

Form 603Corporations Act 2001
Section 671B**Notice of initial substantial holder**

To Company Name/Scheme Alumina Limited

ACN/ARSN 004 820 419

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 02 December 2019

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	144,108,120	144,108,120	5.004%

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 – 144,108,120

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 – 6,485,406
Vanguard Group	BNY Mellon	Various funds and other accounts of Vanguard Group	Ordinary – 7,230,705
Vanguard Group	Citibank	Various funds and other accounts of Vanguard Group	Ordinary – 25,855
Vanguard Group	JP Morgan Chase Bank, N.A.	Various funds and other accounts of Vanguard Group	Ordinary – 72,539,532
Vanguard Group	State Street Bank and Trust Company	Various funds and other accounts of Vanguard Group	Ordinary – 20,174,667
Vanguard Group	Various others	Various funds and other accounts of Vanguard Group	Ordinary – 37,651,955

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 04 December 2019

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 or 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
ACN/ARSN

Alumina Limited
004 820 419

Substantial Holder Name
ACN/ARSN

Vanguard Group
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
2-Aug-2019	The Vanguard Group, Inc.	BUY	2.25	Ordinary	12,664	12,664
5-Aug-2019	The Vanguard Group, Inc.	BUY	2.19	Ordinary	15,830	15,830
6-Aug-2019	The Vanguard Group, Inc.	BUY	2.17	Ordinary	346,668	346,668
6-Aug-2019	The Vanguard Group, Inc.	BUY	2.21	Ordinary	2,120	2,120
6-Aug-2019	The Vanguard Group, Inc.	BUY	2.21	Ordinary	4,522	4,522
6-Aug-2019	The Vanguard Group, Inc.	BUY	2.19	Ordinary	32,447	32,447
6-Aug-2019	The Vanguard Group, Inc.	SELL	2.19	Ordinary	(17,159)	(17,159)
6-Aug-2019	The Vanguard Group, Inc.	SELL	2.19	Ordinary	(11,969)	(11,969)
7-Aug-2019	The Vanguard Group, Inc.	SELL	2.19	Ordinary	(1,718)	(1,718)
8-Aug-2019	The Vanguard Group, Inc.	SELL	2.25	Ordinary	(13,255)	(13,255)
8-Aug-2019	The Vanguard Group, Inc.	BUY	2.23	Ordinary	6,250	6,250
9-Aug-2019	The Vanguard Group, Inc.	BUY	2.29	Ordinary	318,581	318,581
9-Aug-2019	The Vanguard Group, Inc.	BUY	2.27	Ordinary	6,360	6,360
13-Aug-2019	The Vanguard Group, Inc.	SELL	2.29	Ordinary	(18,557)	(18,557)
13-Aug-2019	The Vanguard Group, Inc.	BUY	2.29	Ordinary	4,240	4,240
14-Aug-2019	The Vanguard Group, Inc.	BUY	2.31	Ordinary	1,528	1,528
15-Aug-2019	The Vanguard Group, Inc.	SELL	2.28	Ordinary	(15,906)	(15,906)
15-Aug-2019	The Vanguard Group, Inc.	BUY	2.26	Ordinary	359,238	359,238
19-Aug-2019	The Vanguard Group, Inc.	BUY	2.20	Ordinary	4,522	4,522
19-Aug-2019	The Vanguard Group, Inc.	BUY	2.19	Ordinary	25,924	25,924
19-Aug-2019	The Vanguard Group, Inc.	SELL	2.19	Ordinary	(2,446)	(2,446)
20-Aug-2019	The Vanguard Group, Inc.	BUY	2.15	Ordinary	4,522	4,522
21-Aug-2019	The Vanguard Group, Inc.	SELL	2.16	Ordinary	(4,070,413)	(4,070,413)
22-Aug-2019	The Vanguard Group, Inc.	SELL	2.17	Ordinary	(73,217)	(73,217)
23-Aug-2019	The Vanguard Group, Inc.	BUY	2.12	Ordinary	4,522	4,522
27-Aug-2019	The Vanguard Group, Inc.	SELL	2.16	Ordinary	(17,050)	(17,050)
29-Aug-2019	The Vanguard Group, Inc.	BUY	2.12	Ordinary	41,250	41,250
2-Sep-2019	The Vanguard Group, Inc.	BUY	2.21	Ordinary	24,275	24,275
6-Sep-2019	The Vanguard Group, Inc.	BUY	2.22	Ordinary	1,528	1,528
10-Sep-2019	The Vanguard Group, Inc.	SELL	2.26	Ordinary	(564)	(564)
16-Sep-2019	The Vanguard Group, Inc.	BUY	2.46	Ordinary	7,953	7,953
16-Sep-2019	The Vanguard Group, Inc.	BUY	2.46	Ordinary	4,522	4,522
16-Sep-2019	The Vanguard Group, Inc.	BUY	2.46	Ordinary	14,781	14,781
20-Sep-2019	The Vanguard Group, Inc.	SELL	2.46	Ordinary	(12,538)	(12,538)
20-Sep-2019	The Vanguard Group, Inc.	SELL	2.46	Ordinary	(17,266)	(17,266)
20-Sep-2019	The Vanguard Group, Inc.	SELL	2.46	Ordinary	(6,413)	(6,413)
24-Sep-2019	The Vanguard Group, Inc.	BUY	2.40	Ordinary	36,209	36,209
24-Sep-2019	The Vanguard Group, Inc.	SELL	2.40	Ordinary	(3,231)	(3,231)
25-Sep-2019	The Vanguard Group, Inc.	BUY	2.37	Ordinary	36,485	36,485
25-Sep-2019	The Vanguard Group, Inc.	BUY	2.34	Ordinary	13,266	13,266
27-Sep-2019	The Vanguard Group, Inc.	SELL	2.38	Ordinary	(2,311)	(2,311)
30-Sep-2019	The Vanguard Group, Inc.	BUY	2.37	Ordinary	3,860	3,860
1-Oct-2019	The Vanguard Group, Inc.	BUY	2.42	Ordinary	4,837	4,837
2-Oct-2019	The Vanguard Group, Inc.	BUY	2.35	Ordinary	1,930	1,930
2-Oct-2019	The Vanguard Group, Inc.	BUY	2.35	Ordinary	4,522	4,522
4-Oct-2019	The Vanguard Group, Inc.	BUY	2.31	Ordinary	4,522	4,522
8-Oct-2019	The Vanguard Group, Inc.	BUY	2.29	Ordinary	4,522	4,522
11-Oct-2019	The Vanguard Group, Inc.	BUY	2.25	Ordinary	14,055	14,055
16-Oct-2019	The Vanguard Group, Inc.	BUY	2.21	Ordinary	3,860	3,860
21-Oct-2019	The Vanguard Group, Inc.	BUY	2.30	Ordinary	3,860	3,860
21-Oct-2019	The Vanguard Group, Inc.	BUY	2.30	Ordinary	1,361	1,361
25-Oct-2019	The Vanguard Group, Inc.	SELL	2.35	Ordinary	(31,812)	(31,812)
25-Oct-2019	The Vanguard Group, Inc.	BUY	2.35	Ordinary	3,704	3,704
25-Oct-2019	The Vanguard Group, Inc.	BUY	2.35	Ordinary	6,783	6,783
25-Oct-2019	The Vanguard Group, Inc.	BUY	2.34	Ordinary	1,536	1,536
25-Oct-2019	The Vanguard Group, Inc.	BUY	2.34	Ordinary	35,849	35,849
25-Oct-2019	The Vanguard Group, Inc.	SELL	2.34	Ordinary	(81)	(81)
28-Oct-2019	The Vanguard Group, Inc.	BUY	2.28	Ordinary	75,875	75,875
29-Oct-2019	The Vanguard Group, Inc.	SELL	2.27	Ordinary	(31,287)	(31,287)
31-Oct-2019	The Vanguard Group, Inc.	SELL	2.27	Ordinary	(32,097)	(32,097)
1-Nov-2019	The Vanguard Group, Inc.	BUY	2.26	Ordinary	857	857
4-Nov-2019	The Vanguard Group, Inc.	BUY	2.31	Ordinary	23,660	23,660

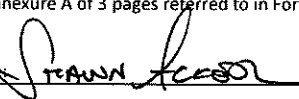
Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
8-Nov-2019	The Vanguard Group, Inc.	BUY	2.43	Ordinary	4,522	4,522
8-Nov-2019	The Vanguard Group, Inc.	BUY	2.42	Ordinary	1,536	1,536
15-Nov-2019	The Vanguard Group, Inc.	BUY	2.48	Ordinary	4,522	4,522
18-Nov-2019	The Vanguard Group, Inc.	BUY	2.50	Ordinary	5,259	5,259
19-Nov-2019	The Vanguard Group, Inc.	BUY	2.47	Ordinary	1,536	1,536
20-Nov-2019	The Vanguard Group, Inc.	BUY	2.42	Ordinary	5,731	5,731
21-Nov-2019	The Vanguard Group, Inc.	BUY	2.39	Ordinary	4,522	4,522
21-Nov-2019	The Vanguard Group, Inc.	BUY	2.39	Ordinary	1,186	1,186
22-Nov-2019	The Vanguard Group, Inc.	SELL	2.39	Ordinary	(2,798)	(2,798)
25-Nov-2019	The Vanguard Group, Inc.	BUY	2.41	Ordinary	3,235	3,235
26-Nov-2019	The Vanguard Group, Inc.	SELL	2.32	Ordinary	(740)	(740)
26-Nov-2019	The Vanguard Group, Inc.	BUY	2.32	Ordinary	2,261	2,261
26-Nov-2019	The Vanguard Group, Inc.	BUY	2.32	Ordinary	10,306	10,306
27-Nov-2019	The Vanguard Group, Inc.	BUY	2.33	Ordinary	1,753	1,753
27-Nov-2019	The Vanguard Group, Inc.	BUY	2.33	Ordinary	4,837	4,837
29-Nov-2019	The Vanguard Group, Inc.	BUY	2.31	Ordinary	4,522	4,522
29-Nov-2019	The Vanguard Group, Inc.	BUY	2.31	Ordinary	1,536	1,536
29-Nov-2019	The Vanguard Group, Inc.	BUY	2.31	Ordinary	1,418	1,418
2-Dec-2019	The Vanguard Group, Inc.	BUY	2.30	Ordinary	46,494	46,494
6-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.19	Ordinary	17,524	17,524
6-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.19	Ordinary	19,458	19,458
6-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.19	Ordinary	19,458	19,458
6-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.19	Ordinary	71,843	71,843
7-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.18	Ordinary	30,660	30,660
8-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.23	Ordinary	23,771	23,771
9-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.28	Ordinary	78,655	78,655
12-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.26	Ordinary	23,705	23,705
13-Aug-2019	Vanguard Investments Australia Ltd.	SELL	2.27	Ordinary	(32,982)	(32,982)
14-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.31	Ordinary	17,588	17,588
15-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.29	Ordinary	17,584	17,584
16-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.19	Ordinary	68,209	68,209
20-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.16	Ordinary	85,814	85,814
21-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.16	Ordinary	13,203	13,203
27-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.16	Ordinary	15,763	15,763
27-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.16	Ordinary	50,336	50,336
27-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.16	Ordinary	893,915	893,915
28-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.13	Ordinary	45,711	45,711
28-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.13	Ordinary	52,422	52,422
29-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.12	Ordinary	13,254	13,254
30-Aug-2019	Vanguard Investments Australia Ltd.	BUY	2.17	Ordinary	59,587	59,587
2-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.21	Ordinary	47,960	47,960
3-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.18	Ordinary	239,907	239,907
4-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.16	Ordinary	46,951	46,951
4-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.16	Ordinary	17,712	17,712
5-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.19	Ordinary	17,776	17,776
5-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.19	Ordinary	79,427	79,427
5-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.19	Ordinary	74,448	74,448
9-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.24	Ordinary	17,776	17,776
13-Sep-2019	Vanguard Investments Australia Ltd.	SELL	2.45	Ordinary	(4,769)	(4,769)
17-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.40	Ordinary	42,514	42,514
17-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.40	Ordinary	42,275	42,275
19-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.41	Ordinary	13,338	13,338
20-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.46	Ordinary	40,650	40,650
20-Sep-2019	Vanguard Investments Australia Ltd.	SELL	2.46	Ordinary	(29,860)	(29,860)
20-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.46	Ordinary	22,300	22,300
23-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.46	Ordinary	33,330	33,330
25-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.37	Ordinary	31,220	31,220
27-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.38	Ordinary	31,038	31,038
27-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.38	Ordinary	17,736	17,736
27-Sep-2019	Vanguard Investments Australia Ltd.	BUY	2.38	Ordinary	26,808	26,808
30-Sep-2019	Vanguard Investments Australia Ltd.	SELL	2.37	Ordinary	(85,701)	(85,701)
2-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.38	Ordinary	47,972	47,972
2-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.38	Ordinary	33,951	33,951
2-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.38	Ordinary	63,448	63,448
2-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.38	Ordinary	41,743	41,743
2-Oct-2019	Vanguard Investments Australia Ltd.	SELL	2.38	Ordinary	(52,728)	(52,728)
3-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.33	Ordinary	26,172	26,172
4-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.29	Ordinary	12,155	12,155
4-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.29	Ordinary	42,918	42,918

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
4-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.29	Ordinary	37,230	37,230
7-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.28	Ordinary	111,847	111,847
9-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.27	Ordinary	21,805	21,805
10-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.26	Ordinary	72,293	72,293
11-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.25	Ordinary	17,416	17,416
14-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.24	Ordinary	325,930	325,930
16-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.21	Ordinary	386,242	386,242
17-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.28	Ordinary	17,444	17,444
18-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.26	Ordinary	13,083	13,083
18-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.26	Ordinary	21,810	21,810
21-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.29	Ordinary	44,248	44,248
22-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.34	Ordinary	21,920	21,920
23-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.34	Ordinary	42,735	42,735
28-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.28	Ordinary	21,700	21,700
30-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.26	Ordinary	78,109	78,109
30-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.26	Ordinary	13,083	13,083
30-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.26	Ordinary	17,444	17,444
31-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.27	Ordinary	28,700	28,700
31-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.27	Ordinary	51,768	51,768
31-Oct-2019	Vanguard Investments Australia Ltd.	BUY	2.27	Ordinary	66,893	66,893
31-Oct-2019	Vanguard Investments Australia Ltd.	SELL	2.27	Ordinary	(25,884)	(25,884)
1-Nov-2019	Vanguard Investments Australia Ltd.	SELL	2.29	Ordinary	(307,700)	(307,700)
1-Nov-2019	Vanguard Investments Australia Ltd.	SELL	2.29	Ordinary	(44,549)	(44,549)
1-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.29	Ordinary	17,444	17,444
1-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.29	Ordinary	13,083	13,083
1-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.29	Ordinary	30,837	30,837
4-Nov-2019	Vanguard Investments Australia Ltd.	SELL	2.34	Ordinary	(378,520)	(378,520)
4-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.34	Ordinary	63,088	63,088
5-Nov-2019	Vanguard Investments Australia Ltd.	SELL	2.35	Ordinary	(99,398)	(99,398)
5-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.35	Ordinary	17,444	17,444
5-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.35	Ordinary	25,764	25,764
7-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.40	Ordinary	17,416	17,416
11-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.45	Ordinary	61,905	61,905
12-Nov-2019	Vanguard Investments Australia Ltd.	SELL	2.44	Ordinary	(16,025)	(16,025)
12-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.44	Ordinary	13,128	13,128
12-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.44	Ordinary	23,826	23,826
13-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.46	Ordinary	6,492	6,492
14-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.47	Ordinary	95,528	95,528
15-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.48	Ordinary	17,540	17,540
19-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.47	Ordinary	28,366	28,366
20-Nov-2019	Vanguard Investments Australia Ltd.	SELL	2.42	Ordinary	(172,560)	(172,560)
20-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.42	Ordinary	15,267	15,267
21-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.39	Ordinary	17,544	17,544
21-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.39	Ordinary	45,843	45,843
22-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.39	Ordinary	13,158	13,158
22-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.39	Ordinary	46,607	46,607
25-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.41	Ordinary	44,455	44,455
26-Nov-2019	Vanguard Investments Australia Ltd.	SELL	2.32	Ordinary	(45,036)	(45,036)
28-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.33	Ordinary	13,158	13,158
29-Nov-2019	Vanguard Investments Australia Ltd.	BUY	2.31	Ordinary	26,748	26,748
2-Dec-2019	Vanguard Investments Australia Ltd.	BUY	2.32	Ordinary	114,092	114,092

This is Annexure A of 3 pages referred to in Form 603, Notice of initial substantial holder.

Signature



Name: Shawn Acker

Capacity: Compliance Manager

Date: 04 December 2019