

Submission for Plan 7 Changes

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Irrigation: Cross Road, Pleasant Point CRC020220.2

What I am proposing

A rule for those with a groundwater extraction permit affected by the change from the 30 to 150 day rule

For those with a groundwater extraction permit that were deemed to not be hydraulically connected using the “30 day rule” but will be using the “150 day rule”: Firstly, the maximum extraction rate at which they would be deemed to be not connected using the “150 day rule” be established.

If their past records show that their average extraction rate over 150 days of the irrigation season [using 150 days as a minimum or a longer period if they actually irrigated for a longer period] was less than the “150 day rule” rate then they continue, in the future, to be deemed not hydraulically connected.

They can continue taking water at up to the “30 day rule” rate but with the proviso that their future annual average flow rate figure must not exceed the “150 day rule” rate.

An Introduction

There is a lot of background information that I would like to give to help explain why I would like this new rule to be introduced – so please bear with me.

Last year I thought I had a problem, in that, over the years I had spent a fortune developing a very small irrigation setup and I understood that Ecan were changing the rules which would have resulted in me going on restrictions at certain times of the year depending on the river’s flow. I have little enough water at the moment and if I was to go on periodic restrictions it would be disastrous.

So last year I made a number of submissions to the local OTOP group when they held a number of meetings for those irrigating. I received no feedback other than to be told, at the later stages, that I would now be classed as a “BN” permit holder which I have found out is absolutely disastrous – miles worse than I had originally thought it would be.

I will include a lot of the information that I presented in those submissions of last year – but also add to it. The photos are just to make it a little more interesting.



Fig 1: [Taken 9-9-2014] This is the set up I had up until this date. This is at the southern end of the first gallery I built (in 2001). The water flowed from the gallery into the pond. The white siltstone seen on the left-hand side is what occurs at the base of all the galleries. The water from the second and third galleries was added (the white pipe) and then the water used for irrigation was pumped out (the grey pipe) and spread using K-lines. The digger (right top corner) is about to make major changes.

A History of my Irrigation Set-up

I have a 45 ha block that I irrigate on Cross Rd in the Sutherlands area (where the Te Ngawai River is the closest river). On the 6-3-2001 I paid for my first permit to dig a gallery and on the 10-7-2001 I paid for a water right.

At the time ECan advised me to engage Bob Hall to help me with my application. He worked out (using the distance the centre of the gallery was from the river – 1050M) that if I applied for a take of 15L/sec I would be deemed to be not connected to the river. This report went to Ecan and I was duly granted the right to take up to 15L/sec to use for irrigation.



Fig 2: [taken 17-8-2012] The same old pond with the level of the water table way up in the Spring. It was very rare for it to get this high. Looking east.



Fig 3: [taken 15-11-2015] The new pond. The base of the pond [in Figs 1 and 2] was filled in and then this new lined pond built over it, in its place. The combined flow of the three galleries goes through a flow meter (which send the relevant data to Ecan) and then enters the pond. [In front of this] water is extracted for irrigation. The Te Ngawai River is 1157M (Bob Hall's measurement – Ecan has it at 1200M) away – beyond the willows in the background. Looking North. Cross Rd on the left.

Over 30 days Bob Hall estimated the depletion rate (when pumping 15L/sec) as being 2.6 L/sec and “[the \[Ecan's\] Investigating Officer has estimated a likely stream depletion of 3.3L/sec in the Te Ngawai River, which is considered minor](#)” – Ecan used a distance of 1100M for the centre of the gallery south of the river.

When the first gallery was built, I was expecting to get 15L/sec but once I was pumping for a while it was quite obvious that there was only a fraction of this amount present. So over the years I have dug two more galleries and now I usually start the season taking about 14L/sec (so that I don't go over my limit) and usually as the season progresses this eases down to 11 or 12L/sec and may go down to as low as 8L/sec (in very dry years it has gone down even lower).

Every day when I am shifting my K-lines I check the three wells and open or close them (the gate valves) fractionally to try and maintain the level as high as possible – so that I have the knowledge that if things get really dry then I still have water underground "in storage". (I keep a daily log of my gate valve settings and each well's height.)

Recently I have built a small storage pond so that the water from the three wells is combined and the flow coming in is radioed to ECan (so you can check my take for the last few years). If there was no water entering the pond it (the water in the pond) would possibly last me about five days. What I usually do is I start with the pond full and each day let the level drop about 200mm then if it rains (or I want a Sunday off) I let it catch up a bit.

I've just been through my farm accounts since 2001 and in that time I have spent a total of \$465,075.22 on "Irrigation capital expenditure". This is basically the cost of three galleries, getting electricity to the site, a lined pond and the K-line set up. For a small sheep farm like mine that is a lot of money but I was happy to do this as I knew that I wasn't connected to the river so I would never be put on restrictions, I could usually get between 8 and 14L/sec (sometimes even less) and I used this to the best of my ability.



Fig 4. [taken 18-10-2007] Digging a gallery. While I had a water right to extract 15L/sec the first gallery only produced a fraction of this. So, the decision was made to build a second one. Wherever we dug on the block there seemed to be a white siltstone about 7 meters down with gravel above this and then quite a good topsoil on the top. There are very, very small streams of water running along the top of the siltstone within the gravel. A trench is dug roughly at right angles to the direction of flow, about a meter into the siltstone with the bottom sloping slightly towards a central point. Novaflow (a corrugated polyethylene land drainage pipe) is laid along the complete length of the gallery trench. This is then covered with over a meter of clean boulders which are topped with a double layer of polythene sheeting and then all the gravel and top soil is filled back in. When finished all that is then visible is the pipe of the well where the water is pumped from. The combined length of our three galleries would be over 500 meters. While each little stream of water is minute, they all add up so that in a good year we can almost get up to our allowable 15L/sec at the beginning of the irrigation season – as the season progresses the amount that we can extract falls and can go to quite a low level – especially in dry years. This is part of the second gallery – a third one was dug in 2011.

The First Problem – the change to the 150 day rule

When I got my original permit, I was deemed to have less than a 5L/sec effect on the rivers flow using the 30-day rule. Bob Hall calculated that taking 15L/sec from my gallery I was depleting the flow of the river by 2.6L/sec and the Ecan investigating officer calculated a figure of 3.3L/sec – which he deemed was a “minor” effect.

As my 15L/sec take was calculated to have a stream depletion effect on the river of less than 5L/sec my setup was deemed to be not connected and so I was never put on any restrictions when the flow of the river was low.

What are Ecan Trying to do? Last year over a number of weeks I went to three “workshops” (Pleasant Point [February], Cave and finally Fairlie). The message I received was that, they felt that in times of low flow in the Te Ngawai they are looking at bringing in restrictions at a higher flow rate – going from the current minimum of 400 L/sec to 475 and then 550 over time. To try and impose these restrictions on more people than are being affected at the moment, for those with groundwater takes, they talked of keeping the 5L/sec depletion rate limit but working this out over 150 days rather than the 30 days that is used at the moment.

I asked Ecan (Dan Clark – who I might add was very helpful) how to go about calculating the effect my 15L/sec was having using the 150 day rule.

At his suggestion I downloaded the “Copy of Streamdepletionv3” from the ECan website and using the “stream depletion analysis – Theis (Jenkins) solution” section I was able to work out that my galleries are depleting the Te Ngawai river by 2.7L/sec (over 30 days)(c.f 2.6L/sec calculated by Bob Hall and 3.3L/sec by Ecan) [[Transmissivity 1000 m²/d, storage 0.1, pumping rate 15L/sec and distance 1050M – I asked Dan Clark and he agreed I was using the correct figures]. I did this so that I knew how the figures were obtained and so could do my own calculations.

Using the same figures but the 150 day rule I calculated I would be affecting the flow by 8.1L/sec [54% of 15L/sec]. As this is over 5L/sec I would be deemed to be hydraulically connected to the river – so, in times of low river flow I would have to go on restrictions the same as those who pump straight out of the river.

Again, using the 150 day rule I calculated I would have to drop my pump rate to 9.25L/sec to be deemed to be not connected [9.25 x 0.54 = 4.995].

I also used the “stream depletion analysis – Theis (Jenkins) solution” and found that if I was abstracting my full 15L/sec (which I never am) putting me on restrictions for a period would only add 0.15L/sec [1% of 15] to the river after 7 days and 2.7L/sec after 30 days. If I am actually abstracting less than my 15L/sec then there would, of course, be less going back to the river when I am on restrictions.

As I said, at the moment these restrictions come in when the river flow is less than 400L/sec but over time this minimum is to be increased to 550L/sec.

Last year, to see how these restrictions are going to affect me I obtained the river flow data for the TeNgawai for the Cave measuring site (from Dan Clark – “thanks!”). I then superimposed onto this chart the combined daily flows from my three galleries during those periods when I was extracting water for irrigating. These daily flows were all from the Ecan meter which was installed in November 2014 – so covered almost all of the 2014/15 irrigation season and then all of the 2015/16, 2016/17, and 2017/18 seasons. On another flow chart I have just recently added the 2018/19 irrigation season. So, this gives my total usage over the most recent five seasons.

Every day, when I am shifting my k-lines I firstly check and record the Ecan meter’s flow rate, then I check each of the three galleries and alter their gate valves fractionally if necessary, then check and record the Ecan meter’s flow rate again before turning the irrigation back on. When I turn the irrigation back on I set it to automatically turn off after so many hours (normally about 19 to 20 in a good season) – I also record the total usage to date of the irrigation meter each day. It is the second Ecan flow meter reading that I have used to superimpose on the river flow chart and I find it usually stays fairly constant until the same time the next day.

I then went through the five irrigation seasons and highlighted in green those reading that occurred when the river was flowing at less than 550L/sec.

The 2014/15 season a very dry year. The first 10 days extraction [9-10-14 to 19-10-14] were to fill up the new pond. Officially started irrigating (extracting water) on 7/11/2014 and finished on 20/4/2015. Excluding the first filling of the pond (which has only happened the once) the irrigation season was 161 days long and I actually extracted water for 158 of those days. During that time there were seven periods that would have been restricted as the river flow was less than 550L/sec.

Te Ngawai River Flow < 550L/sec	Length of Restriction	Av. extraction rate L/sec	Theis Jenkins stream depletion rate
23-11-14	1 day	c. 9.8	[0%] 0
28-11-14 to 11-12 14	14 days	9.74	[5%] 0.48L/sec
30-12-14	1 day	7.55	[0%] 0
21-1-15 to 17-3 15	75 days	5.58	[39%] 2.18L/sec
21-3-15	1 day	4.03	[0%] 0
23-3-15	1 day	3.93	[0%] 0
3-4-15 to 10-4-15	8 days	5.44	[1%] 0.05L/sec

101 days of restrictions

The 2015/16 season started irrigating on the 5/10/15 and finished on 20/5/16. The irrigation season was 229 days long and I extracted water on 172 of those days. During that time there were ten periods that would have been restricted as the river flow was less than 550L/sec.

Te Ngawai River Flow < 550L/sec	Length of Restriction	Av. extraction rate L/sec	Theis Jenkins stream depletion rate
22-10-15 to 27-10-15	6 days	12.21	[0%] 0
25-11-15 to 28-11-15	4 days	11.48	[0%] 0
3-12-15 to 7-12-15	5 days	11.15	[0%] 0
9-12-15 to 18-12-15	10 days	10.49	[2%] 0.21L/sec
27-12-15	1 day	10.15	[0%] 0
29-12-15 to 31-12 15	3 days	10.00	[0%] 0
7-1-16	1 day	9.60	[0%] 0
11-1-16	1 day	9.75	[0%] 0
18-2-16 to 21-2-16	4 days	12.05	[0%] 0
26-2-16 to 16-3-16	20 days	11.26	[10%] 1.13L/sec

55 days of restrictions

The 2016/17 season started irrigating on the 14/9/16 and finished on the 5/3/17. The irrigation season was 173 days long and I extracted water on 76 of those days. During that time there were three periods that would have been restricted as the river flow was less than 550L/sec.

Te Ngawai River Flow < 550L/sec	Length of Restriction	Av. Extraction rate L/sec	Theis Jenkins stream depletion rate	
1-2-17 to 8-2-17	8 days	13.15	[1%]	0.13L/sec
14-2-17	1 day	13.55	[0%]	0
16-2-17 to 5-3-17 (18-1=)	17 days	11.87	[7%]	0.83L/sec

26 days of restrictions

The 2017/18 season started irrigating on the 23/11/2017 and finished on the 19/2/2018. The season was 89 days long and I extracted water on 67 of those days. During that time there were four periods that would have been restricted as the river flow was less than 550L/sec.

Te Ngawai River Flow < 550L/sec	Length of Restriction	Av. Extraction rate L/sec	Theis Jenkins stream depletion rate	
7-12-17 to 14-12-17	8 days	13.24	[1%]	0.13L/sec
19-12-17 to 27-12-17	9 days	9.09	[1%]	0.09L/sec
2-1-18 to 8-1-18	7 days	9.01	[1%]	0.09L/sec
31-1-18 to 1-2-18	2 days	10.38	[0%]	0

26 days on restrictions

The 2018/19 season started irrigating on the 20/10/2018 and finished on the 24/4/2019. The season was 156 days long and I extracted water on 94 of those days. During that time there were four periods that would have been restricted as the river flow was less than 550L/sec.

Te Ngawai River Flow < 550L/sec	Length of Restriction	Av. Extraction rate L/sec	Theis Jenkins stream depletion rate	
13-2-19 to 15-2-19	3 days	13.5	[0%]	0
21-2-19 to 24-2-19	4 days	13.55	[0%]	0
1-3-19 to 9-3-19	9 days	13.57	[1%]	0.14L/sec
26-3-19 to 12-4-19 (18-1=)	17 days	11.33	[7%]	0.79L/sec

33 days on restrictions

The 2019/20 season started irrigating on the 3/11/2019 and finished on the 29/3/2020. The season was 148 days long and I extracted water on 117 of those days. During that time there were four periods that would have been restricted as the river flow was less than 550L/sec.

Te Ngawai River Flow < 550L/sec	Length of Restriction	Av. Extraction rate L/sec	Theis Jenkins stream depletion rate	
3-12-19 to 5-12-19	3 days	11.24	[0%]	0
8-1-20 to 9-1-20	2 days	12.45	[0%]	0
11-1-20 to 6-2-20	27 days	10.27	[15%]	1.54L/sec
9-2-20 to 23-2-20	15 days	7.37	[6%]	0.44L/sec
28-2-20 to 5-3-20	7 days	7.12	[1%]	0.07L/sec
8-3-20 to 10-3-20	3 days	6.92	[0%]	0
21-3-20 to 22-3-20	2 days	7.15	[0%]	0
28-3-20	1 day	7.1	[0%]	0

60 days on restrictions

A Summary of the Result of Changing to the 150 day rule

Over the last six seasons I have been deemed to be not connected to the river (using the 30 day rule) and have extracted what water there was available in my three galleries – up to a maximum of 15L/sec, but usually much less – to run my irrigation scheme when needed.

Over the six seasons I have irrigated on a total of 684 days [158 + 172 + 76 + 67 + 94 + 117], which is an average of 114 days of irrigation per season.

With a change to the 150 day rule I will be deemed to be hydraulically connected to the river and so would have to go on restrictions at time of low river flow. Also, these restrictions are to come in at a higher rate (550L/sec) than they do now (at the moment it is 400L/sec).

Using my last six seasons flow rates I have worked out when I would have been on restrictions at the 550L/sec level. Over the six seasons I would have been on restrictions for 301 [101 + 55 + 26 + 26 + 33 + 60] of the 684 days I actually irrigated. The average days on restrictions per irrigation season would be 50.2. In other words, **I would have been put on restrictions for 44% of the time when I felt it necessary to be irrigating.**

The really galling thing about it all is the fact that, because I am so far away from the river, actually putting me on restrictions has virtually no effect on the flow of the river so it seems (to me) a really rather pointless exercise.

I know that there are some big irrigators taking water virtually directly out of the Te Ngawai river (I've heard the figures in the range of 40 – 70 L/sec – but am not sure of these). If these figures are somewhere near the mark, I can understand that putting restrictions on those with a direct take will have an immediate effect on the river's flow.

But I'm situated over a km from the river and there is definitely no immediate effect when I stop extracting. In the tables for each of the five seasons (above) I have actually calculated using the "stream depletion analysis – Theis (Jenkins) solution" what the effect is for each restriction period. Most of the shorter restriction periods (less than 6 days) have no effect [0], there are a few where the period of restriction is a bit longer that register as <1.0L/sec, and there is one very long restriction period (75 days) that would increase the flow by 2.18L/sec – still well short of the 5L/sec that is deemed significant.

So, I can assure you I was not happy when I found all of this out last year. I made a number of submissions to the OTOP committee but had no formal reply (other than an acknowledgement each time that they received the submissions).

The second Problem – I'm now classed as a "BN" extractor

The problem I have just complained about (above) is only minor in comparison to another problem that these rule changes have produced. At the Fairlie "OTOP irrigation meeting" it was pointed out to me that, as I will now be deemed to be hydraulically connected to the Te Ngawai river (because of the change to the 150 day rule), I am now classed as a "BN" extractor.

I had never previously heard of this set of classifications. Apparently in the Opihi catchment there are four categories: AA, AN, BA and BN. The A and B classifications refer to the original date of the consent – with the "A" consents being granted prior of 1994 and the "B" after that date. The A and N classifications refer to the ownership of Opuha Water Ltd shares – those with the shares are classed as "A" and those without are classed as "B".

So "yes" I must be a "BN" consent holder as I didn't get my consent until 2001 and I do not now have any Opuha shares.

Concerning SCFIS/Opuha Shares: I've just looked up and from 24-5-94 through to 22-6-96 I paid for 64 SCFIS shares in four instalments.

At that stage we were promised that the dam would deliver water into the upper reaches of the Te Ngawai and that we would be able to irrigate both our river flats and our clay downs. I'm not sure if they ever really intended to do this – or whether it was just a "cunning plan" to get more farms involved and more starting finance. Anyway, after a while they decided against the TeNgawai part of the plan – and we never got the water we were promised.

So, in 2001 I began developing my own water scheme on the Cross Rd part of my property.

At the beginning of 2002 I sold my shares (16 – I guess they must have consolidated them). We were very strongly encouraged to sell them back to the company so that they could then on sell them to farmers able to get Opuha water. As, at that stage, ECan had deemed that I was not connected to the river, there was no advantage in keeping them anyway.

Being a "BN" Extractor: As I am now classed as a "BN" extractor the new rules state that I am only allowed to take water from my galleries when the river flow at Cave is over 2500L/sec. Someone commented to me that this was when the river is in flood – this might be a slight exaggeration, but this level is a lot higher than the normal flow during the irrigation season.

I've just had a look up and found the following:

- In the 2014/15 season I extracted for 158 days and **none** of these days had a flow over 2500L/sec.
- In the 2015/16 season I extracted water for 172 days and only **two** days [17/1/16 and 17/3/16] were over 2500L/sec.
- In the 2016/17 season I extracted water for 76 days and on only **two** days [18/10/16 and 19/10/16] was it over 2500L/sec.
- In the 2017/18 season I extracted water for 67 days and on **five** days [20/1/18 and 3/2/18 to 6/3/18] it was over 2500L/sec.
- In the 2018/19 season I extracted water for 94 days and on only **two** days [21/1/19 and 23/4/19] was it over 2500L/sec.
- In the 2019/20 season I extracted water for 117 days and on only **five** days [12 and 13/11/19 and 8th to 10th/4 20] was it over 2500L/sec.

So, applying this new proposal over these five years I would only be able to irrigate on 16 days instead of the 684 [158 + 172 + 76 + 67 + 94 + 117] days I actually irrigated. **This rule change is allowing me to only irrigate on an average of just 2.67 days per irrigation season. Or put another way I am now only allowed to irrigate on 2.34% of the days I would have been irrigating on – this is 97.7% restrictions.**

I've let you know (above) what I thought when I understood your rule change was going to restrict me from irrigating on 44% of the days I would have been irrigating on. I'm sure you can understand how I now feel knowing that **I am now to be restricted from irrigating on 97.7% of the days I should be irrigating on!!!**

I did mention in the last submission that I've spent \$465,000 on the capital development of my scheme. Never once in my correspondence with ECan when I was doing all this development did you say "Your permit is not safe and one day we will change the rules and virtually cut you off altogether".

I've tried to think of anyone else who has a ground water take in my area. There are only four that I can think of

- My brother Bruce – I can remember Stuart Wooffindin developing this take when I was a kid in the 1950s – so definitely pre dam – also they are now in the Opuha scheme using Opuha water
- Richie Gould – I know that I had to get his permission in 2001 when I set up my scheme so I'm pretty sure this well is pre dam – Also this block is leased to Maze Farm and they also now use Opuha water.
- Maze Farm also used to have a take near the Te Ngawai bridge – I'm not sure if it was a direct take or a groundwater take from very near the river. As I said Maze Farm now use Opuha water.

- I thought Alan Warren was another but he tells me he is near the Opihi, not the Te Ngawai.

So, I am the only one that I can think of who has a groundwater take, actively uses it and who is classed as a “BN” – maybe there are some inland from me above Cave that I don’t know of.

Since I wrote this bit last year, I have been told that there is a “BN” consent holder up near Albury with a huge pond that he diverts water into at times of high river flow. So, this is another “BN” consent holder but it is definitely not a groundwater take situated over a km from the river.

I hope that you gather that I am really not very happy about this.

A Possible way out of this Mess

As you can no doubt imagine I have given this matter a lot of thought. This has resulted in the proposal I am putting forward to be considered as a rule change.

The thing about the 30 day rule and the 150 day rule is that both of them assume that the extraction is going on at the maximum allowable rate (in my case 15L/sec) for all of the 30 or 150 days.

If someone was extracting direct from the river then it would be possible to do this. But from my experience things are different with a ground water take – well they definitely are different with my one. Sometimes, if I am lucky, I can actually start up near the 15L/sec level but I find that this level soon decreases as the season progresses. I usually end up around the 8 or 9L/sec level and in the 2014/15 season I got down as low as 3.9L/sec.

The other way I find we differ from your assumed constant take is that there are usually periods during the irrigation season when I stop irrigating altogether. Both these facts, the fall of in the amount of water available for extraction and the periods within the season when we are not irrigating, mean that in actual fact we are only using a proportion of the 15L/sec when worked out over the full 150 days of the season.

I’ve already said that, using the “stream depletion analysis – Theis (Jenkins) solution” from the “Copy of Streamdepletionv3” from the Ecan website, I was able to calculate, using the 150 day rule, that if I were to drop my pump rate to 9.25L/sec my galleries would be deemed to be not connected [$9.25 \times 0.54 = 4.995$].

[\[A correction here \(2020\):](#) I’ve used this figure of 9.25L/sec in the submission I sent in to Ecan last year. Since then I have realised that this was based on the midpoint (as calculated by Bob Hall: 1050M – Ecan’s investigating officer had it at 1100M) of the first gallery from the river. In fact, it should have been based on the midpoint of the three galleries. This puts the midpoint 100M closer to the river (at 1000M using Ecan’s figure).

Using this distance I find that the Theis (Jenkins) solution shows that I am not connected to the river if I take 8.9L/sec [$8.9 \times 0.56 = 4.984$]. So, in the discussion to follow I have changed the 9.25L/sec to 8.9L/sec.]]

I was then interested in finding out whether the drop off in my flow, along with the periods with no irrigation within the season, would result in an average flow for the season that was less than the ~~9.25~~ 8.9L/sec rate.

It is actually possible to easily calculate these figures – Ecan made us install flow meters that electronically send the daily flow data back to them at regular intervals. These meters also have a running total (well mine does anyway) which, fortunately, I have recorded at the beginning of each season. So, it is easy to calculate the total flow over the season, divide this by either 150 days or the actual length of the season (whichever is longest) and so work out the daily average flow for the season.

The following table sets out all the relevant data for the last six seasons for my irrigation setup.

Season	Irrigation Meter M ³			Ecan Meter M ³			Days Irrigating	Season Length ^A	L/sec over 150 days	L/sec over season length
	Start	Finish	Season Total	Start	Finish	Season Total ^E				
2014/15	483,845.013	574,877.265	91,032.25	0 [installed Nov]	80,660	80660++	158	161		6.54^{B,D}
2015/16	574,877.265	729,717.850	154,840.59	80,660	234,984	154,324	172	229		7.80^C
2016/17	729,717.850	808,359.822	78,641.97	234,984	314,372	79,388	76	173		5.31
2017/18	808,359.822	881,738.672	73,378.85	314,372	387,641	73,269	67	89	5.65	
2018/19	881,738.672	987,375.938	105,637.26	387,641	494,159 ^F	106,518	94	156		7.90
2019/20	987,375.938	82,460.121	95,084.17	498304 ^F	593,388	95,084	117	148	7.33	

^A The season length is the number of days from the day when I first extracted water until the last day I extracted water. Exact dates are detailed for each of the five seasons on pages 4 and 5.

^B For the 2014/15 season I used the total from the irrigation meter for the calculation as the Ecan meter was installed after the season started. The rest are based on the Ecan meter figures.

^C It is easy to work these figures out – for example this one: $154,324 \times 1000 \div 229 \div 24 \div 60 \div 60 = 7.7998$ or **7.80**.

^D I actually ignored the initial filling of the pond as it was a one-off event – if it were included then I estimate there would have been an additional 8553.6 M³ [$9 \times 60 \times 60 \times 24 \times 11 \div 1000$] of water extracted. I estimated (using my three galleries gate valve settings) it was filled at about 9L/sec (looking at the time it took to fill the pond this may have been an overestimation) and it took 11 days to fill. Filling occurred from the 9-10-14 to 19-10-14 – so the days irrigating would increase to 169 and the season length would increase to 190 days. Therefore: $91,032.25 + 8553.6$ gives 99,585.85 M³ [$\times 1000 \div 190 \div 24 \div 60 \div 60 = 6.066$] – **6.07L/sec** over the full season. This is actually less than the amount I had calculated (6.54) due to the fact that the season was made 29 days longer.

^E Sometimes during the off season I have the original gallery’s pump on at a very low rate to top up my stock water – I’ve included all this water within the seasons irrigation total take.

^F The difference between these two figures is due to the fact that in the off season I extracted some water for the stock water (using just the first gallery) and the overflow from this went into the pond.

There are a Number of Points I would like to make

I would like to point out that the average flow rate for each of the six seasons is quite a way below the figure of ~~9.25~~ 8.9L/sec which is the level at which I would be deemed not connected using the 150 day rule.

The reason for this is due to the combination of two factors – firstly my groundwater take always/usually decreases as the irrigation season progresses and secondly there are usually times within the season when I am not irrigating or extracting water.

So, if each season's average flow rate is less than the ~~9.25~~ 8.9L/sec flow rate then surely this is proof enough that extraction from my galleries is having less than a 5L/sec effect on the river.

These figures are quite easy to work out. The Ecan meter has a cumulative figure for cubic meters and I have recorded this at the start of each season. I assume that this is sent to Ecan along with my flow rate. Anyone at Ecan can readily check these figures and also see when I start and finish my irrigation season. They could therefore quite easily work out these figures in the same way that I have. I've no doubt that a computer program could be designed to automatically do this through out the season.

You, Ecan, have the science and, now that we all have flow meters sending data to you, you also have the data. Is it asking too much to use this science and data? Surely if I can show by analysing my last six years usage that my average flow rate is less than the critical 150 day rate then I should remain classed as "not connected".

My Proposal

Bearing all of this in mind I would like to carry on irrigating in the future in the same way as I have over the last five seasons. In other words, starting with as much as I can (but, of course, less than 15L/sec) and irrigating whenever necessary with the proviso that my seasons average is to be less than the 150 day rate (in my case ~~9.25~~ 8.9L/sec).

I realise that the 30 day rule has been replaced by the 150 day rule because all the rest of Canterbury use it (I think I am right here?) – so I understand that there is not much chance of you going back to the 30 day rule.

But I believe it is only fair that those of us who were deemed not connected using the 30 day rule but are using the 150 day rule be given some consideration. After all we acted in good faith – it was Ecan who recommended I use Bob Hall so that I could work out at what figure I could pump so as not to have to go on restrictions – on the strength of that I spent over \$465,000 on irrigation capital development over the years since then. Now I am faced with the prospect of having my take put on restrictions 97.7% of the time I would like to be irrigating.

I am suggesting that our actual take over the past few years be taken into consideration. If (as mine does) our past average take for each season is less than the maximum rate one could pump without being connected using the 150 day rule then, we be deemed to be not connected and continue as we are taking at the level set by the 30 day rule. The proviso being added that our future average take flow rate (worked out over the season – 150 days or longer) must remain below the rate set by the 150 day rule.

Since we all now have a flow meter reporting back to Ecan, then Ecan now have all these figures at their disposal and the calculations are easy.

So, this is what I am proposing:

A rule for those with a groundwater extraction permit affected by the change from the 30 to 150 day rule

For those with a groundwater extraction permit that were deemed to not be hydraulically connected using the "30 day rule" but will be using the "150 day rule": Firstly, the maximum extraction rate at which they would be deemed to be not connected using the "150 day rule" be established.

If their past records show that their average extraction rate over 150 days of the irrigation season [using 150 days as a minimum or a longer period if they actually irrigated for a longer period] was less than the "150 day rule" rate then they continue, in the future, to be deemed not hydraulically connected.

They can continue taking water at up to the "30 day rule" rate but with the proviso that their future annual average flow rate figure must not exceed the "150 day rule" rate.

I hope that this is worded correctly and is clear enough.

I think that there should be a rule along these lines so that it is "set in concrete" and can't be changed at someone's whim sometime in the future.

Or put another way: **When a decision is being made on a groundwater wells connectivity with a nearby river, the well's past actual flow information be used rather than the theoretical continuous maximum possible flow.**

Or another thought: **From my well's past records would putting me on restrictions (even at the 98.1% that you are now proposing) add a further 5L/sec back into the river – the answer is "no" (as the average season flow rates are all less than the ~~9.25~~ 8.9L/sec flow rate) – so why do it in the future???**

Finally

Thank you for bearing with me. I guess that you have read enough so I had better stop. I'll finish with another "pretty picture".

[[The following Added September 2020]]

My comment on your (March 2020) summary

On the two pages below, I have pasted pages 319 to 321 from your report [[McCallum-Clark, *et al* [14 others] 2020 March]] These pages deal with my submission and I understand that they are written for the benefit of the Hearing Panel and "make recommendations on possible amendments to these plan changes in response to those submissions".



Fig. 5: [taken 15-11-2015] The new pond – looking east. Let’s hope that it has a use in the future – in other words I hope my proposal is accepted.

All except the last three paragraphs point out the problems/facts that I set out in my submission – none of my “problems/facts” are disputed in any way – which is nice to know. Section 9.83 is a nice summary of what I am seeking:

9.83. Mr Lundie seeks that for those groundwater takes affected by the change to stream depletion methodology, a new rule be introduced to PC7 that allows for the use of past use records in determining the actual average extraction rate over 150 days. The proffered rule would limit consents such that they can continue to take water in accordance with the ORRP 30 day calculation rate, but in future must ensure their annual average rate of take does not exceed the 150 rate at which they would be considered not hydraulically connected.

In section 9.88 it states: We consider the introduction of a bespoke rule as proposed by Mr Lundie is likely to be unworkable in a consenting context due to the likely variability in existing consents,

I am not really sure exactly what this sentence means. I thought that the new rule that I am asking to be introduced is quite clear and straight forward and the fact that all water takes now have flow meters collecting data and sending it to Ecan means that Ecan will have the ability to constantly check that all are within the agreed limits. All that is needed at any time during the irrigation season is the start date, the running total on the start date, the season length (this would initially be 150 days but if the season went longer than this then use the actual season length to date) and the running total on the day in question. In my case as long as the figure arrived at was less than 8.9L/sec then I would be within my limit – I’m sure a very simple computer program could be written to automatically check this daily.

Section 9.90 states: 9.90. In all cases, site specific testing will be required to establish the effects, which may result in a lesser stream depletion effect than estimated by Daniel Clark.

Again, I am not 100% sure exactly what this means. If it means that there is a test available to find what the actual “stream depletion effect” is for a well then this might be interesting. I know that when using the “Theis (Jenkins) solution” computer tool the nearest distance to the river is used (in my case the midpoint distance of 1000M). When we dug our three galleries the direction of flow of the minute streams of underground water, we found, all seemed to be coming from points about 2000+M upstream. In the paper by Zarour, *et al.* (2018) [see extract a couple of pages further on] they state that in our area [Sutherlands Valley] the water is flowing parallel with the river which would make the distance from the source even further. If there is a test available to estimate the actual “stream depletion effect” then it might well be in my favour.

Section 9.91 (first half) states: For Mr Lundie specifically, the take could be limited through the introduction of a 150 day volume limit on his consent to ensure the average flow rate is at or under the 9.25 L/s calculated to ensure the depletion rate is under 5 L/s. With a depletion rate under 5 L/s, the take would be classified as having a low level of hydraulic connection, so would not be considered as a BN permit, and would not require minimum flow restrictions.

This is basically what I was asking for but if the season was longer than 150 days I would like the “volume limit” to be increased at the same rate for however many days the actual season was. Of the six seasons I analysed the volume after 150 days would have been 115,344M³ [$8.9 \times 60 \times 60 \times 24 \times 150 \div 1000$] and five of the seasons were well within this limit. The sixth season [2015/16] was 229 days long and the total pumped was a way over this limit [154,324M³], but if the volume extracted was calculated over the 229 days then the flow rate was 7.8L/sec – significantly less than the 150 day rule maximum: 8.9L/sec. Although I must admit in this one case using the “Theis (Jenkins) solution” computer tool 7.8 over 229 days is getting rather close to the 5L/sec limit [$7.8 @ 64\% = 4.992\text{L/sec}$]. This one case is the closest I have ever been to the 5L/sec limit over the past six seasons.

Section 9.91 (next bit) states: **The outcome of such a volume restriction may allow Mr Lundie a greater transition time.**

I must admit that this statement really upsets me. It allows me “greater transition time”. Time to transition to what?? The purpose of this whole submission is to have my take deemed “not connected”. It seems to me that if I can’t get a rule change then my only option is to go on 97.7% restrictions.

Section 9.91 (final bit) states **However, we acknowledge that this type of solution may be unworkable for consent holders with a greater rate of take, where the reduction in volume would be unsustainable.**

I would like to comment on this. My whole submission has been to fix a problem that is affecting me drastically. And the wording of my proposal is aimed at my problem. So, I have used the data I have collected over the last six seasons to argue my case. Putting it rather simply: I suggest that if irrigators can show that they haven’t altered the flow of the river by more than 5L/sec in the past they should be allowed to carry on as usual in the future.

I do realise that most farmer will probably not have been keeping the detailed records that I have for my wells. So, should this whole thing be looked at in a way that might help more farmer who have been affected by the change from the “30 day rule” to “the 150 day rule”. If Ecan could supply them (each affected farmer) with their start and finish dates and total volumes for those dates, then they could just see what their average water use over the season actually was. Maybe some of them (probably those furthest from their river) are close to the situation I am in.

Even if in the past some farmer who were deemed not connected to the river using the 30 day rule but will be using the “150 day rule” and their actual season flow might find it better to reduce their actual season flows a little and stay non connected.

So, while I really want to fix my situation, I’m sure there are others in a similar situation who also need to be considered.

An Acknowledgment:

Dan Clark (an Ecan Scientist) has been very helpful over the last few years.

- He told me about the “Copy of Streamdepletionv3” from the ECan website and how to use the “stream depletion analysis – Theis (Jenkins) solution”.
- He pointed out to me that I was a “BN” extractor and what a drastic effect it would have on my ability to irrigate.
- On three different occasions, when requested, he sent me the six years flow meter data for the Te Ngawai River.
- “Thank you” for all your help.
- I would like to point out that he in no way helped me in the writing of this submission – I have no idea whether he agrees with what I am saying or not.

THE END

An extract from:

Matthew McCallum-Clark, *et al* [14 others] 2020 March *S42A Report – PC7 to CLWRP and PC2 to WRRP – Part 4: Submissions on PC7 Part B.* (pp 319-321)

1.2. The purpose of this report is to provide the Hearing Panel with a summary and analysis of the submissions made on PC7 and PC2 and to make recommendations on possible amendments to these plan changes in response to those submissions.

9.79. Rathkeale Farming Partnership¹³³⁹ and P Brosnahan¹³⁴⁰ oppose the “150 day stream depletion methodology” set out in Schedule 9 and request that stream depletion is determined over a 30 day pumping rate as set out in the ORRP. Mr Brosnahan identified that he has a currently unrestricted groundwater consent that would likely be tied to a minimum flow on the Opihi Mainstem under the Schedule 9 methodology. Also related to stream depletion, **R Lundie**¹³⁴¹ has submitted on the change in the calculation of stream depletion, through the transition from the ORRP to PC7 methodologies, and the effects it will have on his irrigation consent. **Mr Lundie** has identified that under PC7, his take will shift from being unrestricted groundwater, to stream depleting groundwater, requiring minimum flow restrictions. **Mr Lundie** currently holds a groundwater consent¹³⁴² authorising a maximum rate of take of 15

L/s from three points approximately 1000 m from the Te Ana Wai River. **Mr Lundie** submits that being subject to BN minimum flows would result in near to no ability to abstract water, based on past use and flows.

1341 PC7-82.1

1342 Resource consent CRC020220.2

9.80. Under the ORRP, the level of hydraulic connection of a groundwater take to surface water is calculated over a 30 day pumping period, while under PC7, using the existing Schedule 9 methodology, stream depletion is calculated over a 150 day pumping period. In his submission, **Mr Lundie** has calculated the following depletion rates for his consent:

- A 30 day depletion rate of 3.3 L/s (which is under the 5 L/s exemption threshold);
- A 150 day depletion rate of 8.1 L/s; and
- A maximum pump rate of 9.25 L/s to achieve a 150 day depletion rate of less than 5 L/s. **Mr Lundie** has provided past use data to show that his average rate of take in a season is less than 9.25 L/s.

9.81. For **Mr Lundie**, the change in calculation means at the current consented rate, his take will shift from having a low connection, to a moderate level of hydraulic connection to the Te Ana Wai River.

9.82. Under the permit definitions introduced in PC7, the now moderately connected take would be classified as a BN permit, meaning the take would be subject to Table 14(y) minimum flow restrictions on the Te Ana Wai River. **Mr Lundie** has used his past use records alongside the river flows at Cave for the corresponding period, and determined that he would only have been able to irrigate for 2.2 days per season under the proposed regime, as opposed to his range of 67 – 172 days in the last five seasons.

9.83. **Mr Lundie** seeks that for those groundwater takes affected by the change to stream depletion methodology, a new rule be introduced to PC7 that allows for the use of past use records in determining the actual average extraction rate over 150 days. The proffered rule would limit consents such that they can continue to take water in accordance with the ORRP 30 day calculation rate, but in future must ensure their annual average rate of take does not exceed the 150 rate at which they would be considered not hydraulically connected.

9.84. We acknowledge **Mr Lundie's** submission, and appreciate that the change in calculation methodology will have some significant consequences for takes such as his.

9.85. The potentially stream depleting takes in the OTOH sub-region have been identified in the Resource Consent Inventory. All bores screened at a depth of less than 30 metres had their stream depletion potential assessed to identify how many consents might be affected by the change in methodology from the ORRP to Schedule 9. While the analysis is conservative, it lists 92 newly identified stream depleting groundwater consents in the Opihi catchment, and 47 in the Temuka catchment.

9.86. The identification of these new stream depleting takes has two implications:

- Changes to the allocation status of both ground and surface water allocation zones; and
- Changes in reliability of the identified consents.

9.87. As discussed earlier, the allocation limits in the Temuka and Opihi FMUs were determined in accordance with the Schedule 9 methodology, so should reflect the newly identified depleting takes.

9.88. In terms of how individual consent holders will be affected, little work has been done beyond identification, so the magnitude of the effect on reliability is currently unknown. In some cases, like that of **Mr Lundie**, takes that currently experience near 100% reliability are likely to be severely affected, particularly if they effectively become B permits in the Opihi FMU and do not hold an entitlement to water through OWL. 9.89. We consider the introduction of a bespoke rule as proposed by **Mr Lundie** is likely to be unworkable in a consenting context due to the likely variability in existing consents, particularly without further knowledge as to what extent the takes identified by Daniel Clark will be affected. However, we acknowledge that there are some means available in the consenting space to offer solutions for affected consent holders, where the proposed minimum flows provide too low a reliability to sustain the take.

9.90. In all cases, site specific testing will be required to establish the effects, which may result in a lesser stream depletion effect than estimated by Daniel Clark.

9.91. For Mr Lundie specifically, the take could be limited through the introduction of a 150 day volume limit on his consent to ensure the average flow rate is at or under the 9.25 L/s calculated to ensure the depletion rate is under 5 L/s. With a depletion rate under 5 L/s, the take would be classified as having a low level of hydraulic connection, so would not be considered as a BN permit, and would not require minimum flow restrictions. The outcome of such a volume restriction may allow Mr Lundie a greater transition time. However, we acknowledge that this type of solution may be unworkable for consent holders with a greater rate of take, where the reduction in volume would be unsustainable.

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[An Extract from:](#)

Hisham Zarour, Philippa Aitchison-Earl, Marta Scott, Louisa Peaver, Jayath De Silva (2018) Current state of the groundwater resource in the Orari-Temuka-Opihi Pareora area. Ecan Report No. R16/41 (p. 25)

3.3.1 Horizontal flow In the Inland Basins, geology and/or topography control groundwater flow in major surface water catchments. Groundwater flow paths ultimately converge towards the eastern gorges, to exit the basins via four pathways: (1) Lake Opuha and subsequently the Opuha River, (2) the Opihi River at the gorge, (3) the Te Ana Wai River at the gorge, and (4) the Pareora River at the gorge. In the Coastal Plains and Downlands, regional groundwater flow is in a south-easterly direction towards the coast where it discharges to spring-fed streams, gaining rivers or offshore. Horizontal hydraulic gradients are steeper inland, where the topography is also steeper, and flatten as they approach the coast. There are local scale variations, including: • surface water lost from the Orari river above SH1 is believed to be channelled as groundwater via a buried channel of the historic Umukaha River, resurfacing as spring-fed tributaries of the Waihi River, Dobies Stream, Worners Creek, and Raukapuka Creek (Burbery and Ritson, 2010) • the Geraldine basalt obstructs groundwater flow, diverting groundwater either side of the basalt • **groundwater flow** in the Opihi Valley, Totara Valley, **Sutherlands Valley** and lower Pareora Valley **is parallel to the rivers contained within these valleys.**

My Daily water extraction rate for six years 2014 – 2020

[Taken from the Ecan flow meter]

Date	Te Ngawai Flow At Cave	Min flow M³/sec	Partial Restrictions	% allocation	My inflow L/sec	
2014-10-04	0.976	0.4	0.5	100		
2014-10-05	0.976	0.4	0.5	100		
2014-10-06	0.99	0.4	0.5	100		
2014-10-07	0.962	0.4	0.5	100		
2014-10-08	0.997	0.4	0.5	100		
2014-10-09	0.969	0.4	0.5	100	c.9.0	filling
2014-10-10	0.906	0.4	0.5	100	c.9.0	the
2014-10-11	0.934	0.4	0.5	100	c. 9.0	new
2014-10-12	1.018	0.4	0.5	100	c. 9.0	pond
2014-10-13	0.941	0.4	0.5	100	c. 9.0	
2014-10-14	0.913	0.4	0.5	100	c. 9.0	
2014-10-15	0.845	0.4	0.5	100	c. 9.0	
2014-10-16	0.825	0.4	0.5	100	c. 9.0	
2014-10-17	0.799	0.4	0.5	100	c. 9.0	
2014-10-18	0.825	0.4	0.5	100	c. 9.0	
2014-10-19	0.792	0.4	0.5	100	c. 9.0	
2014-10-20	1.047	0.4	0.5	100		
2014-10-21	1.137	0.4	0.5	100		
2014-10-22	1.263	0.4	0.5	100		
2014-10-23	1.263	0.4	0.5	100		
2014-10-24	1.145	0.4	0.5	100		
2014-10-25	1.035	0.4	0.5	100		
2014-10-26	0.967	0.4	0.5	100		
2014-10-27	0.945	0.4	0.5	100		
2014-10-28	0.93	0.4	0.5	100		
2014-10-29	1.02	0.4	0.5	100		
2014-10-30	1.043	0.4	0.5	100		
2014-10-31	1.464	0.4	0.5	100		
2014-11-01	1.194	0.4	0.5	100		
2014-11-02	1.089	0.4	0.5	100		
2014-11-03	1.005	0.4	0.5	100		
2014-11-04	0.824	0.4	0.5	100		
2014-11-05	0.909	0.4	0.5	100		
2014-11-06	0.945	0.4	0.5	100		
2014-11-07	1.177	0.4	0.5	100	c. 9.0	
2014-11-08	1.351	0.4	0.5	100	c. 9.0	
2014-11-09	1.202	0.4	0.5	100	c. 9.0	
2014-11-10	1.121	0.4	0.5	100	c. 9.0	
2014-11-11	1.005	0.4	0.5	100	c. 9.0	
2014-11-12	0.909	0.4	0.5	100	c. 9.0	
2014-11-13	0.81	0.4	0.5	100	c. 9.0	
2014-11-14	0.887	0.4	0.5	100	c. 9.3	
2014-11-15	0.873	0.4	0.5	100	c. 9.3	
2014-11-16	0.776	0.4	0.5	100	c. 9.3	

2014-11-17	0.716	0.4	0.5	100	c. 9.8
2014-11-18	0.668	0.4	0.5	100	c. 9.8
2014-11-19	0.615	0.4	0.5	100	c. 9.8
2014-11-20	0.598	0.4	0.5	100	c. 9.8
2014-11-21	0.668	0.4	0.5	100	c. 9.8
2014-11-22	0.596	0.4	0.5	100	c. 9.8
2014-11-23	0.53	0.4	0.5	100	c. 9.8
2014-11-24	0.602	0.4	0.5	100	9.9
2014-11-25	0.763	0.4	0.5	100	9.9
2014-11-26	0.615	0.4	0.5	100	9.95
2014-11-27	0.602	0.4	0.5	100	10
2014-11-28	0.53	0.4	0.5	100	9.8
2014-11-29	0.501	0.4	0.5	100	9.6
2014-11-30	0.507	0.4	0.5	100	9.5
2014-12-01	0.507	0.4	0.5	100	9.45
2014-12-02	0.496	0.4	0.5	50	9.4
2014-12-03	0.528	0.4	0.5	100	9.65
2014-12-04	0.533	0.4	0.5	100	9.85
2014-12-05	0.463	0.4	0.5	50	9.9
2014-12-06	0.495	0.4	0.5	50	9.9
2014-12-07	0.543	0.4	0.5	100	9.9
2014-12-08	0.505	0.4	0.5	100	9.85
2014-12-09	0.468	0.4	0.5	50	9.8
2014-12-10	0.468	0.4	0.5	50	9.9
2014-12-11	0.482	0.4	0.5	50	9.9
2014-12-12	1.335	0.4	0.5	100	9.9
2014-12-13	1.199	0.4	0.5	100	9.9
2014-12-14	0.944	0.4	0.5	100	9
2014-12-15	0.936	0.4	0.5	100	9
2014-12-16	0.847	0.4	0.5	100	8.85
2014-12-17	0.745	0.4	0.5	100	8.75
2014-12-18	0.627	0.4	0.5	100	8.35
2014-12-19	0.745	0.4	0.5	100	8.1
2014-12-20	0.687	0.4	0.5	100	7.6
2014-12-21	0.738	0.4	0.5	100	7.66
2014-12-22	0.681	0.4	0.5	100	7.7
2014-12-23	1.136	0.4	0.5	100	7.5
2014-12-24	1.145	0.4	0.5	100	7.5
2014-12-25	0.915	0.4	0.5	100	7.6
2014-12-26	0.738	0.4	0.5	100	7.6
2014-12-27	0.7	0.4	0.5	100	7.55
2014-12-28	0.585	0.4	0.5	100	7.76
2014-12-29	0.579	0.4	0.5	100	7.62
2014-12-30	0.533	0.4	0.5	100	7.55
2014-12-31	0.573	0.4	0.5	100	7.45
2015-01-01	0.562	0.4	0.5	100	7.35
2015-01-02	0.424	0.4	0.5	50	7.4
2015-01-03	0.434	0.4	0.5	50	7.5

2015-01-04	0.365	0.4	0.5	0	7.6
2015-01-05	0.386	0.4	0.5	0	7.55
2015-01-06	0.348	0.4	0.5	0	7.5
2015-01-07	0.36	0.4	0.5	0	7.43
2015-01-08	0.36	0.4	0.5	0	7.35
2015-01-09	0.39	0.4	0.5	0	7.4
2015-01-10	0.404	0.4	0.5	50	7.4
2015-01-11	0.339	0.4	0.5	0	7.45
2015-01-12	0.36	0.4	0.5	0	7.5
2015-01-13	0.36	0.4	0.5	0	7.55
2015-01-14	0.36	0.4	0.5	0	7.45
2015-01-15	0.404	0.4	0.5	50	7.37
2015-01-16	0.418	0.4	0.5	50	7.2
2015-01-17	0.502	0.4	0.5	100	7.25
2015-01-18	0.377	0.4	0.5	0	7.15
2015-01-19	0.36	0.4	0.5	0	6.5
2015-01-20	0.323	0.4	0.5	0	6.95
2015-01-21	0.307	0.4	0.5	0	6.85
2015-01-22	0.299	0.4	0.5	0	6.75
2015-01-23	0.299	0.4	0.5	0	6.7
2015-01-24	0.283	0.4	0.5	0	6.6
2015-01-25	0.271	0.4	0.5	0	6.5
2015-01-26	0.267	0.4	0.5	0	6.43
2015-01-27	0.267	0.4	0.5	0	6.3
2015-01-28	0.244	0.4	0.5	0	6.2
2015-01-29	0.251	0.4	0.5	0	5.4
2015-01-30	0.194	0.4	0.5	0	6.23
2015-01-31	0.191	0.4	0.5	0	6.07
2015-02-01	0.209	0.4	0.5	0	5.91
2015-02-02	0.552	0.4	0.5	100	5.83
2015-02-03	0.498	0.4	0.5	50	5.75
2015-02-04	0.382	0.4	0.5	0	5.68
2015-02-05	0.372	0.4	0.5	0	5.53
2015-02-06	0.257	0.4	0.5	0	5.37
2015-02-07	0.246	0.4	0.5	0	5.28
2015-02-08	0.237	0.4	0.5	0	5.23
2015-02-09	0.22	0.4	0.5	0	5.22
2015-02-10	0.269	0.4	0.5	0	5.15
2015-02-11	0.242	0.4	0.5	0	5.03
2015-02-12	0.233	0.4	0.5	0	4.94
2015-02-13	0.246	0.4	0.5	0	4.83
2015-02-14	0.237	0.4	0.5	0	4.71
2015-02-15	0.25	0.4	0.5	0	4.65
2015-02-16	0.309	0.4	0.5	0	4.62
2015-02-17	0.381	0.4	0.5	0	5.09
2015-02-18	0.352	0.4	0.5	0	4.57
2015-02-19	0.323	0.4	0.5	0	4.45
2015-02-20	0.3	0.4	0.5	0	4.29

2015-02-21	0.287	0.4	0.5	0	4.24
2015-02-22	0.277	0.4	0.5	0	4.24
2015-02-23	0.292	0.4	0.5	0	4.21
2015-02-24	0.292	0.4	0.5	0	4.21
2015-02-25	0.31	0.4	0.5	0	4.12
2015-02-26	0.31	0.4	0.5	0	4.15
2015-02-27	0.292	0.4	0.5	0	4.17
2015-02-28	0.277	0.4	0.5	0	4.19
2015-03-01	0.256	0.4	0.5	0	4.2
2015-03-02	0.248	0.4	0.5	0	4.19
2015-03-03	0.236	0.4	0.5	0	4.19
2015-03-04	0.252	0.4	0.5	0	4.3
2015-03-05	0.252	0.4	0.5	0	4.3
2015-03-06	0.248	0.4	0.5	0	4.5
2015-03-07	0.277	0.4	0.5	0	4.59
2015-03-08	0.252	0.4	0.5	0	4.44
2015-03-09	0.252	0.4	0.5	0	4.35
2015-03-10	0.264	0.4	0.5	0	4.38
2015-03-11	0.268	0.4	0.5	0	4.36
2015-03-12	0.277	0.4	0.5	0	4.29
2015-03-13	0.272	0.4	0.5	0	4.34
2015-03-14	0.283	0.4	0.5	0	4.33
2015-03-15	0.323	0.4	0.5	0	4.26
2015-03-16	0.459	0.4	0.5	50	4.18
2015-03-17	0.486	0.4	0.5	50	4.16
2015-03-18	0.626	0.4	0.5	100	4.13
2015-03-19	0.699	0.4	0.5	100	4.13
2015-03-20	0.582	0.4	0.5	100	4.13
2015-03-21	0.497	0.4	0.5	50	4.03
2015-03-22	0.576	0.4	0.5	100	3.91
2015-03-23	0.533	0.4	0.5	100	3.93
2015-03-24	1.849	0.4	0.5	100	3.93
2015-03-25	1.291	0.4	0.5	100	4.06
2015-03-26	0.976	0.4	0.5	100	4.31
2015-03-27	0.797	0.4	0.5	100	4.3
2015-03-28	0.713	0.4	0.5	100	4.15
2015-03-29	0.639	0.4	0.5	100	3.82
2015-03-30	0.594	0.4	0.5	100	4.22
2015-03-31	0.62	0.4	0.5	100	4.45
2015-04-01	0.62	0.4	0.5	100	4.45
2015-04-02	0.557	0.4	0.5	100	4.9
2015-04-03	0.527	0.4	0.5	100	4.84
2015-04-04	0.492	0.4	0.5	50	5.34
2015-04-05	0.454	0.4	0.5	50	5.23
2015-04-06	0.486	0.4	0.5	50	5.35
2015-04-07	0.448	0.4	0.5	50	5.5
2015-04-08	0.459	0.4	0.5	50	5.5
2015-04-09	0.454	0.4	0.5	50	5.5

2015-04-10	0.454	0.4	0.5	50	6.25
2015-04-11	0.594	0.4	0.5	100	6.75
2015-04-12	0.601	0.4	0.5	100	6.88
2015-04-13	0.726	0.4	0.5	100	6.88
2015-04-14	0.768	0.4	0.5	100	6.88
2015-04-15	0.865	0.4	0.5	100	6.1
2015-04-16	0.811	0.4	0.5	100	6.39
2015-04-17	0.783	0.4	0.5	100	
2015-04-18	0.776	0.4	0.5	100	
2015-04-19	0.768	0.4	0.5	100	
2015-04-20	0.811	0.4	0.5	100	6.3
2015-04-21	0.79	0.4	0.5	100	
2015-04-22	0.888	0.4	0.5	100	
2015-04-23	7.134	0.4	0.5	100	
2015-04-24	2.989	0.4	0.5	100	
2015-04-25	2.181	0.4	0.5	100	
2015-04-26	1.731	0.4	0.5	100	
2015-04-27	1.511	0.4	0.5	100	
2015-04-28	1.376	0.4	0.5	100	
2015-04-29	20.935	0.4	0.5	100	
2015-04-30	8.314	0.4	0.5	100	
2015-05-01	4.457	0.6	0.6	100	
2015-05-02	3.07	0.6	0.6	100	
2015-05-03	2.197	0.6	0.6	100	
2015-05-04	1.822	0.6	0.6	100	
2015-05-05	1.558	0.6	0.6	100	
2015-05-06	2.415	0.6	0.6	100	
2015-05-07	2.21	0.6	0.6	100	
2015-05-08	2.155	0.6	0.6	100	
2015-05-09	1.959	0.6	0.6	100	
2015-05-10	1.986	0.6	0.6	100	
2015-05-11	1.822	0.6	0.6	100	
2015-05-12	1.729	0.6	0.6	100	
2015-05-13	1.678	0.6	0.6	100	
2015-05-14	1.769	0.6	0.6	100	
2015-05-15	1.665	0.6	0.6	100	
2015-05-16	1.306	0.6	0.6	100	
2015-05-17	1.306	0.6	0.6	100	
2015-05-18	1.212	0.6	0.6	100	
2015-05-19	1.181	0.6	0.6	100	
2015-05-20	1.11	0.6	0.6	100	
2015-05-21	1.07	0.6	0.6	100	
2015-05-22	1.06	0.6	0.6	100	
2015-05-23	1.022	0.6	0.6	100	
2015-05-24	1.022	0.6	0.6	100	
2015-05-25	0.974	0.6	0.6	100	
2015-05-26	0.946	0.6	0.6	100	
2015-05-27	0.946	0.6	0.6	100	

2015-05-28	0.9	0.6	0.6	100
2015-05-29	0.873	0.6	0.6	100
2015-05-30	0.864	0.6	0.6	100
2015-05-31	0.838	0.6	0.6	100
2015-06-01	0.838	0.6	0.6	100
2015-06-02	0.82	0.6	0.6	100
2015-06-03	0.803	0.6	0.6	100
2015-06-04	0.877	0.6	0.6	100
2015-06-05	1.511	0.6	0.6	100
2015-06-06	1.591	0.6	0.6	100
2015-06-07	1.357	0.6	0.6	100
2015-06-08	1.236	0.6	0.6	100
2015-06-09	1.153	0.6	0.6	100
2015-06-10	1.079	0.6	0.6	100
2015-06-11	1.079	0.6	0.6	100
2015-06-12	0.975	0.6	0.6	100
2015-06-13	0.985	0.6	0.6	100
2015-06-14	0.906	0.6	0.6	100
2015-06-15	0.897	0.6	0.6	100
2015-06-16	0.849	0.6	0.6	100
2015-06-17	0.821	0.6	0.6	100
2015-06-18	0.777	0.6	0.6	100
2015-06-19	0.866	0.6	0.6	100
2015-06-20	2.145	0.6	0.6	100
2015-06-21	2.098	0.6	0.6	100
2015-06-22	2.491	0.6	0.6	100
2015-06-23	2.565	0.6	0.6	100
2015-06-24	2.241	0.6	0.6	100
2015-06-25	2.098	0.6	0.6	100
2015-06-26	1.959	0.6	0.6	100
2015-06-27	1.855	0.6	0.6	100
2015-06-28	6.581	0.6	0.6	100
2015-06-29	5.3	0.6	0.6	100
2015-06-30	6.748	0.6	0.6	100
2015-07-01	8.552	0.6	0.6	100
2015-07-02	5.539	0.6	0.6	100
2015-07-03	4.489	0.6	0.6	100
2015-07-04	4.179	0.6	0.6	100
2015-07-05	3.845	0.6	0.6	100
2015-07-06	3.37	0.6	0.6	100
2015-07-07	2.893	0.6	0.6	100
2015-07-08	2.602	0.6	0.6	100
2015-07-09	2.311	0.6	0.6	100
2015-07-10	2.036	0.6	0.6	100
2015-07-11	1.959	0.6	0.6	100
2015-07-12	1.811	0.6	0.6	100
2015-07-13	1.65	0.6	0.6	100
2015-07-14	1.563	0.6	0.6	100

2015-07-15	1.452	0.6	0.6	100
2015-07-16	1.465	0.6	0.6	100
2015-07-17	1.592	0.6	0.6	100
2015-07-18	1.592	0.6	0.6	100
2015-07-19	1.621	0.6	0.6	100
2015-07-20	1.493	0.6	0.6	100
2015-07-21	1.372	0.6	0.6	100
2015-07-22	1.346	0.6	0.6	100
2015-07-23	1.245	0.6	0.6	100
2015-07-24	1.233	0.6	0.6	100
2015-07-25	1.102	0.6	0.6	100
2015-07-26	1.092	0.6	0.6	100
2015-07-27	1.037	0.6	0.6	100
2015-07-28	1.048	0.6	0.6	100
2015-07-29	0.995	0.6	0.6	100
2015-07-30	1.016	0.6	0.6	100
2015-07-31	0.985	0.6	0.6	100
2015-08-01	0.954	0.6	0.6	100
2015-08-02	0.944	0.6	0.6	100
2015-08-03	0.895	0.6	0.6	100
2015-08-04	0.904	0.6	0.6	100
2015-08-05	0.954	0.6	0.6	100
2015-08-06	1.037	0.6	0.6	100
2015-08-07	1.016	0.6	0.6	100
2015-08-08	1.016	0.6	0.6	100
2015-08-09	1.135	0.6	0.6	100
2015-08-10	1.124	0.6	0.6	100
2015-08-11	1.146	0.6	0.6	100
2015-08-12	1.113	0.6	0.6	100
2015-08-13	1.071	0.6	0.6	100
2015-08-14	1.06	0.6	0.6	100
2015-08-15	1.05	0.6	0.6	100
2015-08-16	1.102	0.6	0.6	100
2015-08-17	1.519	0.6	0.6	100
2015-08-18	2.49	0.6	0.6	100
2015-08-19	2.333	0.6	0.6	100
2015-08-20	2.194	0.6	0.6	100
2015-08-21	1.925	0.6	0.6	100
2015-08-22	1.739	0.6	0.6	100
2015-08-23	1.668	0.6	0.6	100
2015-08-24	1.586	0.6	0.6	100
2015-08-25	1.586	0.6	0.6	100
2015-08-26	1.573	0.6	0.6	100
2015-08-27	1.897	0.6	0.6	100
2015-08-28	1.641	0.6	0.6	100
2015-08-29	1.546	0.6	0.6	100
2015-08-30	1.533	0.6	0.6	100
2015-08-31	1.442	0.6	0.6	100

2015-09-01	1.455	0.5	0.5	100	
2015-09-02	1.739	0.5	0.5	100	
2015-09-03	3.033	0.5	0.5	100	
2015-09-04	3.784	0.5	0.5	100	
2015-09-05	4.011	0.5	0.5	100	
2015-09-06	3.485	0.5	0.5	100	
2015-09-07	3.571	0.5	0.5	100	
2015-09-08	3.072	0.5	0.5	100	
2015-09-09	2.67	0.5	0.5	100	
2015-09-10	2.402	0.5	0.5	100	
2015-09-11	2.525	0.5	0.5	100	
2015-09-12	2.437	0.5	0.5	100	
2015-09-13	2.256	0.5	0.5	100	
2015-09-14	2.333	0.5	0.5	100	
2015-09-15	2.057	0.5	0.5	100	
2015-09-16	1.911	0.5	0.5	100	
2015-09-17	1.755	0.5	0.5	100	
2015-09-18	1.635	0.5	0.5	100	
2015-09-19	1.509	0.5	0.5	100	
2015-09-20	1.442	0.5	0.5	100	
2015-09-21	1.402	0.5	0.5	100	
2015-09-22	1.375	0.5	0.5	100	
2015-09-23	1.283	0.5	0.5	100	
2015-09-24	1.245	0.5	0.5	100	
2015-09-25	1.941	0.5	0.5	100	
2015-09-26	2.785	0.5	0.5	100	
2015-09-27	2.329	0.5	0.5	100	
2015-09-28	2.363	0.5	0.5	100	
2015-09-29	2.153	0.5	0.5	100	
2015-09-30	1.956	0.5	0.5	100	
2015-10-01	1.926	0.4	0.5	100	
2015-10-02	1.895	0.4	0.5	100	0.42
2015-10-03	1.577	0.4	0.5	100	0.44
2015-10-04	1.509	0.4	0.5	100	0.44
2015-10-05	1.402	0.4	0.5	100	8.8
2015-10-06	1.563	0.4	0.5	100	10.05
2015-10-07	1.1	0.4	0.5	100	11.54
2015-10-08	1.016	0.4	0.5	100	11.79
2015-10-09	0.91	0.4	0.5	100	12.59
2015-10-10	0.888	0.4	0.5	100	13.54
2015-10-11	0.888	0.4	0.5	100	13.49
2015-10-12	0.845	0.4	0.5	100	13.31
2015-10-13	0.784	0.4	0.5	100	13.3
2015-10-14	0.705	0.4	0.5	100	12.48
2015-10-15	0.732	0.4	0.5	100	12.15
2015-10-16	0.723	0.4	0.5	100	12.08
2015-10-17	0.663	0.4	0.5	100	12.07
2015-10-18	0.61	0.4	0.5	100	11.12

2015-10-19	0.583	0.4	0.5	100	11.17
2015-10-20	1.635	0.4	0.5	100	12.14
2015-10-21	1.577	0.4	0.5	100	12.1
2015-10-22	0.5	0.4	0.5	100	12.08
2015-10-23	0.434	0.4	0.5	50	12.15
2015-10-24	0.512	0.4	0.5	100	12.23
2015-10-25	0.512	0.4	0.5	100	12.25
2015-10-26	0.503	0.4	0.5	100	12.25
2015-10-27	0.475	0.4	0.5	50	12.3
2015-10-28	0.569	0.4	0.5	100	12.45
2015-10-29	0.672	0.4	0.5	100	12.63
2015-10-30	0.76	0.4	0.5	100	12.7
2015-10-31	1.433	0.4	0.5	100	12.7
2015-11-01	1.227	0.4	0.5	100	12.73
2015-11-02	0.936	0.4	0.5	100	12.7
2015-11-03	0.819	0.4	0.5	100	12.7
2015-11-04	0.653	0.4	0.5	100	12.73
2015-11-05	0.653	0.4	0.5	100	12.75
2015-11-06	0.729	0.4	0.5	100	12.73
2015-11-07	0.692	0.4	0.5	100	12.73
2015-11-08	0.587	0.4	0.5	100	12.73
2015-11-09	0.56	0.4	0.5	100	12.65
2015-11-10	0.605	0.4	0.5	100	12.45
2015-11-11	0.731	0.4	0.5	100	12.43
2015-11-12	0.662	0.4	0.5	100	12.4
2015-11-13	0.698	0.4	0.5	100	12.23
2015-11-14	0.763	0.4	0.5	100	12.07
2015-11-15	0.731	0.4	0.5	100	11.9
2015-11-16	0.698	0.4	0.5	100	11.7
2015-11-17	1.029	0.4	0.5	100	11.5
2015-11-18	0.928	0.4	0.5	100	11.9
2015-11-19	0.799	0.4	0.5	100	11.73
2015-11-20	0.78	0.4	0.5	100	11.7
2015-11-21	0.78	0.4	0.5	100	11.7
2015-11-22	0.715	0.4	0.5	100	11.75
2015-11-23	0.69	0.4	0.5	100	11.68
2015-11-24	0.579	0.4	0.5	100	11.68
2015-11-25	0.512	0.4	0.5	100	11.58
2015-11-26	0.382	0.4	0.5	0	11.48
2015-11-27	0.356	0.4	0.5	0	11.45
2015-11-28	0.466	0.4	0.5	50	11.4
2015-11-29	0.819	0.4	0.5	100	11.33
2015-11-30	0.715	0.4	0.5	100	11.3
2015-12-01	0.616	0.4	0.5	100	11.23
2015-12-02	0.579	0.4	0.5	100	11.22
2015-12-03	0.497	0.4	0.5	50	11.08
2015-12-04	0.457	0.4	0.5	50	11.2
2015-12-05	0.396	0.4	0.5	0	11.2

2015-12-06	0.433	0.4	0.5	50	11.18	
2015-12-07	0.466	0.4	0.5	50	11.2	
2015-12-08	0.559	0.4	0.5	100	11.1	
2015-12-09	0.525	0.4	0.5	100	11.1	
2015-12-10	0.48	0.4	0.5	50	10.88	
2015-12-11	0.486	0.4	0.5	50	10.45	
2015-12-12	0.38	0.4	0.5	0	10.35	
2015-12-13	0.401	0.4	0.5	50	10.4	
2015-12-14	0.34	0.4	0.5	0	10.4	
2015-12-15	0.309	0.4	0.5	0	10.38	
2015-12-16	0.286	0.4	0.5	0	10.4	
2015-12-17	0.333	0.4	0.5	0	10.3	
2015-12-18	0.504	0.4	0.5	100	10.3	
2015-12-19	0.753	0.4	0.5	100	10.3	
2015-12-20	0.682	0.4	0.5	100	10.03	
2015-12-21	0.643	0.4	0.5	100	10.03	
2015-12-22	0.643	0.4	0.5	100	9.9	
2015-12-23	0.635	0.4	0.5	100	10.9	
2015-12-24	1.079	0.4	0.5	100	10.8	
2015-12-25	0.979	0.4	0.5	100	10.8	
2015-12-26	0.835	0.4	0.5	100	10.5	
2015-12-27	0.542	0.4	0.5	100	10.15	
2015-12-28	0.566	0.4	0.5	100	10.13	
2015-12-29	0.401	0.4	0.5	50	10.05	
2015-12-30	0.26	0.4	0.5	0	10.03	
2015-12-31	0.548	0.4	0.5	100	9.93	
2016-01-01	0.772	0.4	0.5	100	9.95	
2016-01-02	1.163	0.4	0.5	100	9.95	
2016-01-03	0.896	0.4	0.5	100	9.85	
2016-01-04	0.806	0.4	0.5	100	9.63	
2016-01-05	1.62	0.4	0.5	100	9.68	
2016-01-06	0.783	0.4	0.5	100	9.75	
2016-01-07	0.494	0.4	0.5	50	9.6	
2016-01-08	0.828	0.4	0.5	100	9.55	
2016-01-09	0.692	0.4	0.5	100	9.58	
2016-01-10	0.587	0.4	0.5	100	9.65	
2016-01-11	0.55	0.4	0.5	100	9.75	
2016-01-12	0.715	0.4	0.5	100	9.7	
2016-01-13	0.623	0.4	0.5	100	10.05	
2016-01-14	0.606	0.4	0.5	100	10.01	
2016-01-15	0.892	0.4	0.5	100	10.01	
2016-01-16	0.861	0.4	0.5	100	10.08	
2016-01-17	5.139	0.4	0.5	100	10.1	over 2.5
2016-01-18	2.641	0.4	0.5	100		
2016-01-19	3.802	0.4	0.5	100		
2016-01-20	6.893	0.4	0.5	100		
2016-01-21	18.392	0.4	0.5	100		
2016-01-22	7.418	0.4	0.5	100		

2016-01-23	4.474	0.4	0.5	100	
2016-01-24	2.698	0.4	0.5	100	
2016-01-25	2.218	0.4	0.5	100	
2016-01-26	1.83	0.4	0.5	100	
2016-01-27	1.685	0.4	0.5	100	
2016-01-28	1.802	0.4	0.5	100	
2016-01-29	8.34	0.4	0.5	100	
2016-01-30	6.125	0.4	0.5	100	
2016-01-31	4.73	0.4	0.5	100	
2016-02-01	4.499	0.4	0.5	100	
2016-02-02	3.488	0.4	0.5	100	
2016-02-03	2.606	0.4	0.5	100	
2016-02-04	2.122	0.4	0.5	100	11.15
2016-02-05	1.753	0.4	0.5	100	11.25
2016-02-06	1.994	0.4	0.5	100	
2016-02-07	3.504	0.4	0.5	100	
2016-02-08	3.306	0.4	0.5	100	
2016-02-09	2.984	0.4	0.5	100	
2016-02-10	2.754	0.4	0.5	100	
2016-02-11	1.248	0.4	0.5	100	
2016-02-12	1.146	0.4	0.5	100	11.3
2016-02-13	0.959	0.4	0.5	100	11.3
2016-02-14	0.852	0.4	0.5	100	11.7
2016-02-15	0.84	0.4	0.5	100	11.7
2016-02-16	0.738	0.4	0.5	100	11.75
2016-02-17	0.588	0.4	0.5	100	11.98
2016-02-18	0.527	0.4	0.5	100	12
2016-02-19	0.538	0.4	0.5	100	12
2016-02-20	0.548	0.4	0.5	100	12.1
2016-02-21	0.47	0.4	0.5	50	12.1
2016-02-22	0.7	0.4	0.5	100	12.2
2016-02-23	0.7	0.4	0.5	100	12.45
2016-02-24	0.7	0.4	0.5	100	12.52
2016-02-25	0.584	0.4	0.5	100	12.75
2016-02-26	0.505	0.4	0.5	100	12.75
2016-02-27	0.48	0.4	0.5	50	12.75
2016-02-28	0.421	0.4	0.5	50	13.22
2016-02-29	0.331	0.4	0.5	0	13.1
2016-03-01	0.369	0.4	0.5	0	13.1
2016-03-02	0.384	0.4	0.5	0	13.1
2016-03-03	0.447	0.4	0.5	50	13.2
2016-03-04	0.41	0.4	0.5	50	13
2016-03-05	0.374	0.4	0.5	0	12.75
2016-03-06	0.364	0.4	0.5	0	12.1
2016-03-07	0.331	0.4	0.5	0	12.45
2016-03-08	0.322	0.4	0.5	0	12.45
2016-03-09	0.352	0.4	0.5	0	11.45
2016-03-10	0.363	0.4	0.5	0	11.05

2016-03-11	0.374	0.4	0.5	0	10	over 2.5
2016-03-12	0.352	0.4	0.5	0	10.25	
2016-03-13	0.339	0.4	0.5	0	9.85	
2016-03-14	0.335	0.4	0.5	0	9.45	
2016-03-15	0.335	0.4	0.5	0	9.45	
2016-03-16	0.42	0.4	0.5	50	9.65	
2016-03-17	3.828	0.4	0.5	100	9.8	
2016-03-18	1.231	0.4	0.5	100	9.82	
2016-03-19	1.665	0.4	0.5	100	9.58	
2016-03-20	1.371	0.4	0.5	100	9.65	
2016-03-21	1.133	0.4	0.5	100	9.7	
2016-03-22	1.007	0.4	0.5	100	9.75	
2016-03-23	0.899	0.4	0.5	100	9.65	
2016-03-24	0.846	0.4	0.5	100	8.28	
2016-03-25	0.923	0.4	0.5	100	3.55	
2016-03-26	1.545	0.4	0.5	100		
2016-03-27	2.338	0.4	0.5	100		
2016-03-28	1.868	0.4	0.5	100		
2016-03-29	1.532	0.4	0.5	100		
2016-03-30	1.484	0.4	0.5	100		
2016-03-31	1.3	0.4	0.5	100		
2016-04-01	1.24	0.4	0.5	100		
2016-04-02	1.181	0.4	0.5	100		
2016-04-03	1.21	0.4	0.5	100		
2016-04-04	1.21	0.4	0.5	100		
2016-04-05	1.31	0.4	0.5	100		
2016-04-06	3.762	0.4	0.5	100		
2016-04-07	2.362	0.4	0.5	100		
2016-04-08	1.904	0.4	0.5	100		
2016-04-09	1.62	0.4	0.5	100		
2016-04-10	1.521	0.4	0.5	100		
2016-04-11	1.36	0.4	0.5	100		
2016-04-12	1.273	0.4	0.5	100		
2016-04-13	1.185	0.4	0.5	100		
2016-04-14	1.476	0.4	0.5	100		
2016-04-15	1.285	0.4	0.5	100		
2016-04-16	1.185	0.4	0.5	100		
2016-04-17	1.144	0.4	0.5	100		
2016-04-18	1.024	0.4	0.5	100		
2016-04-19	1.079	0.4	0.5	100		
2016-04-20	1.125	0.4	0.5	100		
2016-04-21	1.079	0.4	0.5	100		
2016-04-22	0.978	0.4	0.5	100		
2016-04-23	0.943	0.4	0.5	100		
2016-04-24	0.934	0.4	0.5	100		
2016-04-25	0.952	0.4	0.5	100		
2016-04-26	0.917	0.4	0.5	100		
2016-04-27	0.882	0.4	0.5	100		

2016-04-28	0.833	0.4	0.5	100	
2016-04-29	0.825	0.4	0.5	100	
2016-04-30	0.825	0.4	0.5	100	
2016-05-01	0.801	0.6	0.6	100	
2016-05-02	0.801	0.6	0.6	100	10.05
2016-05-03	0.779	0.6	0.6	100	10.16
2016-05-04	0.801	0.6	0.6	100	10.12
2016-05-05	0.758	0.6	0.6	100	10.05
2016-05-06	0.786	0.6	0.6	100	9.8
2016-05-07	0.779	0.6	0.6	100	9.15
2016-05-08	0.779	0.6	0.6	100	9.15
2016-05-09	0.765	0.6	0.6	100	8.95
2016-05-10	0.758	0.6	0.6	100	8.5
2016-05-11	0.567	0.6	0.6	0	8.45
2016-05-12	0.597	0.6	0.6	0	8.45
2016-05-13	0.597	0.6	0.6	0	8.25
2016-05-14	0.74	0.6	0.6	100	8.25
2016-05-15	0.929	0.6	0.6	100	8.25
2016-05-16	0.855	0.6	0.6	100	8.25
2016-05-17	0.74	0.6	0.6	100	8.25
2016-05-18	0.753	0.6	0.6	100	8.25
2016-05-19	0.791	0.6	0.6	100	8.25
2016-05-20	0.728	0.6	0.6	100	8.25
2016-05-21	0.699	0.6	0.6	100	
2016-05-22	0.728	0.6	0.6	100	
2016-05-23	0.791	0.6	0.6	100	
2016-05-24	0.753	0.6	0.6	100	
2016-05-25	0.895	0.6	0.6	100	
2016-05-26	0.974	0.6	0.6	100	
2016-05-27	0.95	0.6	0.6	100	
2016-05-28	0.929	0.6	0.6	100	
2016-05-29	1.429	0.6	0.6	100	
2016-05-30	5.54	0.6	0.6	100	
2016-05-31	3.807	0.6	0.6	100	
2016-06-01	2.82	0.6	0.6	100	
2016-06-02	2.278	0.6	0.6	100	
2016-06-03	2.027	0.6	0.6	100	
2016-06-04	1.847	0.6	0.6	100	
2016-06-05	1.639	0.6	0.6	100	
2016-06-06	1.555	0.6	0.6	100	
2016-06-07	1.457	0.6	0.6	100	
2016-06-08	1.344	0.6	0.6	100	
2016-06-09	1.256	0.6	0.6	100	
2016-06-10	1.183	0.6	0.6	100	
2016-06-11	1.155	0.6	0.6	100	
2016-06-12	1.169	0.6	0.6	100	
2016-06-13	1.169	0.6	0.6	100	
2016-06-14	1.241	0.6	0.6	100	

2016-06-15	1.128	0.6	0.6	100
2016-06-16	1.038	0.6	0.6	100
2016-06-17	1.013	0.6	0.6	100
2016-06-18	1	0.6	0.6	100
2016-06-19	0.95	0.6	0.6	100
2016-06-20	0.895	0.6	0.6	100
2016-06-21	0.929	0.6	0.6	100
2016-06-22	1.013	0.6	0.6	100
2016-06-23	0.95	0.6	0.6	100
2016-06-24	0.94	0.6	0.6	100
2016-06-25	0.929	0.6	0.6	100
2016-06-26	0.918	0.6	0.6	100
2016-06-27	1.013	0.6	0.6	100
2016-06-28	1.344	0.6	0.6	100
2016-06-29	1.256	0.6	0.6	100
2016-06-30	1.197	0.6	0.6	100
2016-07-01	1.169	0.6	0.6	100
2016-07-02	1.114	0.6	0.6	100
2016-07-03	1.063	0.6	0.6	100
2016-07-04	1.013	0.6	0.6	100
2016-07-05	0.987	0.6	0.6	100
2016-07-06	0.962	0.6	0.6	100
2016-07-07	0.962	0.6	0.6	100
2016-07-08	0.94	0.6	0.6	100
2016-07-09	0.929	0.6	0.6	100
2016-07-10	0.918	0.6	0.6	100
2016-07-11	0.907	0.6	0.6	100
2016-07-12	0.855	0.6	0.6	100
2016-07-13	0.843	0.6	0.6	100
2016-07-14	0.823	0.6	0.6	100
2016-07-15	6.205	0.6	0.6	100
2016-07-16	5.439	0.6	0.6	100
2016-07-17	5.207	0.6	0.6	100
2016-07-18	3.903	0.6	0.6	100
2016-07-19	2.704	0.6	0.6	100
2016-07-20	2.33	0.6	0.6	100
2016-07-21	2.024	0.6	0.6	100
2016-07-22	2.115	0.6	0.6	100
2016-07-23	1.917	0.6	0.6	100
2016-07-24	1.766	0.6	0.6	100
2016-07-25	2.362	0.6	0.6	100
2016-07-26	4.493	0.6	0.6	100
2016-07-27	4.808	0.6	0.6	100
2016-07-28	4.04	0.6	0.6	100
2016-07-29	3.338	0.6	0.6	100
2016-07-30	3.057	0.6	0.6	100
2016-07-31	2.657	0.6	0.6	100
2016-08-01	2.378	0.6	0.6	100

2016-08-02	2.067	0.6	0.6	100	
2016-08-03	1.917	0.6	0.6	100	
2016-08-04	1.902	0.6	0.6	100	
2016-08-05	3.244	0.6	0.6	100	
2016-08-06	3.662	0.6	0.6	100	
2016-08-07	3.824	0.6	0.6	100	
2016-08-08	3.703	0.6	0.6	100	
2016-08-09	3.02	0.6	0.6	100	
2016-08-10	2.927	0.6	0.6	100	
2016-08-11	2.657	0.6	0.6	100	
2016-08-12	2.507	0.6	0.6	100	
2016-08-13	2.562	0.6	0.6	100	
2016-08-14	2.717	0.6	0.6	100	
2016-08-15	2.815	0.6	0.6	100	
2016-08-16	2.815	0.6	0.6	100	
2016-08-17	2.796	0.6	0.6	100	
2016-08-18	2.935	0.6	0.6	100	
2016-08-19	2.762	0.6	0.6	100	
2016-08-20	2.607	0.6	0.6	100	
2016-08-21	2.396	0.6	0.6	100	
2016-08-22	2.299	0.6	0.6	100	
2016-08-23	2.19	0.6	0.6	100	
2016-08-24	2.143	0.6	0.6	100	
2016-08-25	2.128	0.6	0.6	100	
2016-08-26	3.509	0.6	0.6	100	
2016-08-27	3.36	0.6	0.6	100	
2016-08-28	3.612	0.6	0.6	100	
2016-08-29	3.208	0.6	0.6	100	
2016-08-30	2.8	0.6	0.6	100	
2016-08-31	2.479	0.6	0.6	100	
2016-09-01	2.331	0.5	0.5	100	
2016-09-02	2.19	0.5	0.5	100	
2016-09-03	2.02	0.5	0.5	100	
2016-09-04	1.901	0.5	0.5	100	
2016-09-05	1.858	0.5	0.5	100	
2016-09-06	1.845	0.5	0.5	100	
2016-09-07	1.818	0.5	0.5	100	
2016-09-08	1.672	0.5	0.5	100	
2016-09-09	1.632	0.5	0.5	100	
2016-09-10	1.556	0.5	0.5	100	
2016-09-11	1.47	0.5	0.5	100	
2016-09-12	1.408	0.5	0.5	100	
2016-09-13	1.323	0.5	0.5	100	
2016-09-14	1.287	0.5	0.5	100	11.85
2016-09-15	1.206	0.5	0.5	100	10.68
2016-09-16	1.184	0.5	0.5	100	10.1
2016-09-17	1.118	0.5	0.5	100	10
2016-09-18	1.096	0.5	0.5	100	10.08

2016-09-19	1.055	0.5	0.5	100	10.05	
2016-09-20	1.055	0.5	0.5	100	9.9	
2016-09-21	1.055	0.5	0.5	100	9.9	
2016-09-22	1.096	0.5	0.5	100	9.25	
2016-09-23	1.096	0.5	0.5	100		
2016-09-24	1.075	0.5	0.5	100		
2016-09-25	1.024	0.5	0.5	100		
2016-09-26	1.034	0.5	0.5	100		
2016-09-27	1.594	0.5	0.5	100		
2016-09-28	5.328	0.5	0.5	100		
2016-09-29	4.569	0.5	0.5	100		
2016-09-30	3.744	0.5	0.5	100		
2016-10-01	3.208	0.4	0.5	100		
2016-10-02	2.858	0.4	0.5	100		
2016-10-03	2.532	0.4	0.5	100		
2016-10-04	2.236	0.4	0.5	100		
2016-10-05	2.035	0.4	0.5	100		
2016-10-06	1.93	0.4	0.5	100		
2016-10-07	1.872	0.4	0.5	100		
2016-10-08	4.773	0.4	0.5	100		
2016-10-09	3.57	0.4	0.5	100		
2016-10-10	2.935	0.4	0.5	100		
2016-10-11	3.55	0.4	0.5	100		
2016-10-12	2.743	0.4	0.5	100		
2016-10-13	2.514	0.4	0.5	100		
2016-10-14	3.151	0.4	0.5	100		
2016-10-15	2.569	0.4	0.5	100		
2016-10-16	4.351	0.4	0.5	100		
2016-10-17	3.699	0.4	0.5	100		
2016-10-18	3.189	0.4	0.5	100	7.63	over 2.5
2016-10-19	2.666	0.4	0.5	100	9.3	over 2.5
2016-10-20	2.268	0.4	0.5	100	9.3	
2016-10-21	2.283	0.4	0.5	100	9.8	
2016-10-22	4.773	0.4	0.5	100		
2016-10-23	4.069	0.4	0.5	100		
2016-10-24	3.378	0.4	0.5	100		
2016-10-25	3.112	0.4	0.5	100		
2016-10-26	2.896	0.4	0.5	100		
2016-10-27	4.721	0.4	0.5	100		
2016-10-28	5.476	0.4	0.5	100		
2016-10-29	6.26	0.4	0.5	100		
2016-10-30	10.42	0.4	0.5	100		
2016-10-31	7.057	0.4	0.5	100		
2016-11-01	8.889	0.4	0.5	100		
2016-11-02	7.168	0.4	0.5	100		
2016-11-03	6.491	0.4	0.5	100		
2016-11-04	6.038	0.4	0.5	100		
2016-11-05	7.848	0.4	0.5	100		

2016-11-06	5.853	0.4	0.5	100	
2016-11-07	5.408	0.4	0.5	100	
2016-11-08	4.754	0.4	0.5	100	
2016-11-09	4.127	0.4	0.5	100	
2016-11-10	3.955	0.4	0.5	100	
2016-11-11	3.836	0.4	0.5	100	
2016-11-12	3.484	0.4	0.5	100	
2016-11-13	17.81	0.4	0.5	100	
2016-11-14	17.148	0.4	0.5	100	
2016-11-15	15.478	0.4	0.5	100	
2016-11-16	22.321	0.4	0.5	100	
2016-11-17	23.182	0.4	0.5	100	
2016-11-18	46.832	0.4	0.5	100	
2016-11-19	27.432	0.4	0.5	100	
2016-11-20	17.81	0.4	0.5	100	
2016-11-21	12.099	0.4	0.5	100	
2016-11-22	11.577	0.4	0.5	100	
2016-11-23	9.105	0.4	0.5	100	
2016-11-24	4.99	0.4	0.5	100	
2016-11-25	4.662	0.4	0.5	100	
2016-11-26	5.574	0.4	0.5	100	
2016-11-27	4.003	0.4	0.5	100	
2016-11-28	3.605	0.4	0.5	100	
2016-11-29	2.898	0.4	0.5	100	
2016-11-30	2.324	0.4	0.5	100	
2016-12-01	2.113	0.4	0.5	100	
2016-12-02	2.324	0.4	0.5	100	
2016-12-03	2.765	0.4	0.5	100	
2016-12-04	3.235	0.4	0.5	100	
2016-12-05	2.512	0.4	0.5	100	
2016-12-06	2.409	0.4	0.5	100	
2016-12-07	2.113	0.4	0.5	100	
2016-12-08	2.411	0.4	0.5	100	
2016-12-09	2.571	0.4	0.5	100	
2016-12-10	3.685	0.4	0.5	100	
2016-12-11	2.909	0.4	0.5	100	
2016-12-12	2.49	0.4	0.5	100	
2016-12-13	2.571	0.4	0.5	100	
2016-12-14	2.941	0.4	0.5	100	
2016-12-15	2.517	0.4	0.5	100	
2016-12-16	2.27	0.4	0.5	100	
2016-12-17	1.928	0.4	0.5	100	
2016-12-18	1.702	0.4	0.5	100	
2016-12-19	1.619	0.4	0.5	100	9.9
2016-12-20	1.451	0.4	0.5	100	11
2016-12-21	1.27	0.4	0.5	100	11.15
2016-12-22	1.24	0.4	0.5	100	11
2016-12-23	1.078	0.4	0.5	100	11.4

2016-12-24	1.135	0.4	0.5	100	11.6	12.05
2016-12-25	1.369	0.4	0.5	100	11.5	
2016-12-26	1.202	0.4	0.5	100	11.55	
2016-12-27	1.116	0.4	0.5	100	11.4	
2016-12-28	0.984	0.4	0.5	100	11.5	
2016-12-29	0.917	0.4	0.5	100		
2016-12-30	1.003	0.4	0.5	100	12.1	
2016-12-31	2.22	0.4	0.5	100	12.4	
2017-01-01	2.098	0.4	0.5	100	13.4	
2017-01-02	1.965	0.4	0.5	100	13.85	
2017-01-03	1.784	0.4	0.5	100	13.85	
2017-01-04	2.123	0.4	0.5	100	13.85	
2017-01-05	2.385	0.4	0.5	100	14	
2017-01-06	2.27	0.4	0.5	100	14.5	
2017-01-07	2.001	0.4	0.5	100	14.65	
2017-01-08	2.123	0.4	0.5	100	14.65	
2017-01-09	2.27	0.4	0.5	100	14.9	
2017-01-10	1.331	0.4	0.5	100	14.75	
2017-01-11	1.075	0.4	0.5	100	14.9	
2017-01-12	1.044	0.4	0.5	100	15	
2017-01-13	0.861	0.4	0.5	100	15	
2017-01-14	0.72	0.4	0.5	100	14.9	
2017-01-15	0.654	0.4	0.5	100	14.8	
2017-01-16	0.654	0.4	0.5	100	14.9	
2017-01-17	0.654	0.4	0.5	100	14.8	
2017-01-18	0.654	0.4	0.5	100	14.75	
2017-01-19	0.615	0.4	0.5	100	14.75	
2017-01-20	0.775	0.4	0.5	100		
2017-01-21	0.973	0.4	0.5	100		
2017-01-22	0.766	0.4	0.5	100		
2017-01-23	1.311	0.4	0.5	100		
2017-01-24	2.954	0.4	0.5	100		
2017-01-25	1.633	0.4	0.5	100		
2017-01-26	1.195	0.4	0.5	100		
2017-01-27	0.935	0.4	0.5	100		
2017-01-28	0.811	0.4	0.5	100	13.55	
2017-01-29	0.749	0.4	0.5	100	13.85	
2017-01-30	0.677	0.4	0.5	100	13.45	
2017-01-31	0.592	0.4	0.5	100	13.3	
2017-02-01	0.537	0.4	0.5	100	13.3	
2017-02-02	0.491	0.4	0.5	50	13.25	
2017-02-03	0.517	0.4	0.5	100	13.25	
2017-02-04	0.531	0.4	0.5	100	13.2	
2017-02-05	0.425	0.4	0.5	50	13.05	
2017-02-06	0.407	0.4	0.5	50	13.05	
2017-02-07	0.343	0.4	0.5	0	13.05	
2017-02-08	0.419	0.4	0.5	50	13.05	
2017-02-09	0.578	0.4	0.5	100		

2017-02-10	0.828	0.4	0.5	100	
2017-02-11	0.677	0.4	0.5	100	
2017-02-12	0.62	0.4	0.5	100	
2017-02-13	0.524	0.4	0.5	100	
2017-02-14	0.531	0.4	0.5	100	13.55
2017-02-15	0.558	0.4	0.5	100	13.55
2017-02-16	0.504	0.4	0.5	100	13.3
2017-02-17	0.413	0.4	0.5	50	12.55
2017-02-18	0.438	0.4	0.5	50	12.3
2017-02-19	0.425	0.4	0.5	50	12.3
2017-02-20	0.401	0.4	0.5	50	11.85
2017-02-21	0.432	0.4	0.5	50	11.95
2017-02-22	0.365	0.4	0.5	0	11.95
2017-02-23	0.377	0.4	0.5	0	11.95
2017-02-24	0.383	0.4	0.5	0	11.6
2017-02-25	0.413	0.4	0.5	50	11.45
2017-02-26	0.395	0.4	0.5	0	11.45
2017-02-27	0.407	0.4	0.5	50	11.45
2017-02-28	0.53	0.4	0.5	100	11.35
2017-03-01	0.536	0.4	0.5	100	11.35
2017-03-02	0.485	0.4	0.5	50	
2017-03-03	0.505	0.4	0.5	100	11.75
2017-03-04	0.46	0.4	0.5	50	11.6
2017-03-05	0.437	0.4	0.5	50	11.6
2017-03-06	0.41	0.4	0.5	50	
2017-03-07	0.354	0.4	0.5	0	
2017-03-08	0.404	0.4	0.5	50	
2017-03-09	0.421	0.4	0.5	50	
2017-03-10	0.404	0.4	0.5	50	
2017-03-11	0.421	0.4	0.5	50	
2017-03-12	0.454	0.4	0.5	50	
2017-03-13	0.879	0.4	0.5	100	
2017-03-14	5.013	0.4	0.5	100	
2017-03-15	4.825	0.4	0.5	100	
2017-03-16	2.627	0.4	0.5	100	
2017-03-17	1.877	0.4	0.5	100	
2017-03-18	1.485	0.4	0.5	100	
2017-03-19	1.149	0.4	0.5	100	
2017-03-20	1.128	0.4	0.5	100	
2017-03-21	1.004	0.4	0.5	100	
2017-03-22	0.895	0.4	0.5	100	
2017-03-23	1.141	0.4	0.5	100	
2017-03-24	1.209	0.4	0.5	100	
2017-03-25	1.363	0.4	0.5	100	
2017-03-26	1.321	0.4	0.5	100	
2017-03-27	2.634	0.4	0.5	100	
2017-03-28	6.184	0.4	0.5	100	
2017-03-29	10.307	0.4	0.5	100	

2017-03-30	5.324	0.4	0.5	100
2017-03-31	4.814	0.4	0.5	100
2017-04-01	3.723	0.4	0.5	100
2017-04-02	3.194	0.4	0.5	100
2017-04-03	2.893	0.4	0.5	100
2017-04-04	4.702	0.4	0.5	100
2017-04-05	7.071	0.4	0.5	100
2017-04-06	13.584	0.4	0.5	100
2017-04-07	51.354	0.4	0.5	100
2017-04-08	24.681	0.4	0.5	100
2017-04-09	14.286	0.4	0.5	100
2017-04-10	9.612	0.4	0.5	100
2017-04-11	6.937	0.4	0.5	100
2017-04-12	5.683	0.4	0.5	100
2017-04-13	8.206	0.4	0.5	100
2017-04-14	33.938	0.4	0.5	100
2017-04-15	66.526	0.4	0.5	100
2017-04-16	33.642	0.4	0.5	100
2017-04-17	18.459	0.4	0.5	100
2017-04-18	14.855	0.4	0.5	100
2017-04-19	10.177	0.4	0.5	100
2017-04-20	8.135	0.4	0.5	100
2017-04-21	6.709	0.4	0.5	100
2017-04-22	5.608	0.4	0.5	100
2017-04-23	4.545	0.4	0.5	100
2017-04-24	3.956	0.4	0.5	100
2017-04-25	3.723	0.4	0.5	100
2017-04-26	3.444	0.4	0.5	100
2017-04-27	3.143	0.4	0.5	100
2017-04-28	2.796	0.4	0.5	100
2017-04-29	2.613	0.4	0.5	100
2017-04-30	2.385	0.4	0.5	100
2017-05-01	2.398	0.6	0.6	100
2017-05-02	2.63	0.6	0.6	100
2017-05-03	2.353	0.6	0.6	100
2017-05-04	2.206	0.6	0.6	100
2017-05-05	2.395	0.6	0.6	100
2017-05-06	2.18	0.6	0.6	100
2017-05-07	2.004	0.6	0.6	100
2017-05-08	1.905	0.6	0.6	100
2017-05-09	1.857	0.6	0.6	100
2017-05-10	1.775	0.6	0.6	100
2017-05-11	1.73	0.6	0.6	100
2017-05-12	1.73	0.6	0.6	100
2017-05-13	1.81	0.6	0.6	100
2017-05-14	1.869	0.6	0.6	100
2017-05-15	1.763	0.6	0.6	100
2017-05-16	1.709	0.6	0.6	100

2017-05-17	1.623	0.6	0.6	100
2017-05-18	1.644	0.6	0.6	100
2017-05-19	1.798	0.6	0.6	100
2017-05-20	2.042	0.6	0.6	100
2017-05-21	2.042	0.6	0.6	100
2017-05-22	2.042	0.6	0.6	100
2017-05-23	1.687	0.6	0.6	100
2017-05-24	1.644	0.6	0.6	100
2017-05-25	1.591	0.6	0.6	100
2017-05-26	1.57	0.6	0.6	100
2017-05-27	1.538	0.6	0.6	100
2017-05-28	1.475	0.6	0.6	100
2017-05-29	1.612	0.6	0.6	100
2017-05-30	1.709	0.6	0.6	100
2017-05-31	1.591	0.6	0.6	100
2017-06-01	1.57	0.6	0.6	100
2017-06-02	1.527	0.6	0.6	100
2017-06-03	1.517	0.6	0.6	100
2017-06-04	1.517	0.6	0.6	100
2017-06-05	1.559	0.6	0.6	100
2017-06-06	1.709	0.6	0.6	100
2017-06-07	1.655	0.6	0.6	100
2017-06-08	1.601	0.6	0.6	100
2017-06-09	1.527	0.6	0.6	100
2017-06-10	1.496	0.6	0.6	100
2017-06-11	1.464	0.6	0.6	100
2017-06-12	1.4	0.6	0.6	100
2017-06-13	1.338	0.6	0.6	100
2017-06-14	1.26	0.6	0.6	100
2017-06-15	1.318	0.6	0.6	100
2017-06-16	1.251	0.6	0.6	100
2017-06-17	1.205	0.6	0.6	100
2017-06-18	1.242	0.6	0.6	100
2017-06-19	1.187	0.6	0.6	100
2017-06-20	1.179	0.6	0.6	100
2017-06-21	1.17	0.6	0.6	100
2017-06-22	1.152	0.6	0.6	100
2017-06-23	1.144	0.6	0.6	100
2017-06-24	1.655	0.6	0.6	100
2017-06-25	2.079	0.6	0.6	100
2017-06-26	2.155	0.6	0.6	100
2017-06-27	2.69	0.6	0.6	100
2017-06-28	2.438	0.6	0.6	100
2017-06-29	2.467	0.6	0.6	100
2017-06-30	2.585	0.6	0.6	100
2017-07-01	2.452	0.6	0.6	100
2017-07-02	2.938	0.6	0.6	100
2017-07-03	42.441	0.6	0.6	100

2017-07-04	20.497	0.6	0.6	100
2017-07-05	12.969	0.6	0.6	100
2017-07-06	8.239	0.6	0.6	100
2017-07-07	6.445	0.6	0.6	100
2017-07-08	5.519	0.6	0.6	100
2017-07-09	4.965	0.6	0.6	100
2017-07-10	4.495	0.6	0.6	100
2017-07-11	3.978	0.6	0.6	100
2017-07-12	3.576	0.6	0.6	100
2017-07-13	3.978	0.6	0.6	100
2017-07-14	3.613	0.6	0.6	100
2017-07-15	4.282	0.6	0.6	100
2017-07-16	3.595	0.6	0.6	100
2017-07-17	3.186	0.6	0.6	100
2017-07-18	3.359	0.6	0.6	100
2017-07-19	15.953	0.6	0.6	100
2017-07-20	9.952	0.6	0.6	100
2017-07-21	8.174	0.6	0.6	100
2017-07-22	17.269	0.6	0.6	100
2017-07-23	79.062	0.6	0.6	100
2017-07-24	42.351	0.6	0.6	100
2017-07-25	29.736	0.6	0.6	100
2017-07-26	23.452	0.6	0.6	100
2017-07-27	19.042	0.6	0.6	100
2017-07-28	26.34	0.6	0.6	100
2017-07-29	18.732	0.6	0.6	100
2017-07-30	12.868	0.6	0.6	100
2017-07-31	9.567	0.6	0.6	100
2017-08-01	7.764	0.6	0.6	100
2017-08-02	6.875	0.6	0.6	100
2017-08-03	8.824	0.6	0.6	100
2017-08-04	9.181	0.6	0.6	100
2017-08-05	7.827	0.6	0.6	100
2017-08-06	7.202	0.6	0.6	100
2017-08-07	6.785	0.6	0.6	100
2017-08-08	6.632	0.6	0.6	100
2017-08-09	6.31	0.6	0.6	100
2017-08-10	5.902	0.6	0.6	100
2017-08-11	5.681	0.6	0.6	100
2017-08-12	5.312	0.6	0.6	100
2017-08-13	5.124	0.6	0.6	100
2017-08-14	5.419	0.6	0.6	100
2017-08-15	26.858	0.6	0.6	100
2017-08-16	17.9	0.6	0.6	100
2017-08-17	12.726	0.6	0.6	100
2017-08-18	11.55	0.6	0.6	100
2017-08-19	11.078	0.6	0.6	100
2017-08-20	8.847	0.6	0.6	100

2017-08-21	7.694	0.6	0.6	100
2017-08-22	7.365	0.6	0.6	100
2017-08-23	6.669	0.6	0.6	100
2017-08-24	5.84	0.6	0.6	100
2017-08-25	6.168	0.6	0.6	100
2017-08-26	5.782	0.6	0.6	100
2017-08-27	5.401	0.6	0.6	100
2017-08-28	5.14	0.6	0.6	100
2017-08-29	5.041	0.6	0.6	100
2017-08-30	4.927	0.6	0.6	100
2017-08-31	6.382	0.6	0.6	100
2017-09-01	6.017	0.5	0.5	100
2017-09-02	6.728	0.5	0.5	100
2017-09-03	6.073	0.5	0.5	100
2017-09-04	5.818	0.5	0.5	100
2017-09-05	4.048	0.5	0.5	100
2017-09-06	3.911	0.5	0.5	100
2017-09-07	3.871	0.5	0.5	100
2017-09-08	4.249	0.5	0.5	100
2017-09-09	3.952	0.5	0.5	100
2017-09-10	3.767	0.5	0.5	100
2017-09-11	3.667	0.5	0.5	100
2017-09-12	3.654	0.5	0.5	100
2017-09-13	2.564	0.5	0.5	100
2017-09-14	2.411	0.5	0.5	100
2017-09-15	2.343	0.5	0.5	100
2017-09-16	2.293	0.5	0.5	100
2017-09-17	2.36	0.5	0.5	100
2017-09-18	2.204	0.5	0.5	100
2017-09-19	2.36	0.5	0.5	100
2017-09-20	6.132	0.5	0.5	100
2017-09-21	4.335	0.5	0.5	100
2017-09-22	3.701	0.5	0.5	100
2017-09-23	9.24	0.5	0.5	100
2017-09-24	6.227	0.5	0.5	100
2017-09-25	5.092	0.5	0.5	100
2017-09-26	4.378	0.5	0.5	100
2017-09-27	3.906	0.5	0.5	100
2017-09-28	3.483	0.5	0.5	100
2017-09-29	3.34	0.5	0.5	100
2017-09-30	3.096	0.5	0.5	100
2017-10-01	2.825	0.4	0.5	100
2017-10-02	2.685	0.4	0.5	100
2017-10-03	2.547	0.4	0.5	100
2017-10-04	2.239	0.4	0.5	100
2017-10-05	2.051	0.4	0.5	100
2017-10-06	1.937	0.4	0.5	100
2017-10-07	1.937	0.4	0.5	100

2017-10-08	1.969	0.4	0.5	100	
2017-10-09	15.365	0.4	0.5	100	
2017-10-11	23.43	0.4	0.5	100	
2017-10-12	15.797	0.4	0.5	100	
2017-10-13	10.609	0.4	0.5	100	
2017-10-14	7.976	0.4	0.5	100	
2017-10-15	6.274	0.4	0.5	100	
2017-10-16	5.114	0.4	0.5	100	
2017-10-17	4.078	0.4	0.5	100	
2017-10-18	3.462	0.4	0.5	100	
2017-10-19	3.152	0.4	0.5	100	
2017-10-20	2.616	0.4	0.5	100	
2017-10-21	2.257	0.4	0.5	100	
2017-10-22	1.969	0.4	0.5	100	
2017-10-23	1.953	0.4	0.5	100	
2017-10-24	1.812	0.4	0.5	100	
2017-10-25	1.782	0.4	0.5	100	
2017-10-26	2.626	0.4	0.5	100	
2017-10-27	4.28	0.4	0.5	100	
2017-10-28	3.477	0.4	0.5	100	
2017-10-29	3.307	0.4	0.5	100	
2017-10-30	2.869	0.4	0.5	100	
2017-10-31	2.626	0.4	0.5	100	
2017-11-01	2.443	0.4	0.5	100	
2017-11-02	2.717	0.4	0.5	100	
2017-11-03	2.555	0.4	0.5	100	
2017-11-04	2.365	0.4	0.5	100	
2017-11-05	2.271	0.4	0.5	100	
2017-11-06	2.084	0.4	0.5	100	
2017-11-07	2.148	0.4	0.5	100	
2017-11-08	1.876	0.4	0.5	100	
2017-11-09	2.318	0.4	0.5	100	
2017-11-10	2.573	0.4	0.5	100	
2017-11-11	1.454	0.4	0.5	100	
2017-11-12	1.503	0.4	0.5	100	
2017-11-13	1.405	0.4	0.5	100	
2017-11-14	1.47	0.4	0.5	100	
2017-11-15	1.358	0.4	0.5	100	
2017-11-16	1.233	0.4	0.5	100	
2017-11-17	1.119	0.4	0.5	100	
2017-11-18	1.263	0.4	0.5	100	
2017-11-19	1.27	0.4	0.5	100	
2017-11-20	1.233	0.4	0.5	100	
2017-11-21	1.19	0.4	0.5	100	
2017-11-22	1.169	0.4	0.5	100	
2017-11-23	1.176	0.4	0.5	100	11.2
2017-11-24	0.952	0.4	0.5	100	11.2
2017-11-25	0.908	0.4	0.5	100	

2017-11-26	0.937	0.4	0.5	100	
2017-11-27	0.887	0.4	0.5	100	
2017-11-28	0.839	0.4	0.5	100	
2017-11-29	0.801	0.4	0.5	100	
2017-11-30	0.77	0.4	0.5	100	
2017-12-01	0.814	0.4	0.5	100	
2017-12-02	0.866	0.4	0.5	100	
2017-12-03	0.751	0.4	0.5	100	
2017-12-04	0.681	0.4	0.5	100	
2017-12-05	0.631	0.4	0.5	100	
2017-12-06	0.583	0.4	0.5	100	11.65
2017-12-07	0.424	0.4	0.5	50	12.41
2017-12-08	0.435	0.4	0.5	50	13.45
2017-12-09	0.46	0.4	0.5	50	13.37
2017-12-10	0.423	0.4	0.5	50	13.5
2017-12-11	0.39	0.4	0.5	0	13.3
2017-12-12	0.375	0.4	0.5	0	13.3
2017-12-13	0.385	0.4	0.5	0	13.3
2017-12-14	0.45	0.4	0.5	50	13.3
2017-12-15	0.652	0.4	0.5	100	11.15
2017-12-16	0.936	0.4	0.5	100	10.05
2017-12-17	0.696	0.4	0.5	100	10.3
2017-12-18	0.57	0.4	0.5	100	10.3
2017-12-19	0.496	0.4	0.5	50	9.8
2017-12-20	0.46	0.4	0.5	50	9.9
2017-12-21	0.499	0.4	0.5	50	9.65
2017-12-22	0.482	0.4	0.5	50	9.65
2017-12-23	0.505	0.4	0.5	100	7.03
2017-12-24	0.549	0.4	0.5	100	8.9
2017-12-25	0.493	0.4	0.5	50	8.8
2017-12-26	0.439	0.4	0.5	50	9.05
2017-12-27	0.471	0.4	0.5	50	9.05
2017-12-28	0.879	0.4	0.5	100	9.05
2017-12-29	0.907	0.4	0.5	100	9.05
2017-12-30	0.718	0.4	0.5	100	9.05
2017-12-31	0.623	0.4	0.5	100	9.25
2018-01-01	0.555	0.4	0.5	100	9.1
2018-01-02	0.505	0.4	0.5	100	9.05
2018-01-03	0.493	0.4	0.5	50	8.95
2018-01-04	0.471	0.4	0.5	50	8.95
2018-01-05	0.449	0.4	0.5	50	8.95
2018-01-06	0.444	0.4	0.5	50	8.95
2018-01-07	0.476	0.4	0.5	50	9.1
2018-01-08	0.487	0.4	0.5	50	9.1
2018-01-09	0.471	0.4	0.5	50	
2018-01-10	0.439	0.4	0.5	50	
2018-01-11	0.366	0.4	0.5	0	
2018-01-12	0.652	0.4	0.5	100	

2018-01-13	11.533	0.4	0.5	100		
2018-01-14	7.608	0.4	0.5	100		
2018-01-15	4.244	0.4	0.5	100		
2018-01-16	2.675	0.4	0.5	100		
2018-01-17	1.991	0.4	0.5	100		
2018-01-18	1.648	0.4	0.5	100		
2018-01-19	1.508	0.4	0.5	100		
2018-01-20	2.988	0.4	0.5	100	9.37	over 2.5
2018-01-21	1.851	0.4	0.5	100	9.6	
2018-01-22	1.449	0.4	0.5	100	9.5	
2018-01-23	1.282	0.4	0.5	100	9.45	
2018-01-24	1.115	0.4	0.5	100	9.6	
2018-01-25	0.902	0.4	0.5	100	9.7	
2018-01-26	0.82	0.4	0.5	100	9.75	
2018-01-27	0.74	0.4	0.5	100	10.25	
2018-01-28	0.758	0.4	0.5	100	10.25	
2018-01-29	0.652	0.4	0.5	100	10.3	
2018-01-30	0.594	0.4	0.5	100	10.38	
2018-01-31	0.532	0.4	0.5	100	10.38	
2018-02-01	0.47	0.4	0.5	50	10.38	
2018-02-02	0.67	0.4	0.5	100	10.38	
2018-02-03	15.259	0.4	0.5	100	10.38	over 2.5
2018-02-04	6.141	0.4	0.5	100	10.38	over 2.5
2018-02-05	3.966	0.4	0.5	100	10.46	over 2.5
2018-02-06	2.744	0.4	0.5	100	10.58	over 2.5
2018-02-07	2.246	0.4	0.5	100	10.6	
2018-02-08	2.023	0.4	0.5	100	10.6	
2018-02-09	1.74	0.4	0.5	100	10.75	
2018-02-10	1.579	0.4	0.5	100	11.05	
2018-02-11	1.425	0.4	0.5	100	11.15	
2018-02-12	1.535	0.4	0.5	100	11.15	
2018-02-13	1.79	0.4	0.5	100	11.15	
2018-02-14	1.37	0.4	0.5	100	11.3	
2018-02-15	1.191	0.4	0.5	100	11.55	
2018-02-16	1.194	0.4	0.5	100	11.5	
2018-02-17	1.113	0.4	0.5	100	11.85	
2018-02-18	0.963	0.4	0.5	100	11.85	
2018-02-19	0.963	0.4	0.5	100	11.95	
2018-02-20	0.841	0.4	0.5	100		
2018-02-21	2.317	0.4	0.5	100		
2018-02-22	150.243	0.4	0.5	100		
2018-02-23	32.106	0.4	0.5	100		
24/02/2018	16.522	0.4	0.5	100		
25/02/2018	10.987	0.4	0.5	100		
26/02/2018	7.908	0.4	0.5	100		
27/02/2018	5.171	0.4	0.5	100		
28/02/2018	2.407	0.4	0.5	100		

1/03/2018	6.37	0.4	0.5	100
2/03/2018	6.11	0.4	0.5	100
3/03/2018	6.057	0.4	0.5	100
4/03/2018	5.817	0.4	0.5	100
5/03/2018	6.04	0.4	0.5	100
6/03/2018	5.845	0.4	0.5	100
7/03/2018	5.85	0.4	0.5	100
8/03/2018	8.548	0.4	0.5	100
9/03/2018	9.699	0.4	0.5	100
10/03/2018	7.821	0.4	0.5	100
11/03/2018	10.252	0.4	0.5	100
12/03/2018	7.703	0.4	0.5	100
13/03/2018	6.191	0.4	0.5	100
14/03/2018	5.11	0.4	0.5	100
15/03/2018	4.77	0.4	0.5	100
16/03/2018	4.093	0.4	0.5	100
17/03/2018	3.585	0.4	0.5	100
18/03/2018	3.585	0.4	0.5	100
19/03/2018	3.415	0.4	0.5	100
20/03/2018	3.194	0.4	0.5	100
21/03/2018	3.007	0.4	0.5	100
22/03/2018	2.663	0.4	0.5	100
23/03/2018	4.297	0.4	0.5	100
24/03/2018	5.11	0.4	0.5	100
25/03/2018	4.712	0.4	0.5	100
26/03/2018	4.367	0.4	0.5	100
27/03/2018	3.814	0.4	0.5	100
28/03/2018	3.471	0.4	0.5	100
29/03/2018	3.556	0.4	0.5	100
30/03/2018	3.181	0.4	0.5	100
31/03/2018	3.007	0.4	0.5	100
1/04/2018	2.758	0.4	0.5	100
2/04/2018	2.569	0.4	0.5	100
3/04/2018	2.43	0.4	0.5	100
4/04/2018	2.303	0.4	0.5	100
5/04/2018	2.184	0.4	0.5	100
6/04/2018	1.782	0.4	0.5	100
7/04/2018	1.721	0.4	0.5	100
8/04/2018	1.687	0.4	0.5	100
9/04/2018	1.747	0.4	0.5	100
10/04/2018	1.638	0.4	0.5	100
11/04/2018	3.475	0.4	0.5	100
12/04/2018	2.756	0.4	0.5	100
13/04/2018	2.374	0.4	0.5	100
14/04/2018	2.249	0.4	0.5	100
15/04/2018	2.099	0.4	0.5	100
16/04/2018	2.021	0.4	0.5	100
17/04/2018	2.05	0.4	0.5	100

18/04/2018	2.188	0.4	0.5	100
19/04/2018	2.138	0.4	0.5	100
20/04/2018	1.993	0.4	0.5	100
21/04/2018	1.809	0.4	0.5	100
22/04/2018	1.704	0.4	0.5	100
23/04/2018	1.638	0.4	0.5	100
24/04/2018	1.552	0.4	0.5	100
25/04/2018	1.499	0.4	0.5	100
26/04/2018	1.484	0.4	0.5	100
27/04/2018	1.403	0.4	0.5	100
28/04/2018	1.368	0.4	0.5	100
29/04/2018	1.607	0.4	0.5	100
30/04/2018	50.521	0.4	0.5	100
1/05/2018	24.878	0.6	0.6	100
2/05/2018	17.51	0.6	0.6	100
3/05/2018	13.198	0.6	0.6	100
4/05/2018	10.1	0.6	0.6	100
5/05/2018	8.321	0.6	0.6	100
6/05/2018	6.975	0.6	0.6	100
7/05/2018	6.429	0.6	0.6	100
8/05/2018	5.793	0.6	0.6	100
9/05/2018	4.98	0.6	0.6	100
10/05/2018	4.552	0.6	0.6	100
11/05/2018	4.302	0.6	0.6	100
12/05/2018	4.058	0.6	0.6	100
13/05/2018	3.929	0.6	0.6	100
14/05/2018	3.911	0.6	0.6	100
15/05/2018	3.75	0.6	0.6	100
16/05/2018	3.593	0.6	0.6	100
17/05/2018	3.442	0.6	0.6	100
18/05/2018	4.283	0.6	0.6	100
19/05/2018	3.768	0.6	0.6	100
20/05/2018	3.475	0.6	0.6	100
21/05/2018	3.312	0.6	0.6	100
22/05/2018	3.857	0.6	0.6	100
23/05/2018	3.542	0.6	0.6	100
24/05/2018	8.508	0.6	0.6	100
25/05/2018	5.703	0.6	0.6	100
26/05/2018	5.573	0.6	0.6	100
27/05/2018	4.89	0.6	0.6	100
28/05/2018	4.494	0.6	0.6	100
29/05/2018	4.189	0.6	0.6	100
30/05/2018	3.966	0.6	0.6	100
31/05/2018	3.732	0.6	0.6	100
1/06/2018	2.652	0.6	0.6	100
2/06/2018	2.449	0.6	0.6	100
3/06/2018	2.299	0.6	0.6	100
4/06/2018	2.215	0.6	0.6	100

5/06/2018	2.188	0.6	0.6	100
6/06/2018	2.188	0.6	0.6	100
7/06/2018	2.243	0.6	0.6	100
8/06/2018	2.122	0.6	0.6	100
9/06/2018	2.215	0.6	0.6	100
10/06/2018	2.097	0.6	0.6	100
11/06/2018	2.012	0.6	0.6	100
12/06/2018	9.577	0.6	0.6	100
13/06/2018	17.856	0.6	0.6	100
14/06/2018	12.275	0.6	0.6	100
15/06/2018	10.559	0.6	0.6	100
16/06/2018	8.401	0.6	0.6	100
17/06/2018	7.249	0.6	0.6	100
18/06/2018	5.877	0.6	0.6	100
19/06/2018	5.054	0.6	0.6	100
20/06/2018	4.444	0.6	0.6	100
21/06/2018	3.913	0.6	0.6	100
22/06/2018	3.638	0.6	0.6	100
23/06/2018	3.363	0.6	0.6	100
24/06/2018	3.137	0.6	0.6	100
25/06/2018	3.012	0.6	0.6	100
26/06/2018	3.261	0.6	0.6	100
27/06/2018	2.866	0.6	0.6	100
28/06/2018	2.593	0.6	0.6	100
29/06/2018	2.477	0.6	0.6	100
30/06/2018	2.355	0.6	0.6	100
1/07/2018	2.196	0.6	0.6	100
2/07/2018	2.142	0.6	0.6	100
3/07/2018	2.16	0.6	0.6	100
4/07/2018	2.124	0.6	0.6	100
5/07/2018	2.007	0.6	0.6	100
6/07/2018	1.947	0.6	0.6	100
7/07/2018	1.889	0.6	0.6	100
8/07/2018	1.861	0.6	0.6	100
9/07/2018	2.023	0.6	0.6	100
10/07/2018	2.214	0.6	0.6	100
11/07/2018	2.09	0.6	0.6	100
12/07/2018	2.054	0.6	0.6	100
13/07/2018	1.969	0.6	0.6	100
14/07/2018	1.914	0.6	0.6	100
15/07/2018	1.835	0.6	0.6	100
16/07/2018	1.835	0.6	0.6	100
17/07/2018	1.848	0.6	0.6	100
18/07/2018	1.835	0.6	0.6	100
19/07/2018	1.761	0.6	0.6	100
20/07/2018	1.725	0.6	0.6	100
21/07/2018	1.666	0.6	0.6	100
22/07/2018	1.678	0.6	0.6	100

23/07/2018	1.761	0.6	0.6	100
24/07/2018	1.737	0.6	0.6	100
25/07/2018	1.822	0.6	0.6	100
26/07/2018	1.737	0.6	0.6	100
27/07/2018	1.713	0.6	0.6	100
28/07/2018	1.69	0.6	0.6	100
29/07/2018	1.631	0.6	0.6	100
30/07/2018	1.597	0.6	0.6	100
31/07/2018	1.643	0.6	0.6	100
1/08/2018	1.577	0.6	0.6	100
2/08/2018	1.415	0.6	0.6	100
3/08/2018	1.393	0.6	0.6	100
4/08/2018	1.372	0.6	0.6	100
5/08/2018	1.382	0.6	0.6	100
6/08/2018	1.404	0.6	0.6	100
7/08/2018	1.361	0.6	0.6	100
8/08/2018	1.35	0.6	0.6	100
9/08/2018	1.339	0.6	0.6	100
10/08/2018	1.585	0.6	0.6	100
11/08/2018	1.539	0.6	0.6	100
12/08/2018	1.471	0.6	0.6	100
13/08/2018	1.404	0.6	0.6	100
14/08/2018	1.372	0.6	0.6	100
15/08/2018	1.361	0.6	0.6	100
16/08/2018	1.393	0.6	0.6	100
17/08/2018	1.372	0.6	0.6	100
18/08/2018	1.404	0.6	0.6	100
19/08/2018	1.69	0.6	0.6	100
20/08/2018	1.539	0.6	0.6	100
21/08/2018	1.471	0.6	0.6	100
22/08/2018	1.449	0.6	0.6	100
23/08/2018	1.426	0.6	0.6	100
24/08/2018	1.382	0.6	0.6	100
25/08/2018	1.339	0.6	0.6	100
26/08/2018	1.329	0.6	0.6	100
27/08/2018	1.297	0.6	0.6	100
28/08/2018	1.265	0.6	0.6	100
29/08/2018	1.197	0.6	0.6	100
30/08/2018	1.324	0.6	0.6	100
31/08/2018	2.292	0.6	0.6	100
1/09/2018	1.798	0.5	0.5	100
2/09/2018	1.655	0.5	0.5	100
3/09/2018	1.584	0.5	0.5	100
4/09/2018	1.726	0.5	0.5	100
5/09/2018	1.81	0.5	0.5	100
6/09/2018	1.786	0.5	0.5	100
7/09/2018	1.774	0.5	0.5	100
8/09/2018	1.702	0.5	0.5	100

9/09/2018	1.679	0.5	0.5	100	
10/09/2018	1.643	0.5	0.5	100	
11/09/2018	1.584	0.5	0.5	100	
12/09/2018	1.537	0.5	0.5	100	
13/09/2018	1.525	0.5	0.5	100	
14/09/2018	1.421	0.5	0.5	100	
15/09/2018	1.345	0.5	0.5	100	
16/09/2018	1.314	0.5	0.5	100	
17/09/2018	1.263	0.5	0.5	100	
18/09/2018	1.263	0.5	0.5	100	
19/09/2018	1.702	0.5	0.5	100	
20/09/2018	1.478	0.5	0.5	100	
21/09/2018	1.377	0.5	0.5	100	
22/09/2018	1.304	0.5	0.5	100	
23/09/2018	1.263	0.5	0.5	100	
24/09/2018	1.234	0.5	0.5	100	
25/09/2018	1.273	0.5	0.5	100	
26/09/2018	2.059	0.5	0.5	100	
27/09/2018	1.655	0.5	0.5	100	
28/09/2018	1.466	0.5	0.5	100	
29/09/2018	1.388	0.5	0.5	100	
30/09/2018	1.314	0.5	0.5	100	
1/10/2018	1.253	0.4	0.5	100	
2/10/2018	1.225	0.4	0.5	100	
3/10/2018	1.216	0.4	0.5	100	
4/10/2018	1.179	0.4	0.5	100	
5/10/2018	1.161	0.4	0.5	100	
6/10/2018	0.989	0.4	0.5	100	
7/10/2018	1.027	0.4	0.5	100	
8/10/2018	0.97	0.4	0.5	100	
9/10/2018	0.915	0.4	0.5	100	
10/10/2018	0.888	0.4	0.5	100	
11/10/2018	0.871	0.4	0.5	100	
12/10/2018	0.933	0.4	0.5	100	
13/10/2018	1.281	0.4	0.5	100	
14/10/2018	2.344	0.4	0.5	100	
15/10/2018	2.084	0.4	0.5	100	
16/10/2018	2.1	0.4	0.5	100	
17/10/2018	1.876	0.4	0.5	100	
18/10/2018	1.715	0.4	0.5	100	
19/10/2018	1.617	0.4	0.5	100	
20/10/2018	1.458	0.4	0.5	100	11.85
21/10/2018	1.269	0.4	0.5	100	11.62
22/10/2018	1.176	0.4	0.5	100	11.45
23/10/2018	1.088	0.4	0.5	100	9.4
24/10/2018	0.999	0.4	0.5	100	8.48
25/10/2018	0.933	0.4	0.5	100	
26/10/2018	0.98	0.4	0.5	100	

27/10/2018	2.002	0.4	0.5	100	8.25
28/10/2018	1.562	0.4	0.5	100	8.25
29/10/2018	1.414	0.4	0.5	100	8.1
30/10/2018	4.454	0.4	0.5	100	
31/10/2018	11.207	0.4	0.5	100	
1/11/2018	8.961	0.4	0.5	100	
2/11/2018	5.751	0.4	0.5	100	
3/11/2018	4.097	0.4	0.5	100	
4/11/2018	3.364	0.4	0.5	100	
5/11/2018	2.699	0.4	0.5	100	
6/11/2018	2.203	0.4	0.5	100	
7/11/2018	2.002	0.4	0.5	100	
8/11/2018	1.846	0.4	0.5	100	
9/11/2018	1.759	0.4	0.5	100	
10/11/2018	108.425	0.4	0.5	100	
11/11/2018	40.47	0.4	0.5	100	
12/11/2018	30.732	0.4	0.5	100	
13/11/2018	21.274	0.4	0.5	100	
14/11/2018	16.766	0.4	0.5	100	
15/11/2018	13.05	0.4	0.5	100	
16/11/2018	10.518	0.4	0.5	100	
17/11/2018	8.539	0.4	0.5	100	
18/11/2018	13.648	0.4	0.5	100	
19/11/2018	8.616	0.4	0.5	100	
20/11/2018	7.795	0.4	0.5	100	
21/11/2018	9.267	0.4	0.5	100	
22/11/2018	21.339	0.4	0.5	100	
23/11/2018	25.47	0.4	0.5	100	
24/11/2018	18.078	0.4	0.5	100	
25/11/2018	14.524	0.4	0.5	100	
26/11/2018	119.831	0.4	0.5	100	
27/11/2018	137.076	0.4	0.5	100	
28/11/2018	51.689	0.4	0.5	100	
29/11/2018	28.463	0.4	0.5	100	
30/11/2018	21.675	0.4	0.5	100	
1/12/2018	16.578	0.4	0.5	100	
2/12/2018	12.715	0.4	0.5	100	
3/12/2018	9.918	0.4	0.5	100	
4/12/2018	8.438	0.4	0.5	100	
5/12/2018	7.243	0.4	0.5	100	
6/12/2018	5.818	0.4	0.5	100	
7/12/2018	6.529	0.4	0.5	100	
8/12/2018	5.643	0.4	0.5	100	
9/12/2018	4.985	0.4	0.5	100	
10/12/2018	4.552	0.4	0.5	100	
11/12/2018	4.408	0.4	0.5	100	
12/12/2018	4.51	0.4	0.5	100	
13/12/2018	5.306	0.4	0.5	100	

14/12/2018	15.481	0.4	0.5	100		
15/12/2018	9.413	0.4	0.5	100		
16/12/2018	10.566	0.4	0.5	100		
17/12/2018	7.735	0.4	0.5	100		
18/12/2018	6.068	0.4	0.5	100		
19/12/2018	4.542	0.4	0.5	100		
20/12/2018	5.775	0.4	0.5	100		
21/12/2018	10.571	0.4	0.5	100		
22/12/2018	8.191	0.4	0.5	100		
23/12/2018	16.451	0.4	0.5	100		
24/12/2018	18.995	0.4	0.5	100		
25/12/2018	14.115	0.4	0.5	100		
26/12/2018	10.261	0.4	0.5	100		
27/12/2018	8.547	0.4	0.5	100		
28/12/2018	7.802	0.4	0.5	100		
29/12/2018	6.602	0.4	0.5	100		
30/12/2018	5.321	0.4	0.5	100		
31/12/2018	4.285	0.4	0.5	100		
1/01/2019	3.754	0.4	0.5	100		
2/01/2019	3.848	0.4	0.5	100		
3/01/2019	3.219	0.4	0.5	100		
4/01/2019	2.596	0.4	0.5	100		
5/01/2019	2.209	0.4	0.5	100		
6/01/2019	2.017	0.4	0.5	100		
7/01/2019	1.668	0.4	0.5	100		
8/01/2019	2.926	0.4	0.5	100		
9/01/2019	1.985	0.4	0.5	100		
10/01/2019	1.922	0.4	0.5	100		
11/01/2019	1.653	0.4	0.5	100		
12/01/2019	1.51	0.4	0.5	100		
13/01/2019	1.985	0.4	0.5	100		
14/01/2019	2.192	0.4	0.5	100		
15/01/2019	5.689	0.4	0.5	100		
16/01/2019	2.382	0.4	0.5	100		
17/01/2019	2.017	0.4	0.5	100		
18/01/2019	1.537	0.4	0.5	100		
19/01/2019	1.242	0.4	0.5	100		
20/01/2019	1.217	0.4	0.5	100	7.58	
21/01/2019	2.542	0.4	0.5	100	10.02	over 2.5
22/01/2019	1.168	0.4	0.5	100	11.45	
23/01/2019	0.876	0.4	0.5	100	11.93	
24/01/2019	2.01	0.4	0.5	100		
25/01/2019	1.608	0.4	0.5	100	12.75	
26/01/2019	1.299	0.4	0.5	100	13	
27/01/2019	1.21	0.4	0.5	100	13.9	
28/01/2019	1.126	0.4	0.5	100	14.88	
29/01/2019	1.061	0.4	0.5	100	15.21	
30/01/2019	1.004	0.4	0.5	100	15.2	

31/01/2019	1.044	0.4	0.5	100	16.1
1/02/2019	0.913	0.4	0.5	100	13.4
2/02/2019	0.903	0.4	0.5	100	13.65
3/02/2019	0.917	0.4	0.5	100	13.6
4/02/2019	0.917	0.4	0.5	100	13.9
5/02/2019	0.832	0.4	0.5	100	14.15
6/02/2019	0.753	0.4	0.5	100	14.05
7/02/2019	0.757	0.4	0.5	100	14.2
8/02/2019	0.91	0.4	0.5	100	14.05
9/02/2019	0.989	0.4	0.5	100	14.1
10/02/2019	0.84	0.4	0.5	100	14.1
11/02/2019	0.73	0.4	0.5	100	14.1
12/02/2019	0.671	0.4	0.5	100	14.1
13/02/2019	0.531	0.4	0.5	100	13.35
14/02/2019	0.531	0.4	0.5	100	13.45
15/02/2019	0.537	0.4	0.5	100	13.6
16/02/2019	0.588	0.4	0.5	100	13.65
17/02/2019	0.681	0.4	0.5	100	13.65
18/02/2019	0.656	0.4	0.5	100	13.55
19/02/2019	0.618	0.4	0.5	100	13.5
20/02/2019	0.564	0.4	0.5	100	13.5
21/02/2019	0.506	0.4	0.5	100	13.5
22/02/2019	0.501	0.4	0.5	100	13.4
23/02/2019	0.495	0.4	0.5	50	13.65
24/02/2019	0.529	0.4	0.5	100	13.65
25/02/2019	0.593	0.4	0.5	100	13.65
26/02/2019	0.928	0.4	0.5	100	13.55
27/02/2019	0.743	0.4	0.5	100	13.55
28/02/2019	0.581	0.4	0.5	100	13.55
1/03/2019	0.517	0.4	0.5	100	13.5
2/03/2019	0.49	0.4	0.5	50	13.35
3/03/2019	0.473	0.4	0.5	50	13.35
4/03/2019	0.462	0.4	0.5	50	13.7
5/03/2019	0.457	0.4	0.5	50	13.7
6/03/2019	0.38	0.4	0.5	0	13.7
7/03/2019	0.35	0.4	0.5	0	13.55
8/03/2019	0.32	0.4	0.5	0	13.65
9/03/2019	0.36	0.4	0.5	0	13.65
10/03/2019	0.83	0.4	0.5	100	13.65
11/03/2019	0.64	0.4	0.5	100	13.6
12/03/2019	0.578	0.4	0.5	100	13.6
13/03/2019	0.513	0.4	0.5	100	
14/03/2019	0.455	0.4	0.5	50	
15/03/2019	0.439	0.4	0.5	50	
16/03/2019	0.936	0.4	0.5	100	
17/03/2019	0.988	0.4	0.5	100	
18/03/2019	0.885	0.4	0.5	100	
19/03/2019	0.814	0.4	0.5	100	

20/03/2019	0.705	0.4	0.5	100	13.75	
21/03/2019	0.685	0.4	0.5	100	13.35	
22/03/2019	0.652	0.4	0.5	100	13.35	
23/03/2019	0.659	0.4	0.5	100	11.7	
24/03/2019	0.621	0.4	0.5	100	10.7	
25/03/2019	0.603	0.4	0.5	100	11.75	
26/03/2019	0.545	0.4	0.5	100	11.75	
27/03/2019	0.495	0.4	0.5	50	11.75	
28/03/2019	0.461	0.4	0.5	50	11.75	
29/03/2019	0.477	0.4	0.5	50		
30/03/2019	0.507	0.4	0.5	100	12.2	
31/03/2019	0.489	0.4	0.5	50	11.85	
1/04/2019	0.466	0.4	0.5	50	11.75	
2/04/2019	0.445	0.4	0.5	50	11.75	
3/04/2019	0.439	0.4	0.5	50	11.67	
4/04/2019	0.445	0.4	0.5	50	11.55	
5/04/2019	0.445	0.4	0.5	50	11.45	
6/04/2019	0.455	0.4	0.5	50	11.45	
7/04/2019	0.501	0.4	0.5	100	11.45	
8/04/2019	0.545	0.4	0.5	100	10.75	
9/04/2019	0.526	0.4	0.5	100	10.2	
10/04/2019	0.519	0.4	0.5	100	10.5	
11/04/2019	0.501	0.4	0.5	100	10.55	
12/04/2019	0.519	0.4	0.5	100	10.25	
13/04/2019	1.171	0.4	0.5	100	10.45	
14/04/2019	1.045	0.4	0.5	100	10.45	
15/04/2019	0.907	0.4	0.5	100	10.45	
16/04/2019	0.847	0.4	0.5	100	10.4	
17/04/2019	0.83	0.4	0.5	100	10.4	
18/04/2019	0.782	0.4	0.5	100	10.4	
19/04/2019	0.731	0.4	0.5	100	10.4	
20/04/2019	0.678	0.4	0.5	100	10	
21/04/2019	0.659	0.4	0.5	100	10	
22/04/2019	0.731	0.4	0.5	100	10	
23/04/2019	2.848	0.4	0.5	100	10	over 2.5
24/04/2019	1.814	0.4	0.5	100	10	
25/04/2019	1.342	0.4	0.5	100		
26/04/2019	1.137	0.4	0.5	100		
27/04/2019	1.029	0.4	0.5	100		
28/04/2019	0.936	0.4	0.5	100		
29/04/2019	0.877	0.4	0.5	100		
30/04/2019	1.095	0.4	0.5	100		
1/05/2019	3.328	0.6	0.6	100		
2/05/2019	1.487	0.6	0.6	100		
3/05/2019	1.179	0.6	0.6	100		
4/05/2019	1.032	0.6	0.6	100		
5/05/2019	0.921	0.6	0.6	100		
6/05/2019	0.814	0.6	0.6	100		

7/05/2019	0.731	0.6	0.6	100
8/05/2019	0.705	0.6	0.6	100
9/05/2019	0.665	0.6	0.6	100
10/05/2019	0.64	0.6	0.6	100
11/05/2019	0.621	0.6	0.6	100
12/05/2019	0.603	0.6	0.6	100
13/05/2019	0.578	0.6	0.6	0
14/05/2019	0.678	0.6	0.6	100
15/05/2019	0.981	0.6	0.6	100
16/05/2019	0.798	0.6	0.6	100
17/05/2019	0.725	0.6	0.6	100
18/05/2019	0.652	0.6	0.6	100
19/05/2019	0.615	0.6	0.6	100
20/05/2019	0.59	0.6	0.6	0
21/05/2019	0.584	0.6	0.6	0
22/05/2019	0.584	0.6	0.6	0
23/05/2019	0.578	0.6	0.6	0
24/05/2019	0.565	0.6	0.6	0
25/05/2019	0.558	0.6	0.6	0
26/05/2019	0.545	0.6	0.6	0
27/05/2019	0.526	0.6	0.6	0
28/05/2019	0.513	0.6	0.6	0
29/05/2019	0.513	0.6	0.6	0
30/05/2019	0.519	0.6	0.6	0
31/05/2019	0.501	0.6	0.6	0
1/06/2019	0.646	0.6	0.6	100
2/06/2019	11.828	0.6	0.6	100
3/06/2019	4.674	0.6	0.6	100
4/06/2019	2.739	0.6	0.6	100
5/06/2019	2.156	0.6	0.6	100
6/06/2019	2.437	0.6	0.6	100
7/06/2019	2.141	0.6	0.6	100
8/06/2019	2.331	0.6	0.6	100
9/06/2019	2.141	0.6	0.6	100
10/06/2019	2.272	0.6	0.6	100
11/06/2019	1.894	0.6	0.6	100
12/06/2019	1.867	0.6	0.6	100
13/06/2019	1.807	0.6	0.6	100
14/06/2019	1.867	0.6	0.6	100
15/06/2019	1.724	0.6	0.6	100
16/06/2019	1.627	0.6	0.6	100
17/06/2019	1.559	0.6	0.6	100
18/06/2019	1.425	0.6	0.6	100
19/06/2019	1.305	0.6	0.6	100
20/06/2019	1.205	0.6	0.6	100
21/06/2019	1.131	0.6	0.6	100
22/06/2019	1.083	0.6	0.6	100
23/06/2019	1.015	0.6	0.6	100
24/06/2019	0.957	0.6	0.6	100

25/06/2019	0.928	0.6	0.6	100
26/06/2019	0.892	0.6	0.6	100
27/06/2019	0.847	0.6	0.6	100
28/06/2019	0.814	0.6	0.6	100
29/06/2019	0.775	0.6	0.6	100
30/06/2019	0.745	0.6	0.6	100

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27/08/2019	3.982	0.6	0.6	100
28/08/2019	4.092	0.6	0.6	100
29/08/2019	3.51	0.6	0.6	100
30/08/2019	3.087	0.6	0.6	100
31/08/2019	2.793	0.6	0.6	100
1/09/2019	2.519	0.5	0.5	100
2/09/2019	2.29	0.5	0.5	100
3/09/2019	2.13	0.5	0.5	100
4/09/2019	2.019	0.5	0.5	100
5/09/2019	1.949	0.5	0.5	100
6/09/2019	2.043	0.5	0.5	100
7/09/2019	2.019	0.5	0.5	100
8/09/2019	1.915	0.5	0.5	100
9/09/2019	1.774	0.5	0.5	100
10/09/2019	1.881	0.5	0.5	100
11/09/2019	1.816	0.5	0.5	100
12/09/2019	1.733	0.5	0.5	100
13/09/2019	1.654	0.5	0.5	100
14/09/2019	1.609	0.5	0.5	100
15/09/2019	5.552	0.5	0.5	100
16/09/2019	5.405	0.5	0.5	100
17/09/2019	3.846	0.5	0.5	100
18/09/2019	3.19	0.5	0.5	100
19/09/2019	2.759	0.5	0.5	100
20/09/2019	2.276	0.5	0.5	100
21/09/2019	2.08	0.5	0.5	100
22/09/2019	1.949	0.5	0.5	100
23/09/2019	1.827	0.5	0.5	100
24/09/2019	1.743	0.5	0.5	100
25/09/2019	1.636	0.5	0.5	100
26/09/2019	1.573	0.5	0.5	100
27/09/2019	1.618	0.5	0.5	100
28/09/2019	1.527	0.5	0.5	100
29/09/2019	1.427	0.5	0.5	100
30/09/2019	1.32	0.5	0.5	100
1/10/2019	1.271	0.4	0.5	100
2/10/2019	1.545	0.4	0.5	100
3/10/2019	1.461	0.4	0.5	100
4/10/2019	1.353	0.4	0.5	100
5/10/2019	1.279	0.4	0.5	100

6/10/2019	1.311	0.4	0.5	100		
7/10/2019	1.618	0.4	0.5	100		
8/10/2019	1.394	0.4	0.5	100		
9/10/2019	1.255	0.4	0.5	100		
10/10/2019	1.185	0.4	0.5	100		
11/10/2019	1.32	0.4	0.5	100		
12/10/2019	1.336	0.4	0.5	100		
13/10/2019	1.6	0.4	0.5	100		
14/10/2019	5.851	0.4	0.5	100		
15/10/2019	3.367	0.4	0.5	100		
16/10/2019	2.822	0.4	0.5	100		
17/10/2019	2.698	0.4	0.5	100		
18/10/2019	2.404	0.4	0.5	100		
19/10/2019	3.839	0.4	0.5	100		
20/10/2019	21.24	0.4	0.5	100		
21/10/2019	12.453	0.4	0.5	100		
22/10/2019	8.355	0.4	0.5	100		
23/10/2019	6.294	0.4	0.5	100		
24/10/2019	6.847	0.4	0.5	100		
25/10/2019	5.335	0.4	0.5	100		
26/10/2019	3.786	0.4	0.5	100		
27/10/2019	3.229	0.4	0.5	100		
28/10/2019	2.614	0.4	0.5	100		
29/10/2019	2.474	0.4	0.5	100		
30/10/2019	2.193	0.4	0.5	100		
31/10/2019	2.096	0.4	0.5	100		
1/11/2019	1.853	0.4	0.5	100		
2/11/2019	1.618	0.4	0.5	100		
3/11/2019	1.458	0.4	0.5	100	7.61	
4/11/2019	1.263	0.4	0.5	100	8.1	
5/11/2019	1.103	0.4	0.5	100	6.2	
6/11/2019	1.02	0.4	0.5	100		
7/11/2019	1.088	0.4	0.5	100		
8/11/2019	1.712	0.4	0.5	100		
9/11/2019	1.298	0.4	0.5	100	6.97	
10/11/2019	1.103	0.4	0.5	100	7.8	
11/11/2019	0.99	0.4	0.5	100	7.66	
12/11/2019	4.737	0.4	0.5	100	7.66	Over 2.5
13/11/2019	3.055	0.4	0.5	100	7.6	Over 2.5
14/11/2019	2.082	0.4	0.5	100		
15/11/2019	2.137	0.4	0.5	100		
16/11/2019	2.029	0.4	0.5	100		
17/11/2019	1.671	0.4	0.5	100		
18/11/2019	1.566	0.4	0.5	100		
19/11/2019	1.353	0.4	0.5	100		
20/11/2019	1.28	0.4	0.5	100		
21/11/2019	1.164	0.4	0.5	100		
22/11/2019	1.228	0.4	0.5	100		

23/11/2019	1.042	0.4	0.5	100		
24/11/2019	0.909	0.4	0.5	100		
25/11/2019	0.924	0.4	0.5	100	6.5	
26/11/2019	0.808	0.4	0.5	100	9.1	
27/11/2019	0.742	0.4	0.5	100	8.9	
28/11/2019	0.681	0.4	0.5	100	9.25	
29/11/2019	0.593	0.4	0.5	100	10.75	
30/11/2019	0.6	0.4	0.5	100	10.75	
1/12/2019	0.6	0.4	0.5	100	11.1	
2/12/2019	0.599	0.4	0.5	100	11.1	
3/12/2019	0.499	0.4	0.5	50	11.1	
4/12/2019	0.517	0.4	0.5	100	11.25	
5/12/2019	0.488	0.4	0.5	50	11.38	
6/12/2019	0.815	0.4	0.5	100	11.38	
7/12/2019	0.855	0.4	0.5	100	11.38	
8/12/2019	6.581	0.4	0.5	100	11.38	Over 2.5
9/12/2019	4.95	0.4	0.5	100	11.6	Over 2.5
10/12/2019	2.748	0.4	0.5	100	11.35	Over 2.5
11/12/2019	2.11	0.4	0.5	100	11.35	
12/12/2019	1.844	0.4	0.5	100	11.35	
13/12/2019	1.586	0.4	0.5	100	11.2	
14/12/2019	1.586	0.4	0.5	100	11.7	
15/12/2019	1.451	0.4	0.5	100	11.7	
16/12/2019	1.264	0.4	0.5	100		
17/12/2019	1.256	0.4	0.5	100		
18/12/2019	1.913	0.4	0.5	100		
19/12/2019	6.037	0.4	0.5	100		
20/12/2019	3.005	0.4	0.5	100		
21/12/2019	1.741	0.4	0.5	100		
22/12/2019	1.634	0.4	0.5	100	12.4	
23/12/2019	1.461	0.4	0.5	100		
24/12/2019	1.217	0.4	0.5	100		
25/12/2019	1.069	0.4	0.5	100		
26/12/2019	1.092	0.4	0.5	100	13.2	
27/12/2019	1.422	0.4	0.5	100	12.8	
28/12/2019	1.334	0.4	0.5	100	12.75	
29/12/2019	1.046	0.4	0.5	100	12.75	
30/12/2019	0.896	0.4	0.5	100	12.6	
31/12/2019	0.808	0.4	0.5	100	12.6	
1/01/2020	0.815	0.4	0.5	100	12.55	
2/01/2020	0.788	0.4	0.5	100	12.55	
3/01/2020	0.737	0.4	0.5	100	12.45	
4/01/2020	0.815	0.4	0.5	100	12.4	
5/01/2020	0.808	0.4	0.5	100	12.4	
6/01/2020	0.724	0.4	0.5	100	12.4	
7/01/2020	0.632	0.4	0.5	100	12.45	
8/01/2020	0.507	0.4	0.5	100	12.4	
9/01/2020	0.528	0.4	0.5	100	12.5	

10/01/2020	0.561	0.4	0.5	100	12.5
11/01/2020	0.539	0.4	0.5	100	12.4
12/01/2020	0.523	0.4	0.5	100	12.35
13/01/2020	0.497	0.4	0.5	50	12.4
14/01/2020	0.435	0.4	0.5	50	12.4
15/01/2020	0.444	0.4	0.5	50	12.5
16/01/2020	0.427	0.4	0.5	50	12.5
17/01/2020	0.448	0.4	0.5	50	12.2
18/01/2020	0.411	0.4	0.5	50	12.1
19/01/2020	0.415	0.4	0.5	50	12.15
20/01/2020	0.389	0.4	0.5	0	12.1
21/01/2020	0.378	0.4	0.5	0	11.55
22/01/2020	0.364	0.4	0.5	0	11.55
23/01/2020	0.371	0.4	0.5	0	10.9
24/01/2020	0.361	0.4	0.5	0	10.2
25/01/2020	0.368	0.4	0.5	0	10.2
26/01/2020	0.34	0.4	0.5	0	9.7
27/01/2020	0.337	0.4	0.5	0	8.8
28/01/2020	0.291	0.4	0.5	0	8.8
29/01/2020	0.291	0.4	0.5	0	8.48
30/01/2020	0.283	0.4	0.5	0	8.48
31/01/2020	0.271	0.4	0.5	0	8.2
1/02/2020	0.259	0.4	0.5	0	7.95
2/02/2020	0.267	0.4	0.5	0	7.95
3/02/2020	0.249	0.4	0.5	0	7.85
4/02/2020	0.256	0.4	0.5	0	7.85
5/02/2020	0.259	0.4	0.5	0	7.85
6/02/2020	0.298	0.4	0.5	0	7.85
7/02/2020	0.713	0.4	0.5	100	7.65
8/02/2020	0.558	0.4	0.5	100	7.65
9/02/2020	0.498	0.4	0.5	50	7.65
10/02/2020	0.498	0.4	0.5	50	7.65
11/02/2020	0.403	0.4	0.5	50	7.65
12/02/2020	0.399	0.4	0.5	0	7.65
13/02/2020	0.354	0.4	0.5	0	7.65
14/02/2020	0.324	0.4	0.5	0	7.65
15/02/2020	0.324	0.4	0.5	0	7.65
16/02/2020	0.345	0.4	0.5	0	7.05
17/02/2020	0.376	0.4	0.5	0	7.27
18/02/2020	0.334	0.4	0.5	0	7.23
19/02/2020	0.305	0.4	0.5	0	7.23
20/02/2020	0.293	0.4	0.5	0	7.02
21/02/2020	0.281	0.4	0.5	0	7.05
22/02/2020	0.277	0.4	0.5	0	7.05
23/02/2020	0.274	0.4	0.5	0	7.05
24/02/2020	1.832	0.4	0.5	100	7.05
25/02/2020	1.178	0.4	0.5	100	7.22
26/02/2020	0.772	0.4	0.5	100	7.22

27/02/2020	0.601	0.4	0.5	100	7.2
28/02/2020	0.508	0.4	0.5	100	7.2
29/02/2020	0.431	0.4	0.5	50	7.25
1/03/2020	0.375	0.4	0.5	0	7.25
2/03/2020	0.38	0.4	0.5	0	7.25
3/03/2020	0.371	0.4	0.5	0	7.25
4/03/2020	0.363	0.4	0.5	0	6.85
5/03/2020	0.41	0.4	0.5	50	6.85
6/03/2020	0.569	0.4	0.5	100	6.9
7/03/2020	0.601	0.4	0.5	100	6.86
8/03/2020	0.53	0.4	0.5	100	6.86
9/03/2020	0.472	0.4	0.5	50	6.95
10/03/2020	0.456	0.4	0.5	50	6.95
11/03/2020	0.41	0.4	0.5	50	
12/03/2020	0.812	0.4	0.5	100	
13/03/2020	1.043	0.4	0.5	100	
14/03/2020	0.845	0.4	0.5	100	
15/03/2020	0.759	0.4	0.5	100	
16/03/2020	0.666	0.4	0.5	100	
17/03/2020	0.627	0.4	0.5	100	
18/03/2020	0.569	0.4	0.5	100	
19/03/2020	0.569	0.4	0.5	100	7.1
20/03/2020	0.524	0.4	0.5	100	7.1
21/03/2020	0.472	0.4	0.5	50	7.15
22/03/2020	0.446	0.4	0.5	50	7.15
23/03/2020	0.574	0.4	0.5	100	7.1
24/03/2020	0.633	0.4	0.5	100	7.1
25/03/2020	0.585	0.4	0.5	100	7.1
26/03/2020	0.585	0.4	0.5	100	7.1
27/03/2020	0.553	0.4	0.5	100	7.1
28/03/2020	0.524	0.4	0.5	100	7.1
29/03/2020	0.585	0.4	0.5	100	7.15
30/03/2020	0.694	0.4	0.5	100	
31/03/2020	0.785	0.4	0.5	100	
1/04/2020	21.378	0.4	0.5	100	
2/04/2020	7.444	0.4	0.5	100	
3/04/2020	3.582	0.4	0.5	100	
4/04/2020	2.472	0.4	0.5	100	
5/04/2020	1.959	0.4	0.5	100	
6/04/2020	1.69	0.4	0.5	100	
7/04/2020	1.459	0.4	0.5	100	
8/04/2020	1.292	0.4	0.5	100	
9/04/2020	1.332	0.4	0.5	100	
10/04/2020	1.669	0.4	0.5	100	
11/04/2020	1.38	0.4	0.5	100	
12/04/2020	1.214	0.4	0.5	100	
13/04/2020	1.13	0.4	0.5	100	
14/04/2020	1.158	0.4	0.5	100	

15/04/2020	1.068	0.4	0.5	100
16/04/2020	0.943	0.4	0.5	100
17/04/2020	0.886	0.4	0.5	100
18/04/2020	0.845	0.4	0.5	100
19/04/2020	1.003	0.4	0.5	100
20/04/2020	2.123	0.4	0.5	100
21/04/2020	1.736	0.4	0.5	100
22/04/2020	1.504	0.4	0.5	100
23/04/2020	1.361	0.4	0.5	100
24/04/2020	1.262	0.4	0.5	100
25/04/2020	1.167	0.4	0.5	100
26/04/2020	1.068	0.4	0.5	100
27/04/2020	0.973	0.4	0.5	100
28/04/2020	0.929	0.4	0.5	100
29/04/2020	0.943	0.4	0.5	100
30/04/2020	0.893	0.4	0.5	100
1/05/2020	0.838	0.6	0.6	100
2/05/2020	0.798	0.6	0.6	100
3/05/2020	0.798	0.6	0.6	100
4/05/2020	0.785	0.6	0.6	100
5/05/2020	0.779	0.6	0.6	100
6/05/2020	0.914	0.6	0.6	100
7/05/2020	0.845	0.6	0.6	100
8/05/2020	0.785	0.6	0.6	100
9/05/2020	0.752	0.6	0.6	100
10/05/2020	0.733	0.6	0.6	100
11/05/2020	0.733	0.6	0.6	100
12/05/2020	0.713	0.6	0.6	100
13/05/2020	0.7	0.6	0.6	100
14/05/2020	0.644	0.6	0.6	100
15/05/2020	0.638	0.6	0.6	100
16/05/2020	0.681	0.6	0.6	100
17/05/2020	0.773	0.6	0.6	100
18/05/2020	0.82	0.6	0.6	100
19/05/2020	0.744	0.6	0.6	100
20/05/2020	0.688	0.6	0.6	100
21/05/2020	0.695	0.6	0.6	100
22/05/2020	0.695	0.6	0.6	100
23/05/2020	0.662	0.6	0.6	100
24/05/2020	0.638	0.6	0.6	100
25/05/2020	0.632	0.6	0.6	100
26/05/2020	0.656	0.6	0.6	100
27/05/2020	0.695	0.6	0.6	100
28/05/2020	0.708	0.6	0.6	100
29/05/2020	0.674	0.6	0.6	100
30/05/2020	0.65	0.6	0.6	100
31/05/2020	0.644	0.6	0.6	100
1/06/2020	0.626	0.6	0.6	100

2/06/2020	0.62	0.6	0.6	100
3/06/2020	0.614	0.6	0.6	100
4/06/2020	0.602	0.6	0.6	100
5/06/2020	0.596	0.6	0.6	0
6/06/2020	0.608	0.6	0.6	100
7/06/2020	0.681	0.6	0.6	100
8/06/2020	0.807	0.6	0.6	100
9/06/2020	0.814	0.6	0.6	100
10/06/2020	0.752	0.6	0.6	100
11/06/2020	0.701	0.6	0.6	100
12/06/2020	0.668	0.6	0.6	100
13/06/2020	0.644	0.6	0.6	100
14/06/2020	0.638	0.6	0.6	100
15/06/2020	0.638	0.6	0.6	100
16/06/2020	0.626	0.6	0.6	100
17/06/2020	0.608	0.6	0.6	100
18/06/2020	0.602	0.6	0.6	100
19/06/2020	0.73	0.6	0.6	100
20/06/2020	1.14	0.6	0.6	100
21/06/2020	1.06	0.6	0.6	100
22/06/2020	1.035	0.6	0.6	100
23/06/2020	0.977	0.6	0.6	100
24/06/2020	0.929	0.6	0.6	100
25/06/2020	0.876	0.6	0.6	100
26/06/2020	0.847	0.6	0.6	100
27/06/2020	0.906	0.6	0.6	100
28/06/2020	1.213	0.6	0.6	100
29/06/2020	1.308	0.6	0.6	100
30/06/2020	24.494	0.6	0.6	100
1/07/2020	11.076	0.6	0.6	100
2/07/2020	6.35	0.6	0.6	100
3/07/2020	4.167	0.6	0.6	100
4/07/2020	3.237	0.6	0.6	100
5/07/2020	2.707	0.6	0.6	100
6/07/2020	2.442	0.6	0.6	100
7/07/2020	2.182	0.6	0.6	100
8/07/2020	2.08	0.6	0.6	100
9/07/2020	2.052	0.6	0.6	100
10/07/2020	1.796	0.6	0.6	100
11/07/2020	1.669	0.6	0.6	100
12/07/2020	1.566	0.6	0.6	100
13/07/2020	1.427	0.6	0.6	100
14/07/2020	1.438	0.6	0.6	100
15/07/2020	1.459	0.6	0.6	100
16/07/2020	1.387	0.6	0.6	100
17/07/2020	1.298	0.6	0.6	100
18/07/2020	1.251	0.6	0.6	100
19/07/2020	1.213	0.6	0.6	100

20/07/2020	1.158	0.6	0.6	100
21/07/2020	1.14	0.6	0.6	100
22/07/2020	1.104	0.6	0.6	100
23/07/2020	1.167	0.6	0.6	100
24/07/2020	1.078	0.6	0.6	100
25/07/2020	1.018	0.6	0.6	100
26/07/2020	0.952	0.6	0.6	100
27/07/2020	0.921	0.6	0.6	100
28/07/2020	0.898	0.6	0.6	100
29/07/2020	0.876	0.6	0.6	100
30/07/2020	0.861	0.6	0.6	100
31/07/2020	0.854	0.6	0.6	100
1/08/2020	0.841	0.6	0.6	100
2/08/2020	0.82	0.6	0.6	100
3/08/2020	0.82	0.6	0.6	100
4/08/2020	0.793	0.6	0.6	100
5/08/2020	0.744	0.6	0.6	100
6/08/2020	0.759	0.6	0.6	100
7/08/2020	0.73	0.6	0.6	100
8/08/2020	0.73	0.6	0.6	100
9/08/2020	0.82	0.6	0.6	100
10/08/2020	0.906	0.6	0.6	100
11/08/2020	0.814	0.6	0.6	100
12/08/2020	0.759	0.6	0.6	100
13/08/2020	0.73	0.6	0.6	100
14/08/2020	0.701	0.6	0.6	100
15/08/2020	0.722	0.6	0.6	100
16/08/2020	0.722	0.6	0.6	100
17/08/2020	0.701	0.6	0.6	100
18/08/2020	0.681	0.6	0.6	100
19/08/2020	0.668	0.6	0.6	100
20/08/2020	0.662	0.6	0.6	100
21/08/2020	0.668	0.6	0.6	100
22/08/2020	0.701	0.6	0.6	100
23/08/2020	0.737	0.6	0.6	100
24/08/2020	0.744	0.6	0.6	100
25/08/2020	0.82	0.6	0.6	100
26/08/2020	1.357	0.6	0.6	100
27/08/2020	1.26	0.6	0.6	100
28/08/2020	1.122	0.6	0.6	100
29/08/2020	1.043	0.6	0.6	100
30/08/2020	0.969	0.6	0.6	100
31/08/2020	0.891	0.6	0.6	100
1/09/2020	0.814	0.5	0.5	100
2/09/2020	1.06	0.5	0.5	100
3/09/2020	2.426	0.5	0.5	100
4/09/2020	2.242	0.5	0.5	100
5/09/2020	2.109	0.5	0.5	100

6/09/2020	2.095	0.5	0.5	100
7/09/2020	2.287	0.5	0.5	100
8/09/2020	2.167	0.5	0.5	100
9/09/2020	1.896	0.5	0.5	100
10/09/2020	1.724	0.5	0.5	100
11/09/2020	1.896	0.5	0.5	100
12/09/2020	3.019	0.5	0.5	100
13/09/2020	2.653	0.5	0.5	100
14/09/2020	2.319	0.5	0.5	100
15/09/2020	2.095	0.5	0.5	100
16/09/2020	1.947	0.5	0.5	100
17/09/2020	2.138	0.5	0.5	100
18/09/2020	1.772	0.5	0.5	100
19/09/2020	4.373	0.5	0.5	100
20/09/2020	5.056	0.5	0.5	100
21/09/2020	3.852	0.5	0.5	100
22/09/2020	3.214	0.5	0.5	100
23/09/2020	2.583	0.5	0.5	100
24/09/2020	2.287	0.5	0.5	100
25/09/2020	1.998	0.5	0.5	100