
Form 603

Corporations Law
Section 671B

Notice of initial substantial holder

To Company Name/Scheme **QUBE HOLDINGS LIMITED**

ACN/ARSN **149 723 053**

1. Details of substantial holder (1)

Name **PERPETUAL LIMITED and its related bodies corporate**

ACN (if applicable) **000 431 827**

The holder became a substantial holder on **_12_ / _05_ / 2020_**

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	Persons' votes (5)	Voting power (6)
Ordinary	97,240,728	97,240,728	5.52%

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
Refer annexure 1 & 2		

4. Details of present registered holders

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

Holder of relevant interest	Registered holder of securities	Persons entitled to be registered as holder (8)	Class and number of securities
Refer annexure 1			

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
Refer annexure 3		Cash	Non - Cash	

Associates

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

Name and ACN (if applicable)	Nature of association
Perpetual Investment Management Limited	Related bodies corporate of Perpetual Limited
Perpetual Trustee Company Limited	Related bodies corporate of Perpetual Limited

6. Addresses

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

Name	Address
Perpetual Limited	18/123 Pitt Street Sydney, NSW 2000
Perpetual Investment Management Limited	18/123 Pitt Street Sydney, NSW 2000
Perpetual Trustee Company Limited	18/123 Pitt Street Sydney, NSW 2000



Signature

Print name **Sylvie Dimarco**

Capacity **COMPANY SECRETARY**

ANNEXURE 1 - Perpetual Investments Account Codes & Details

Perpetual Investment Management Limited (PIML), subsidiary of Perpetual Limited, as Responsible Entity for:

INTERNAL CODE	REGISTRATION DETAILS
17	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
26	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
33	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
118	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
212	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
649	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
650	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
652	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
653	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
651	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
654	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
670	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
695	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
774	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001

855	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2093	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2095	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2124	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2125	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2127	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2128	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2199	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2210	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2219	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2130	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2089	RBC Investor Services Australia Nominees Pty Limited <PICREDIT> GPO Box 5430 Sydney NSW 2001
2086	RBC Investor Services Australia Nominees Pty Ltd <PI CREDIT A/C> GPO Box 5430 Sydney NSW 2001
106	RBC Investor Services Australia Nominees Pty Ltd <PI POOLED A/C> GPO Box 5430 Sydney NSW 2001
133	RBC Investor Services Australia Nominees Pty Ltd <PI POOLED A/C> GPO Box 5430 Sydney NSW 2001

323	RBC Investor Services Australia Nominees Pty Ltd <PI POOLED A/C> GPO Box 5430 Sydney NSW 2001
669	RBC Investor Services Australia Nominees Pty Ltd <PI POOLED A/C> GPO Box 5430 Sydney NSW 2001
139	RBC Investor Services Australia Nominees Pty Ltd <PIQTE2 A/C> GPO Box 5430 Sydney NSW 2001
44	UBS Nominees Pty Ltd Level 16 Chifley Tower 2 Chifley Square Sydney NSW 2000
108	UBS Nominees Pty Ltd Level 16, Chifley Tower 2 Chifley Square Sydney NSW 2000
414	UBS Nominees Pty Ltd Level 16 Chifley Tower 2 Chifley Square Sydney NSW 2000
696	UBS Nominees Pty Ltd Level 16 Chifley Tower 2 Chifley Square Sydney NSW 2000
941	UBS Nominees Pty Ltd Level 16 Chifley Tower 2 Chifley Square Sydney NSW 2000

Perpetual Investment Management Limited (PIML), subsidiary of Perpetual Limited, as Trustee for:

ALL 'SS' CODES	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
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Perpetual Investment Management Limited (PIML), subsidiary of Perpetual Limited, under Investment Management Agreements with:

INTERNAL CODE	REGISTRATION DETAILS
227	BNP Paribas Nominees Pty Ltd PO Box R209 Royal Exchange NSW 1225
248	BNP Paribas Noms Pty Ltd P.O. Box R209 Royal Exchange Sydney NSW 1225
702	BNP Paribas Nominees Pty Ltd PO Box R209 Royal Exchange NSW 1225
740	BNP Paribas Nominees Pty Ltd PO Box R209 Royal Exchange NSW 1225

786	BNP Paribas Nominees Pty Ltd PO Box R209 Royal Exchange NSW 1225
2085	BNP Paribas Nominees Pty Ltd PO Box R209 Royal Exchange NSW 1225
2122	BNP Paribas Nominees Pty Ltd PO Box R209 Royal Exchange NSW 1225
2131	BNP Paribas Nominees Pty Ltd PO Box R209 Royal Exchange NSW 1225
2216	BNP Paribas Nominees Pty Ltd PO Box R209 Royal Exchange NSW 1225
220	Citicorp Nominees Pty Ltd GPO Box 764G Melbourne VIC 3001
221	Citicorp Nominees Pty Ltd GPO Box 764G Melbourne VIC 3001
222	Citicorp Nominees Pty Ltd GPO Box 764G Melbourne VIC 3001
224	Citicorp Nominees Pty Ltd GPO Box 764G Melbourne VIC 3001
2163	Northern Trust Company Melbourne Branch: HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2222	Citicorp Nominees Pty Ltd GPO Box 764G Melbourne VIC 3001
194	Northern Trust Company Melbourne Branch: HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
779	State Street Limited 420 George Street Sydney NSW 2000
2101	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2152	Northern Trust Company Melbourne Branch: HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001

2161	HSBC Custody Nominees (Australia) Limited GPO Box 5302 Sydney NSW 2001
2172	State Street Limited 420 George Street Sydney NSW 2000
210	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
215	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
230	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
231	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
392	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
394	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
449	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
773	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
788	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
791	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
2100	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
2166	JPMorgan Nominees Australia Limited Locked Bag 20049 Melbourne VIC 3001
711	National Nominees Pty Ltd PO Box 1406 Melbourne VIC 3001

787	National Nominees Pty Ltd PO Box 1406 Melbourne VIC 3001
2083	National Nominees Pty Ltd PO Box 1406 Melbourne VIC 3001
2097	National Nominees Pty Ltd PO Box 1406 Melbourne VIC 3001
2160	National Nominees Pty Ltd PO Box 1406 Melbourne VIC 3001
2220	National Nominees Pty Ltd PO Box 1406 Melbourne VIC 3001
2243	National nominees Pty Ltd PO Box 1406 Melbourne VIC 3001

Perpetual Trustee Company Limited as trustee, custodian or nominee

INTERNAL CODE	REGISTRATION DETAILS
T2	Perpetual Trustee Company Limited GPO Box 4172 Sydney NSW 2001
T3	The Trust Company Limited GPO Box 4270 Sydney NSW 2001
T4	Perpetual Trustee Company Limited GPO Box 4172 Sydney NSW 2001
T6	Perpetual Trustee Company Limited GPO Box 4172 Sydney NSW 2001
T7	Perpetual Trustee Company Limited GPO Box 4172 Sydney NSW 2001

ANNEXURE 2

PRESENT RELEVANT INTERESTS

ASXCode	Internal Code	Holding
QUB	17	6,088,374
QUB	26	6,835,952
QUB	2216	2,404,028
QUB	2166	3,049,582
QUB	2085	1,156,367
QUB	212	4,847,364
QUB	2163	4,174,318
QUB	2100	1,622,361
QUB	2161	191,911
QUB	702	2,091,993
QUB	2152	4,802,115
QUB	2127	1,377,810
QUB	651	2,512,113
QUB	670	16,613
QUB	740	2,948,886
QUB	696	2,286,631
QUB	695	5,352,481
QUB	215	14,757,422
QUB	652	10,984,188
QUB	653	5,335,746
QUB	T2	<u>14,404,473</u>
		97,240,728

ANNEXURE 3

CHANGES IN RELEVANT INTERESTS

Account	Security	Volume	Value	Price	AsAtDate
2161	QUB	17,000	60,226	\$ 3.54	13/01/2020
941	QUB	- 1,369,254	4,880,721	\$ 3.57	17/01/2020
17	QUB	- 116,848	419,329	\$ 3.59	22/01/2020
17	QUB	- 74,918	267,777	\$ 3.58	22/01/2020
26	QUB	- 2,989	10,610	\$ 3.56	29/01/2020
702	QUB	- 711	2,523	\$ 3.56	29/01/2020
2152	QUB	- 1,632	5,793	\$ 3.56	29/01/2020
2085	QUB	- 548	1,945	\$ 3.56	29/01/2020
2161	QUB	- 91	323	\$ 3.56	29/01/2020
740	QUB	- 1,001	3,553	\$ 3.56	29/01/2020
215	QUB	- 5,013	17,792	\$ 3.56	29/01/2020
695	QUB	- 2,509	8,906	\$ 3.56	29/01/2020
17	QUB	- 1,053	3,738	\$ 3.56	29/01/2020
2100	QUB	- 554	1,966	\$ 3.56	29/01/2020
652	QUB	564,849	1,948,729	\$ 3.45	6/02/2020
26	QUB	- 427,142	1,473,640	\$ 3.45	6/02/2020
2127	QUB	123,535	426,196	\$ 3.45	6/02/2020
2216	QUB	124,128	428,242	\$ 3.45	6/02/2020
702	QUB	- 54,157	186,842	\$ 3.45	6/02/2020
2152	QUB	- 116,973	403,557	\$ 3.45	6/02/2020
2085	QUB	- 39,429	136,030	\$ 3.45	6/02/2020
651	QUB	145,232	501,050	\$ 3.45	6/02/2020
740	QUB	- 71,624	247,103	\$ 3.45	6/02/2020
215	QUB	- 361,320	1,246,554	\$ 3.45	6/02/2020
17	QUB	- 76,423	263,659	\$ 3.45	6/02/2020
2100	QUB	- 39,962	137,869	\$ 3.45	6/02/2020
2163	QUB	229,286	791,037	\$ 3.45	6/02/2020
26	QUB	- 73,156	256,363	\$ 3.51	14/02/2020
702	QUB	- 21,179	74,207	\$ 3.51	14/02/2020
2085	QUB	- 16,339	57,249	\$ 3.51	14/02/2020
2152	QUB	- 48,681	170,594	\$ 3.51	14/02/2020
2085	QUB	- 579,077	2,032,560	\$ 3.51	14/02/2020
740	QUB	- 29,862	104,631	\$ 3.51	14/02/2020
215	QUB	- 149,604	524,183	\$ 3.51	14/02/2020
17	QUB	- 31,437	110,166	\$ 3.51	14/02/2020
2100	QUB	- 16,535	57,944	\$ 3.51	14/02/2020
26	QUB	- 406,753	1,392,468	\$ 3.43	17/02/2020
702	QUB	- 110,030	376,617	\$ 3.43	17/02/2020
2085	QUB	- 84,615	289,625	\$ 3.43	17/02/2020
2152	QUB	- 252,126	863,122	\$ 3.43	17/02/2020
740	QUB	- 154,731	529,622	\$ 3.43	17/02/2020
215	QUB	- 775,063	2,652,931	\$ 3.43	17/02/2020
17	QUB	- 162,334	555,730	\$ 3.43	17/02/2020
2100	QUB	- 85,668	293,274	\$ 3.43	17/02/2020
26	QUB	- 107,042	366,590	\$ 3.43	20/02/2020
702	QUB	- 27,378	93,752	\$ 3.43	20/02/2020
2085	QUB	- 10,311	35,308	\$ 3.43	20/02/2020
2152	QUB	- 62,615	214,439	\$ 3.43	20/02/2020
740	QUB	- 38,424	131,577	\$ 3.43	20/02/2020
215	QUB	- 192,449	659,011	\$ 3.43	20/02/2020

17	QUB	-	40,315	138,068	\$	3.43	20/02/2020
2100	QUB	-	21,466	73,515	\$	3.43	20/02/2020
2216	QUB		41,278	126,859	\$	3.07	25/02/2020
2127	QUB		22,658	69,627	\$	3.07	25/02/2020
651	QUB		42,054	129,230	\$	3.07	25/02/2020
2163	QUB		70,316	216,102	\$	3.07	25/02/2020
652	QUB		184,050	565,576	\$	3.07	25/02/2020
941	QUB		603,991	1,843,900	\$	3.05	26/02/2020
2166	QUB	-	59,987	185,374	\$	3.10	26/02/2020
653	QUB		204,492	624,578	\$	3.05	26/02/2020
26	QUB	-	221,794	685,397	\$	3.10	26/02/2020
2216	QUB		101,137	311,979	\$	3.08	26/02/2020
2127	QUB		44,573	137,480	\$	3.08	26/02/2020
702	QUB	-	52,001	160,678	\$	3.10	26/02/2020
2085	QUB	-	23,824	73,614	\$	3.10	26/02/2020
2152	QUB	-	119,500	369,284	\$	3.10	26/02/2020
212	QUB	-	52,430	162,021	\$	3.10	26/02/2020
651	QUB		99,657	307,379	\$	3.08	26/02/2020
2161	QUB	-	6,340	19,592	\$	3.10	26/02/2020
740	QUB	-	73,312	226,526	\$	3.10	26/02/2020
17	QUB	-	76,573	236,629	\$	3.10	26/02/2020
215	QUB	-	367,291	1,134,890	\$	3.10	26/02/2020
695	QUB	-	194,636	601,472	\$	3.10	26/02/2020
2100	QUB	-	40,575	125,387	\$	3.10	26/02/2020
2163	QUB		175,347	540,896	\$	3.08	26/02/2020
652	QUB		436,188	1,345,365	\$	3.08	26/02/2020
941	QUB		110,260	331,285	\$	3.00	27/02/2020
653	QUB		118,260	355,322	\$	3.00	27/02/2020
26	QUB		175,067	526,003	\$	3.00	27/02/2020
702	QUB		61,420	184,562	\$	3.00	27/02/2020
2085	QUB		37,251	111,936	\$	3.00	27/02/2020
2152	QUB		140,703	422,753	\$	3.00	27/02/2020
740	QUB		86,410	259,655	\$	3.00	27/02/2020
17	QUB		90,828	272,900	\$	3.00	27/02/2020
215	QUB		433,010	1,301,160	\$	3.00	27/02/2020
2100	QUB		47,655	143,183	\$	3.00	27/02/2020
2216	QUB		118,420	346,353	\$	2.92	28/02/2020
2127	QUB		64,120	187,516	\$	2.92	28/02/2020
651	QUB		113,956	333,260	\$	2.92	28/02/2020
44	QUB	-	16,481	48,200	\$	2.93	28/02/2020
2163	QUB		190,065	555,900	\$	2.92	28/02/2020
652	QUB		498,758	1,458,597	\$	2.92	28/02/2020
44	QUB	-	46,741	134,673	\$	2.89	2/03/2020
653	QUB	-	1,000,000	2,873,575	\$	2.88	3/03/2020
26	QUB	-	139,847	402,479	\$	2.88	3/03/2020
2125	QUB	-	3,878	10,877	\$	2.81	4/03/2020
650	QUB	-	36,811	103,249	\$	2.81	4/03/2020
220	QUB	-	42,240	118,463	\$	2.81	4/03/2020
2243	QUB	-	3,360	9,426	\$	2.81	4/03/2020
44	QUB	-	156,113	437,872	\$	2.81	4/03/2020
44	QUB	-	13,317	37,440	\$	2.82	4/03/2020
649	QUB	-	197,271	553,314	\$	2.81	4/03/2020
2124	QUB	-	2,358	6,614	\$	2.81	4/03/2020
2222	QUB	-	3,347	9,387	\$	2.81	4/03/2020
2125	QUB	-	18,632	52,719	\$	2.83	5/03/2020
650	QUB	-	176,880	500,480	\$	2.83	5/03/2020

220	QUB	-	202,969	574,234	\$	2.83	5/03/2020
2243	QUB	-	16,147	45,695	\$	2.83	5/03/2020
44	QUB	-	750,141	2,122,515	\$	2.83	5/03/2020
649	QUB	-	947,910	2,682,100	\$	2.83	5/03/2020
2124	QUB	-	11,328	32,052	\$	2.83	5/03/2020
2222	QUB	-	16,085	45,507	\$	2.83	5/03/2020
2166	QUB	-	131,379	344,340	\$	2.63	10/03/2020
2166	QUB	-	114,778	301,402	\$	2.63	10/03/2020
2166	QUB	-	114,778	301,495	\$	2.63	10/03/2020
2166	QUB	-	131,379	344,996	\$	2.63	10/03/2020
2130	QUB		102,177	269,619	\$	2.63	10/03/2020
2130	QUB		227,169	598,750	\$	2.63	10/03/2020
17	QUB		136,498	352,597	\$	2.58	10/03/2020
2161	QUB	-	30,918	81,035	\$	2.63	10/03/2020
2161	QUB	-	13,711	36,004	\$	2.63	10/03/2020
2161	QUB	-	13,712	36,018	\$	2.63	10/03/2020
2161	QUB	-	30,917	81,187	\$	2.63	10/03/2020
695	QUB	-	837,703	2,195,589	\$	2.63	10/03/2020
695	QUB	-	371,511	975,572	\$	2.63	10/03/2020
695	QUB	-	371,510	975,870	\$	2.63	10/03/2020
695	QUB	-	837,704	2,199,774	\$	2.63	10/03/2020
26	QUB		376,425	792,845	\$	2.10	16/03/2020
702	QUB		148,422	312,649	\$	2.10	16/03/2020
2085	QUB		88,556	186,542	\$	2.10	16/03/2020
2152	QUB		330,851	696,855	\$	2.10	16/03/2020
17	QUB		224,661	473,192	\$	2.10	16/03/2020
740	QUB		205,642	433,182	\$	2.10	16/03/2020
215	QUB		1,012,454	2,132,721	\$	2.10	16/03/2020
2100	QUB		112,989	237,983	\$	2.10	16/03/2020
26	QUB	-	53,090	101,054	\$	1.91	20/03/2020
941	QUB	-	714,251	1,296,366	\$	1.82	23/03/2020
702	QUB		51,603	93,659	\$	1.82	23/03/2020
2085	QUB		28,484	51,698	\$	1.82	23/03/2020
2152	QUB		118,358	214,820	\$	1.82	23/03/2020
17	QUB		79,370	144,057	\$	1.82	23/03/2020
740	QUB		72,683	131,920	\$	1.82	23/03/2020
215	QUB		363,753	660,212	\$	1.82	23/03/2020
2130	QUB	-	3,181,372	6,096,092	\$	1.92	25/03/2020
653	QUB	-	500,000	1,097,310	\$	2.20	26/03/2020
653	QUB	-	1,000,000	2,028,976	\$	2.03	26/03/2020
17	QUB	-	214,111	467,480	\$	2.18	26/03/2020
653	QUB	-	655,156	1,488,188	\$	2.28	27/03/2020
653	QUB	-	94,844	215,041	\$	2.27	27/03/2020
2166	QUB	-	133,828	304,659	\$	2.28	27/03/2020
2161	QUB	-	20,788	47,324	\$	2.28	27/03/2020
695	QUB	-	563,223	1,282,174	\$	2.28	27/03/2020
653	QUB	-	200,000	449,308	\$	2.25	30/03/2020
26	QUB		50,535	106,065	\$	2.10	30/03/2020
702	QUB		15,355	32,231	\$	2.10	30/03/2020
2085	QUB		8,475	17,790	\$	2.10	30/03/2020
2152	QUB		35,217	73,915	\$	2.10	30/03/2020
17	QUB		23,619	49,573	\$	2.10	30/03/2020
740	QUB		21,627	45,397	\$	2.10	30/03/2020
215	QUB		108,233	227,190	\$	2.10	30/03/2020
2100	QUB		11,939	25,058	\$	2.10	30/03/2020
26	QUB		452,524	990,524	\$	2.19	31/03/2020

702	QUB	103,515	226,608	\$	2.19	31/03/2020
2085	QUB	56,244	123,126	\$	2.19	31/03/2020
2152	QUB	236,211	517,039	\$	2.19	31/03/2020
17	QUB	163,057	356,913	\$	2.19	31/03/2020
740	QUB	146,062	319,749	\$	2.19	31/03/2020
215	QUB	728,883	1,595,621	\$	2.19	31/03/2020
2100	QUB	113,504	248,447	\$	2.19	31/03/2020
2216	QUB	11,718	25,812	\$	2.20	1/04/2020
2127	QUB	10,381	22,865	\$	2.20	1/04/2020
651	QUB	13,884	30,580	\$	2.20	1/04/2020
652	QUB	60,582	133,434	\$	2.20	1/04/2020
2163	QUB	21,683	47,763	\$	2.20	1/04/2020
26	QUB	136,239	293,419	\$	2.15	2/04/2020
2216	QUB	78,465	168,664	\$	2.15	2/04/2020
2127	QUB	81,244	174,614	\$	2.15	2/04/2020
702	QUB	49,144	105,854	\$	2.15	2/04/2020
2085	QUB	27,553	59,348	\$	2.15	2/04/2020
2152	QUB	113,010	243,390	\$	2.15	2/04/2020
17	QUB	75,305	162,185	\$	2.15	2/04/2020
651	QUB	100,226	215,411	\$	2.15	2/04/2020
740	QUB	69,255	149,172	\$	2.15	2/04/2020
215	QUB	347,105	747,646	\$	2.15	2/04/2020
652	QUB	437,356	939,989	\$	2.15	2/04/2020
2163	QUB	151,233	325,075	\$	2.15	2/04/2020
2100	QUB	34,952	75,276	\$	2.15	2/04/2020
696	QUB	- 204,584	483,071	\$	2.36	9/04/2020
696	QUB	- 68,322	158,994	\$	2.33	9/04/2020
696	QUB	- 35,937	85,138	\$	2.37	9/04/2020
2166	QUB	- 23,923	55,672	\$	2.33	9/04/2020
26	QUB	- 121,638	287,216	\$	2.36	9/04/2020
26	QUB	- 38,881	90,481	\$	2.33	9/04/2020
26	QUB	- 17,658	41,833	\$	2.37	9/04/2020
2216	QUB	- 24,622	58,133	\$	2.36	9/04/2020
2216	QUB	- 8,222	19,132	\$	2.33	9/04/2020
2216	QUB	- 4,325	10,246	\$	2.37	9/04/2020
17	QUB	- 8,297	19,656	\$	2.37	9/04/2020
17	QUB	- 57,151	134,947	\$	2.36	9/04/2020
17	QUB	- 18,268	42,512	\$	2.33	9/04/2020
702	QUB	- 37,166	87,750	\$	2.36	9/04/2020
702	QUB	- 11,880	27,644	\$	2.33	9/04/2020
702	QUB	- 5,395	12,781	\$	2.37	9/04/2020
2085	QUB	- 20,521	48,451	\$	2.36	9/04/2020
2085	QUB	- 6,560	15,265	\$	2.33	9/04/2020
2085	QUB	- 2,979	7,057	\$	2.37	9/04/2020
2152	QUB	- 85,257	201,312	\$	2.36	9/04/2020
2152	QUB	- 27,252	63,419	\$	2.33	9/04/2020
2152	QUB	- 12,377	29,322	\$	2.37	9/04/2020
651	QUB	- 25,600	60,448	\$	2.36	9/04/2020
651	QUB	- 8,549	19,895	\$	2.33	9/04/2020
651	QUB	- 4,497	10,654	\$	2.37	9/04/2020
2161	QUB	- 2,372	5,520	\$	2.33	9/04/2020
740	QUB	- 52,349	123,597	\$	2.36	9/04/2020
740	QUB	- 16,733	38,936	\$	2.33	9/04/2020
740	QUB	- 7,599	18,002	\$	2.37	9/04/2020
215	QUB	- 261,992	618,569	\$	2.36	9/04/2020
215	QUB	- 83,744	194,866	\$	2.33	9/04/2020

215	QUB	-	38,033	90,100	\$	2.37	9/04/2020
695	QUB	-	63,455	147,668	\$	2.33	9/04/2020
652	QUB	-	111,706	263,764	\$	2.36	9/04/2020
652	QUB	-	37,304	86,811	\$	2.33	9/04/2020
652	QUB	-	19,622	46,486	\$	2.37	9/04/2020
2163	QUB	-	42,657	100,714	\$	2.36	9/04/2020
2163	QUB	-	14,246	33,149	\$	2.33	9/04/2020
2163	QUB	-	7,493	17,751	\$	2.37	9/04/2020
2100	QUB	-	28,825	68,063	\$	2.36	9/04/2020
2100	QUB	-	9,214	21,442	\$	2.33	9/04/2020
2100	QUB	-	4,184	9,912	\$	2.37	9/04/2020
26	QUB		47,349	103,278	\$	2.18	21/04/2020
17	QUB		27,154	59,229	\$	2.18	21/04/2020
702	QUB		17,775	38,773	\$	2.18	21/04/2020
2085	QUB		9,936	21,673	\$	2.18	21/04/2020
2152	QUB		40,785	88,961	\$	2.18	21/04/2020
740	QUB		25,054	54,650	\$	2.18	21/04/2020
215	QUB		125,285	273,284	\$	2.18	21/04/2020
2100	QUB		13,283	28,973	\$	2.18	21/04/2020
26	QUB		18,362	40,446	\$	2.20	22/04/2020
17	QUB		9,967	21,954	\$	2.20	22/04/2020
702	QUB		6,478	14,270	\$	2.20	22/04/2020
2085	QUB		3,540	7,798	\$	2.20	22/04/2020
2152	QUB		14,770	32,534	\$	2.20	22/04/2020
740	QUB		9,127	20,106	\$	2.20	22/04/2020
215	QUB		45,379	99,966	\$	2.20	22/04/2020
2100	QUB		4,962	10,930	\$	2.20	22/04/2020
2166	QUBXX		44,574	86,919	\$	1.95	30/04/2020
653	QUBXX		446,757	871,176	\$	1.95	1/05/2020
17	QUBXX		505,933	986,569	\$	1.95	1/05/2020
17	QUBXX		826,593	1,611,856	\$	1.95	1/05/2020
26	QUBXX		1,760,889	3,433,734	\$	1.95	1/05/2020
2166	QUBXX		435,871	849,948	\$	1.95	1/05/2020
2216	QUBXX		333,951	651,204	\$	1.95	1/05/2020
2216	QUBXX		64,596	125,962	\$	1.95	1/05/2020
2127	QUBXX		217,066	423,279	\$	1.95	1/05/2020
702	QUBXX		537,525	1,048,174	\$	1.95	1/05/2020
2085	QUBXX		296,815	578,789	\$	1.95	1/05/2020
2152	QUBXX		1,232,992	2,404,334	\$	1.95	1/05/2020
651	QUBXX		348,961	680,474	\$	1.95	1/05/2020
651	QUBXX		65,533	127,789	\$	1.95	1/05/2020
212	QUBXX		763,676	1,489,168	\$	1.95	1/05/2020
2161	QUBXX		30,235	58,958	\$	1.95	1/05/2020
740	QUBXX		757,116	1,476,376	\$	1.95	1/05/2020
215	QUBXX		3,789,109	7,388,763	\$	1.95	1/05/2020
670	QUBXX		2,617	5,103	\$	1.95	1/05/2020
652	QUBXX		1,525,947	2,975,597	\$	1.95	1/05/2020
652	QUBXX		291,646	568,710	\$	1.95	1/05/2020
695	QUBXX		843,255	1,644,347	\$	1.95	1/05/2020
2163	QUBXX		579,882	1,130,770	\$	1.95	1/05/2020
2163	QUBXX		109,683	213,882	\$	1.95	1/05/2020
2100	QUBXX		416,840	812,838	\$	1.95	1/05/2020
696	QUBXX		517,791	1,009,692	\$	1.95	1/05/2020
653	QUB		2,000,000	4,884,068	\$	2.44	4/05/2020
17	QUB	-	430,035	1,101,683	\$	2.57	4/05/2020
17	QUB	-	430,035	1,073,765	\$	2.50	4/05/2020

17	QUB	-	430,035	1,073,765	\$	2.50	4/05/2020
17	QUB	-	426,768	1,066,744	\$	2.50	4/05/2020
26	QUB	-	912,623	2,337,999	\$	2.57	4/05/2020
26	QUB	-	912,623	2,278,751	\$	2.50	4/05/2020
26	QUB	-	912,623	2,278,751	\$	2.50	4/05/2020
26	QUB	-	941,442	2,353,217	\$	2.50	4/05/2020
2216	QUB	-	125,712	320,770	\$	2.56	4/05/2020
702	QUB	-	279,672	716,412	\$	2.57	4/05/2020
702	QUB	-	279,672	698,257	\$	2.50	4/05/2020
702	QUB	-	279,672	698,257	\$	2.50	4/05/2020
702	QUB	-	277,289	693,046	\$	2.50	4/05/2020
2085	QUB	-	154,478	395,713	\$	2.57	4/05/2020
2085	QUB	-	154,478	385,685	\$	2.50	4/05/2020
2085	QUB	-	154,478	385,685	\$	2.50	4/05/2020
2152	QUB	-	641,437	1,643,262	\$	2.57	4/05/2020
2152	QUB	-	641,437	1,601,620	\$	2.50	4/05/2020
2152	QUB	-	641,437	1,601,620	\$	2.50	4/05/2020
2085	QUB	-	152,687	381,620	\$	2.50	4/05/2020
2152	QUB	-	636,836	1,591,827	\$	2.50	4/05/2020
651	QUB	-	118,849	303,286	\$	2.56	4/05/2020
740	QUB	-	393,929	1,009,094	\$	2.57	4/05/2020
740	QUB	-	393,929	983,523	\$	2.50	4/05/2020
740	QUB	-	393,929	983,523	\$	2.50	4/05/2020
740	QUB	-	390,527	976,069	\$	2.50	4/05/2020
215	QUB	-	1,971,184	5,049,413	\$	2.57	4/05/2020
215	QUB	-	1,971,184	4,921,455	\$	2.50	4/05/2020
215	QUB	-	1,971,184	4,921,455	\$	2.50	4/05/2020
215	QUB	-	1,957,205	4,891,765	\$	2.50	4/05/2020
652	QUB	-	552,809	1,410,690	\$	2.56	4/05/2020
2163	QUB	-	202,630	517,036	\$	2.56	4/05/2020
2100	QUB	-	216,642	555,003	\$	2.57	4/05/2020
2100	QUB	-	216,642	540,939	\$	2.50	4/05/2020
2100	QUB	-	216,642	540,939	\$	2.50	4/05/2020
2100	QUB	-	217,246	543,025	\$	2.50	4/05/2020
696	QUB	-	1,000,000	2,551,857	\$	2.56	4/05/2020
17	QUB	-	530,346	1,390,446	\$	2.63	5/05/2020
17	QUB	-	107,370	281,056	\$	2.62	5/05/2020
26	QUB	-	393,213	1,030,915	\$	2.63	5/05/2020
26	QUB	-	61,390	160,697	\$	2.62	5/05/2020
702	QUB	-	120,540	316,000	\$	2.63	5/05/2020
702	QUB	-	20,904	54,714	\$	2.62	5/05/2020
2085	QUB	-	66,588	174,563	\$	2.63	5/05/2020
2085	QUB	-	11,646	30,482	\$	2.62	5/05/2020
2152	QUB	-	276,479	724,865	\$	2.63	5/05/2020
2152	QUB	-	47,819	125,173	\$	2.62	5/05/2020
740	QUB	-	169,786	445,100	\$	2.63	5/05/2020
740	QUB	-	29,455	77,096	\$	2.62	5/05/2020
215	QUB	-	849,663	2,227,421	\$	2.63	5/05/2020
215	QUB	-	146,966	384,669	\$	2.62	5/05/2020
2100	QUB	-	93,385	244,834	\$	2.63	5/05/2020
2100	QUB	-	15,799	41,356	\$	2.62	5/05/2020
26	QUB	-	207,212	526,706	\$	2.55	7/05/2020
702	QUB	-	62,147	157,955	\$	2.55	7/05/2020
2085	QUB	-	33,282	84,591	\$	2.55	7/05/2020
2152	QUB	-	138,740	352,659	\$	2.55	7/05/2020
740	QUB	-	85,285	216,764	\$	2.55	7/05/2020

215	QUB	-	426,196	1,083,237	\$	2.55	7/05/2020
2100	QUB	-	47,138	119,819	\$	2.55	7/05/2020
653	QUB		500,000	1,270,261	\$	2.54	11/05/2020