordinary	(10,919)	(10,919)
31-Aug-23	The Vanguard Group, Inc.	BUY	4.63	Ordinary	12,128	12,128
1-Sep-23	The Vanguard Group, Inc.	BUY	4.60	Ordinary	99,539	99,539
5-Sep-23	The Vanguard Group, Inc.	BUY	4.68	Ordinary	6,250	6,250
6-Sep-23	The Vanguard Group, Inc.	BUY	4.70	Ordinary	286	286
6-Sep-23	The Vanguard Group, Inc.	BUY	4.70	Ordinary	616	616
6-Sep-23	The Vanguard Group, Inc.	BUY	4.70	Ordinary	2,245	2,245
6-Sep-23	The Vanguard Group, Inc.	BUY	4.70	Ordinary	1,796	1,796
7-Sep-23	The Vanguard Group, Inc.	BUY	4.62	Ordinary	6,250	6,250
11-Sep-23	The Vanguard Group, Inc.	BUY	4.42	Ordinary	2,496	2,496
15-Sep-23	The Vanguard Group, Inc.	SELL	4.47	Ordinary	(16,228)	(16,228)
15-Sep-23	The Vanguard Group, Inc.	BUY	4.49	Ordinary	298,594	298,594
15-Sep-23	The Vanguard Group, Inc.	BUY	4.49	Ordinary	3,080	3,080
15-Sep-23	The Vanguard Group, Inc.	BUY	4.49	Ordinary	3,438	3,438
15-Sep-23	The Vanguard Group, Inc.	BUY	4.49	Ordinary	519	519
15-Sep-23	The Vanguard Group, Inc.	SELL	4.49	Ordinary	(65,230)	(65,230)
15-Sep-23	The Vanguard Group, Inc.	SELL	4.49	Ordinary	(3,577)	(3,577)
15-Sep-23	The Vanguard Group, Inc.	BUY	4.49	Ordinary	30,460	30,460
15-Sep-23	The Vanguard Group, Inc.	BUY	4.49	Ordinary	50,209	50,209
15-Sep-23	The Vanguard Group, Inc.	SELL	4.49	Ordinary	(8,823)	(8,823)
15-Sep-23	The Vanguard Group, Inc.	BUY	4.49	Ordinary	20,440	20,440
15-Sep-23	The Vanguard Group, Inc.	SELL	4.49	Ordinary	(88,859)	(88,859)
15-Sep-23	The Vanguard Group, Inc.	SELL	4.49	Ordinary	(147,745)	(147,745)
18-Sep-23	The Vanguard Group, Inc.	BUY	4.35	Ordinary	616	616
18-Sep-23	The Vanguard Group, Inc.	BUY	4.35	Ordinary	1,347	1,347
18-Sep-23	The Vanguard Group, Inc.	SELL	4.35	Ordinary	(119,217)	(119,217)
18-Sep-23	The Vanguard Group, Inc.	BUY	4.40	Ordinary	1,320	1,320
18-Sep-23	The Vanguard Group, Inc.	BUY	4.40	Ordinary	8,760	8,760
18-Sep-23	The Vanguard Group, Inc.	BUY	4.40	Ordinary	127,969	127,969
19-May-23	Vanguard Investments Australia Ltd.	BUY	4.99	Ordinary	7,588	7,588
25-May-23	Vanguard Investments Australia Ltd.	BUY	4.63	Ordinary	5,691	5,691
31-May-23	Vanguard Investments Australia Ltd.	BUY	4.41	Ordinary	5,691	5,691
1-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.34	Ordinary	5,691	5,691
1-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.34	Ordinary	11,382	11,382
1-Jun-23	Vanguard Investments Australia Ltd.	SELL	4.34	Ordinary	(61,074)	(61,074)
1-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.34	Ordinary	22,620	22,620
6-Jun-23	Vanguard Investments Australia Ltd.	SELL	4.65	Ordinary	(47,670)	(47,670)
7-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.64	Ordinary	15,855	15,855
7-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.64	Ordinary	5,691	5,691
9-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.75	Ordinary	18,120	18,120

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
15-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.66	Ordinary	6,036	6,036
15-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.66	Ordinary	20,358	20,358
16-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.88	Ordinary	20,139	20,139
16-Jun-23	Vanguard Investments Australia Ltd.	SELL	4.89	Ordinary	(47,703)	(47,703)
16-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.89	Ordinary	509	509
22-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.96	Ordinary	5,655	5,655
22-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.96	Ordinary	3,770	3,770
22-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.96	Ordinary	9,198	9,198
23-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.90	Ordinary	5,655	5,655
23-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.90	Ordinary	9,195	9,195
26-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.83	Ordinary	18,144	18,144
26-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.83	Ordinary	3,770	3,770
27-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.83	Ordinary	7,540	7,540
27-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.83	Ordinary	20,439	20,439
29-Jun-23	Vanguard Investments Australia Ltd.	BUY	4.83	Ordinary	7,548	7,548
3-Jul-23	Vanguard Investments Australia Ltd.	BUY	5.06	Ordinary	9,132	9,132
3-Jul-23	Vanguard Investments Australia Ltd.	BUY	5.06	Ordinary	36,016	36,016
3-Jul-23	Vanguard Investments Australia Ltd.	BUY	5.06	Ordinary	18,002	18,002
4-Jul-23	Vanguard Investments Australia Ltd.	SELL	5.17	Ordinary	(146,055)	(146,055)
5-Jul-23	Vanguard Investments Australia Ltd.	SELL	5.18	Ordinary	(112,400)	(112,400)
5-Jul-23	Vanguard Investments Australia Ltd.	SELL	5.18	Ordinary	(22,480)	(22,480)
5-Jul-23	Vanguard Investments Australia Ltd.	BUY	5.18	Ordinary	3,732	3,732
6-Jul-23	Vanguard Investments Australia Ltd.	BUY	5.07	Ordinary	1,866	1,866
7-Jul-23	Vanguard Investments Australia Ltd.	BUY	4.88	Ordinary	22,490	22,490
7-Jul-23	Vanguard Investments Australia Ltd.	BUY	4.88	Ordinary	5,598	5,598
10-Jul-23	Vanguard Investments Australia Ltd.	BUY	4.92	Ordinary	11,196	11,196
10-Jul-23	Vanguard Investments Australia Ltd.	BUY	4.92	Ordinary	38,233	38,233
11-Jul-23	Vanguard Investments Australia Ltd.	BUY	5.03	Ordinary	15,230	15,230
12-Jul-23	Vanguard Investments Australia Ltd.	BUY	4.92	Ordinary	7,464	7,464
17-Jul-23	Vanguard Investments Australia Ltd.	BUY	5.12	Ordinary	234,015	234,015
19-Jul-23	Vanguard Investments Australia Ltd.	SELL	5.13	Ordinary	(9,330)	(9,330)
19-Jul-23	Vanguard Investments Australia Ltd.	BUY	5.13	Ordinary	22,480	22,480
20-Jul-23	Vanguard Investments Australia Ltd.	BUY	5.10	Ordinary	11,235	11,235
21-Jul-23	Vanguard Investments Australia Ltd.	BUY	4.87	Ordinary	13,062	13,062
24-Jul-23	Vanguard Investments Australia Ltd.	BUY	4.59	Ordinary	17,984	17,984
26-Jul-23	Vanguard Investments Australia Ltd.	SELL	5.05	Ordinary	(60,980)	(60,980)
26-Jul-23	Vanguard Investments Australia Ltd.	SELL	5.05	Ordinary	(7,464)	(7,464)
28-Jul-23	Vanguard Investments Australia Ltd.	BUY	4.95	Ordinary	3,732	3,732
31-Jul-23	Vanguard Investments Australia Ltd.	BUY	4.84	Ordinary	3,732	3,732
31-Jul-23	Vanguard Investments Australia Ltd.	SELL	4.84	Ordinary	(9,147)	(9,147)
3-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.94	Ordinary	17,928	17,928
4-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.99	Ordinary	5,598	5,598
8-Aug-23	Vanguard Investments Australia Ltd.	BUY	5.32	Ordinary	5,598	5,598
9-Aug-23	Vanguard Investments Australia Ltd.	BUY	5.29	Ordinary	3,732	3,732
9-Aug-23	Vanguard Investments Australia Ltd.	BUY	5.29	Ordinary	22,290	22,290
10-Aug-23	Vanguard Investments Australia Ltd.	BUY	5.37	Ordinary	22,210	22,210
10-Aug-23	Vanguard Investments Australia Ltd.	BUY	5.37	Ordinary	10,868	10,868
11-Aug-23	Vanguard Investments Australia Ltd.	BUY	5.31	Ordinary	3,734	3,734
14-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.99	Ordinary	5,604	5,604
16-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.75	Ordinary	17,800	17,800
16-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.75	Ordinary	22,250	22,250
16-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.75	Ordinary	5,616	5,616
16-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.75	Ordinary	9,360	9,360
17-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.70	Ordinary	22,240	22,240
17-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.70	Ordinary	3,744	3,744
18-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.73	Ordinary	3,744	3,744
18-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.73	Ordinary	22,210	22,210
21-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.85	Ordinary	3,744	3,744
22-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.94	Ordinary	189,040	189,040
22-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.94	Ordinary	7,488	7,488
23-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.99	Ordinary	13,111	13,111
23-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.99	Ordinary	8,884	8,884
23-Aug-23	Vanguard Investments Australia Ltd.	SELL	4.99	Ordinary	(5,619)	(5,619)
23-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.99	Ordinary	97,724	97,724
23-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.99	Ordinary	22,210	22,210
23-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.99	Ordinary	62,188	62,188
25-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.70	Ordinary	5,619	5,619
25-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.70	Ordinary	22,190	22,190

Annexure A

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
30-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.64	Ordinary	15,330	15,330
30-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.64	Ordinary	22,200	22,200
30-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.64	Ordinary	59,940	59,940
31-Aug-23	Vanguard Investments Australia Ltd.	BUY	4.66	Ordinary	46,702	46,702
1-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.70	Ordinary	11,423	11,423
4-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.77	Ordinary	3,774	3,774
6-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.70	Ordinary	31,108	31,108
6-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.70	Ordinary	3,772	3,772
7-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.62	Ordinary	3,780	3,780
8-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.51	Ordinary	3,782	3,782
11-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.41	Ordinary	8,900	8,900
11-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.41	Ordinary	3,782	3,782
12-Sep-23	Vanguard Investments Australia Ltd.	SELL	4.60	Ordinary	(28,497)	(28,497)
12-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.60	Ordinary	22,240	22,240
12-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.60	Ordinary	5,673	5,673
14-Sep-23	Vanguard Investments Australia Ltd.	SELL	4.39	Ordinary	(15,395)	(15,395)
14-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.39	Ordinary	28,912	28,912
15-Sep-23	Vanguard Investments Australia Ltd.	SELL	4.49	Ordinary	(59,767)	(59,767)
15-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.49	Ordinary	1,902,103	1,902,103
15-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.49	Ordinary	319,835	319,835
18-Sep-23	Vanguard Investments Australia Ltd.	BUY	4.40	Ordinary	815,186	815,186

This is Annexure A of 5 pages referred to in Form 603, Notice of initial substantial holder.

Signature: 

Name: Shawn Acker

Capacity: Compliance Manager

Date: 21 September 2023