



Utrecht University



UNIVERSITY  
OF AGDER

# REALIZING THE POTENTIAL OF HUMIC ACID IN NORWAY THROUGH CHITOSAN TREATMENT OF DRINKING WATER

---

Written by  
Department  
Supervisor  
Period

Sophie Engels (3928608)  
Biology  
Dr. Reyn Joseph O'Born & Dr. Jaco Appelman  
March 2019 – September 2021

## Table of Contents

<b>Abstract .....</b>	<b>3</b>
<b>Laymen summary.....</b>	<b>3</b>
<b>1. Introduction.....</b>	<b>4</b>
<b>2. Potential of Chitosan (Literature Review).....</b>	<b>6</b>
<b>3. Methods .....</b>	<b>8</b>
<b>3.1.     <i>Snowballing: Literature Review .....</i></b>	<b>8</b>
<b>3.2.     <i>Data collection.....</i></b>	<b>9</b>
<b>3.3.     <i>Mass balance and extrapolation .....</i></b>	<b>10</b>
<b>4. Results .....</b>	<b>15</b>
<b>5. Discussion .....</b>	<b>19</b>
<b>6. Conclusion .....</b>	<b>22</b>
<b>7. References .....</b>	<b>23</b>
<b>Appendix .....</b>	<b>27</b>

## Abstract

The current movement towards a circular economy has increasingly focused on turning materials which were previously considered waste products into valuable resources. Humus materials, including humic acid, are potentially valuable resources that can be utilized from surface water treatment for use in agricultural applications to increase yield and remediate soil. Humic acid is commonly observed as color in surface water, and in Norway, is typically removed through coagulation with inorganic salt aluminum sulphate. Although this coagulation method has proven to be very cost-effective, has good performance, is relatively easy to handle and is highly available, it produces substantial amounts of alum sludge. Alum sludge contains a high concentration of alum and many other toxic compounds, like pathogens, organic contaminants and other heavy metals. To decrease the impact on both human health and the environment under current circumstances, there is a necessity to use a natural, more sustainable coagulant in water treatment processes. Chitosan is a natural substance that has been used successfully as a coagulant in water treatment and is a natural material made from the shells of crustaceans. Chitosan is biodegradable and poses no danger to human health and can be used to filter surface water to remove humic acid without contaminating it. This preserves the potential value of humic acid for use in agriculture as a soil amendment. In the result section of this paper, the resource availability of humic acid is mapped with data from all drinking water treatment plants to identify potentially rich sources of humic acid while a mass balance approach is used to determine how much humic acid can be potentially removed via chitosan. The results should be used to identify circular business opportunities which allow for humic acid to be brought back into the natural system and to understand where humic acid is occurring naturally in water sources in Norway and how it can be sustainably harvested.

## Laymen summary

In Norway, surface waters like lakes and rivers are common sources for drinking water. To get drinkable water from these sources, it has to be treated in by drinking water treatment facilities first. These facilities remove pollutants, like humus materials, including humic acid, from the water. Humic acid is commonly observed as color in surface water, and in Norway, it is usually removed by using aluminum as a coagulant. Not only does the use of aluminum pose risks for human health, it also causes the residue to be environmentally toxic and unavailable for any further use. To decrease the impact on both human health and the environment, it is necessary to use a coagulant in water treatment processes that is natural and more sustainable. This way, materials that were previously considered waste products can be turned into valuable resources, creating a more circular economy. Chitosan is a natural, biodegradable substance that can be used as a coagulant in the water treatment process. It is safe for human health and can remove humic acid without contaminating it. This provides the possibility to use the humic acid fertilizer in crop agriculture. In this study the resource availability of humic acid is mapped, assessing data from drinking water treatment plants across Norway, identifying potentially rich sources of humic acid. A conservative estimation of how much humic acid would potentially be available in Norway was made using a mass balance approach. The results should be used to establish circular business opportunities to bring the humic acid back into the natural system and how it can be harvested in a sustainable fashion.

## 1. Introduction

Climate change conditions are predicted to lead to more frequent and more extreme weather events, such as higher temperatures, flooding and droughts (IPCC, 2012; Münchener, 2017). Water quality is projected to be affected by rising water temperatures and these changes in extreme weather events, which will lead to intensification of many forms of water pollution (Bates et al., 2008). Floods and droughts have an enormous impact on both water availability and (surface) water quality, because they directly affect the concentration of dissolved substances in the water (Hrdinka et al., 2012). As a result of climate change related droughts, the number of rainy days will decrease, but their impact will be higher since the water volume per event will increase. Subsequently, the water quality will be affected by the drought-rewetting cycles because these enhance decomposition and runoff of organic matter (Bates et al., 2008; Delpla et al., 2009; Evans et al., 2005). These are examples of how ecosystems and human health could be negatively affected, but also of how water system reliability and operating costs could face negative impacts (Bates et al., 2008). Water management practices as they are now may not be effective enough to carry out the impacts of climate change on factors such as water supply reliability, both human health as well as the ecosystem's, and water quality (Bates et al., 2008; Delpla et al., 2009).

Over the course of the last years, climate fluctuations have also affected Northern Europe. In the Scandinavian countries, records of abnormal weather conditions such as rising temperatures and increased precipitation have been documented over the last century (Gaardbo Kuhn et al., 2020; Gasparrini et al., 2017; Hongve et al., 2004; Hyvärinen, 2003). It is predicted that Norway will also be subjected to more (severe) extreme weather events like floods and storms, and that it will face long-term rising temperatures and serious changes in precipitation (Ketzler et al., 2021; Wood & Ludwig, 2020). It is expected that with these changes in precipitation come changes in hydrological flow patterns (Hongve et al., 2004; Wood & Ludwig, 2020). Periods of lasting rain cause soil to saturate, therefore causing an increase in flow through the upper, organic layer of the soil. This directly influences the flux as well as the chemical composition of NOM (dissolved natural organic matter) (Riise et al., 1994; Steinberg & Steinberg, 2003b, 2003a). NOM is one of the primary contributors to the pH level of surface waters, which is why the acidification of lakes that serve as drinking water reservoirs takes place (Brakke et al., 1987; Hongve et al., 2004).

In Norway, lakes and surface water are common sources for drinking water (Gjessing et al., 1999; Hindar et al., 2020; Hongve et al., 2004; Vik et al., 1985). In many of those sources, an increase in water color of significant proportions has been observed by Norwegian waterworks and health authorities (Hongve et al., 2004). A few of the most important waterworks that serve the Oslo area identified that the raw water color had more than doubled during the time period of 1997 to 2001 (Liltved et al., 2001). Increases in water color are closely correlated with higher amounts of rainfall (Škerlep et al., 2020; Wood & Ludwig, 2020). Higher total amounts of rainfall in combination with more periods with extremely intensive precipitation cause water pathways to change. Due to this change, the amount of colored and acidic organic compounds leaching from the top layers of the forest floor has increased. This is the process that causes the intensification of water color. It affects the DOC (dissolved organic carbon) ratio in the lakes and lowers their pH, making the water more acidic (Hongve et al., 2004; Riise et al., 1994). The fact that water color has increased significantly is of both hygienic and economic importance, considering it hinders the regular procedures of disinfection. Also, to meet the drinking water standards, it requires water treatments to be more comprehensive (Bates et al., 2008; Delpla et al., 2009; Hongve et al., 2004).

Since the water color has intensified so much, more NOM has to be removed from the water, by water purification systems now than before to comply with drinking water standards. A couple examples of what NOM causes besides color problems, are taste and odor problems and enhanced growth of micro-organisms and corrosion in the distribution systems (Matilainen et al., 2010). Currently, NOM is removed from water predominantly by coagulation and filtration mechanisms (Kawamura, 1991; Vik et al., 1985). Elevated levels of NOM require a higher dose of disinfectants and coagulants used during treatment (B. Eikebrokk et al., 2004). Moreover, water treatment processes are not able to remove all NOM from the water, just a fraction of the total NOM. Therefore, it is possible for elevated NOM levels to affect the tap water quality negatively (B. Eikebrokk et al., 2004).

The coagulant that is most widely used to remove NOM is inorganic salt aluminum sulphate (alum) (Kawamura, 1991; Renault et al., 2009; Vik et al., 1985). Although it has proven to be very cost-effective, has good performance, is relatively easy to handle and is highly available, it produces substantial amounts of alum sludge (Kawamura, 1991; Renault et al., 2009). This sludge not only contains a high concentration of alum, but also many other toxic compounds, like pathogens, organic contaminants and other heavy metals (Dong et al., 2013; Shehu et al., 2012; G. Yang et al., 2015). This can cause serious environmental damage and therefore the disposal procedure becomes more complex (Kawamura, 1991). Also, because alum is affected by the pH level of water, the amount of residue in treated water is relatively high (Kawamura, 1991; Niquette et al., 2004). Since aluminum is generally toxic to humans, this poses risks to human health (Niquette et al., 2004; Renault et al., 2009).

Synthetic polyelectrolytes are used as coagulants as well, even though they are much costlier than alum for example. This is because compared to alum flocculation, the volume of sludge produced when using synthetic polymers is much lower (Kawamura, 1991; Zahrim et al., 2010). Additionally, they are not affected by the pH level of the water, have better sludge dehydration traits and have a better filtration performance (Kawamura, 1991). However, synthetic polymers might also pose risks to human health - the long-term effects considering toxicity and carcinogenicity of these substances are not yet completely known. They also pose a risk to the environment, since most of the synthetic polymers are not biodegradable and can affect the environment negatively (Kawamura, 1991; Niquette et al., 2004). Therefore, it is necessary to use a natural, more sustainable coagulant in water treatment processes. An example of such a coagulant is chitosan. A natural coagulant like chitosan poses no danger to human health and is biodegradable, which makes the disposal process of the residue a lot easier (Ahmad et al., 2004; Bjørnar Eikebrokk, 1999; Hofman et al., 2011). Moreover, it does not necessarily have to be disposed of, it could even propose new business opportunities. By bringing the organic matter residue, including the natural coagulant, back into the natural system, the water treatment system would be made more sustainable and circular (Chi & Cheng, 2006). For instance, it could be used as soil amendments, since the NOM extracted from the water is just a fraction of soil humus and the output of decayed plant residues (Edzwald & Van Benschoten, 1990; Vik et al., 1985). The substances would be brought back into the natural system like they would without human interreference.

In this research, data is obtained from water treatment plants located throughout the entirety of Norway. A mass balance, a method used to compare inputs and outputs of systems, is set up based on the collected data, in order gain insight on the amounts of usable NOM residues all over Norway by data extrapolation. This displays a good overview of the possibility of recycling the residues and making a circular business opportunity out of it.

## 2. Potential of Chitosan (Literature Review)

When water is treated with aluminum, the concentration of aluminum residue in the drinking water is relatively high (Kawamura, 1991; Niquette et al., 2004). To decrease the impact on both human health and the environment under current circumstances, there is a necessity to use a natural, more sustainable coagulant in water treatment processes. An example of such a natural, environmentally friendly coagulant is chitosan. Chitosan is a natural substance that has been used successfully as a coagulant in water treatment in restricted parts of the world (Kawamura, 1991). It is made from chitin, which is an organic substance that can be obtained from the shells of crustaceans, such as crabs, lobsters and shrimp. Once deacetylated, it forms chitosan, which has the ability to coagulate (Huang et al., 2000; Kawamura, 1991; R. Yang et al., 2016). The use of chitosan as a natural coagulant has a lot of potential in water treatment systems. Because chitosan is retrieved from renewable resources such as shells from shrimp and lobsters, which are the waste streams of the seafood industry, the pressure on the environment by water treatment systems that use this material is severely reduced (Huang et al., 2000; Kawamura, 1991; Krajewska, 2005; Renault et al., 2009). Several other benefits of chitosan, among others, are the fact that it is widely available, it is biodegradable, it contains antimicrobial properties and it is nontoxic (Krajewska, 2005; Renault et al., 2009; Vik et al., 1985).

Chitosan has more than one potential purpose, as there have been several reviews on materials based on chitosan respecting other separation mechanisms. There have been studies on the use of chitosan in membrane-based processes (filtration) (Krajewska, 2005), and also on the use of chitosan in adsorption processes, such as the removal of dye in liquid solutions and the removal of heavy metals from waste water, and using chitosan-based materials as biological sorbents (Crini & Badot, 2008; Gerente et al., 2007; Renault et al., 2009; Wang & Chen, 2009; Wase & Wase, 2002). However, on the use of chitosan for the removal of dissolved contaminants there are a lot less studies done (Eric Guibal et al., 2006; Renault et al., 2009).

There are many studies that have been written on the effectiveness of chitosan as a coagulant, a couple examples of these studies are by Johnson and Gallanger (Johnson & Gallanger, 1985), No et al. (No & Meyers, 2000) and Moore et al. (Moore et al., 1987). In these articles, it is shown that suspended solids (SS), turbidity (TB) and chemical oxygen demand (COD) can be reduced significantly when using chitosan as a coagulant. In the 1970s, substantial research on waste water of the food processing industry has been done by W. A. Bough and colleagues. The research targeted several different processing industries, such as vegetables, seafood, poultry, meat, cheese and eggs (W. A. Bough et al., 1978; W. A. Bough & Landes, 1976; W.A. Bough, 1975; Wayne A. Bough, 1975; Wayne A. Bough et al., 1975; Renault et al., 2009).

After the sludge (residue) has been used, it has to be disposed of. Sludge coming from systems that are typically based on treatment with metal and synthetic polymers may have a higher environmental impact than sludge from systems that used chitosan as a coagulant (Cheng et al., 2005; Chi & Cheng, 2006; Divakaran & Sivasankara Pillai, 2001; Renault et al., 2009; Ruhsing Pan et al., 1999). Moreover, this sludge from systems that used chitosan as a coagulant proposes the possibility to be re-purposed. For example, research by Chi and Cheng (2006) indicates that the SS of the sludge after it has been dried has potential to be used as a fertilizer in crop agriculture or gardening, or as an animal feed supplement in animal agriculture. Doing this would simultaneously solve the problem of existing shrimp shell waste by upcycling it into other products (Chi & Cheng, 2006). This would make the water treatment system more sustainable and circular. Research also suggests that it would be safe to dispose of sludge that is

produced when chitosan is used in flocculation of kaolinite suspensions in landfills, as it is non-toxic and biodegradable (Divakaran & Sivasankara Pillai, 2001).

Chitosan has traits of both coagulants and flocculants (Eric Guibal et al., 2006). Hence, it can be used as a primary coagulant or as a flocculant after coagulation (Eric Guibal et al., 2006; Renault et al., 2009). The performance of chitosan with regard to coagulation and/or flocculation has been evaluated to a great extent, there are many articles available on this subject. The biopolymer chitosan has been proven to have an extremely high affinity for many kinds of pollutants. For example, it has shown exceptional removal properties for natural organic matter as well as inorganic suspensions (Bolto et al., 2004; Eric Guibal et al., 2006) and mineral colloids (Roussy et al., 2005). Chitosan has also been proven to be highly effective at removing bacterial suspensions (Strand et al., 2002, 2003) and algal suspensions (Divakaran & Pillai, 2002). Chitosan also proved to be highly effective removing dye-molecules and dye-containing solutions (E. Guibal & Roussy, 2007; Eric Guibal et al., 2006), oil and grease (which represent one of the principal challenges as water pollutants in various big industries such as the expected petroleum and petrochemical industry, but also in the production of food, cosmetic and pharmaceutical items) (Ahmad et al., 2004; S. Bratskaya et al., 2006; Meyssami & Kasaean, 2005), and humic substances (S. Y. Bratskaya et al., 2002; Vogelsang et al., 2004). For this research, humic substances are particularly interesting, because the goal of this research is to determine how much humic acid can be potentially removed via chitosan in the entirety of Norway.

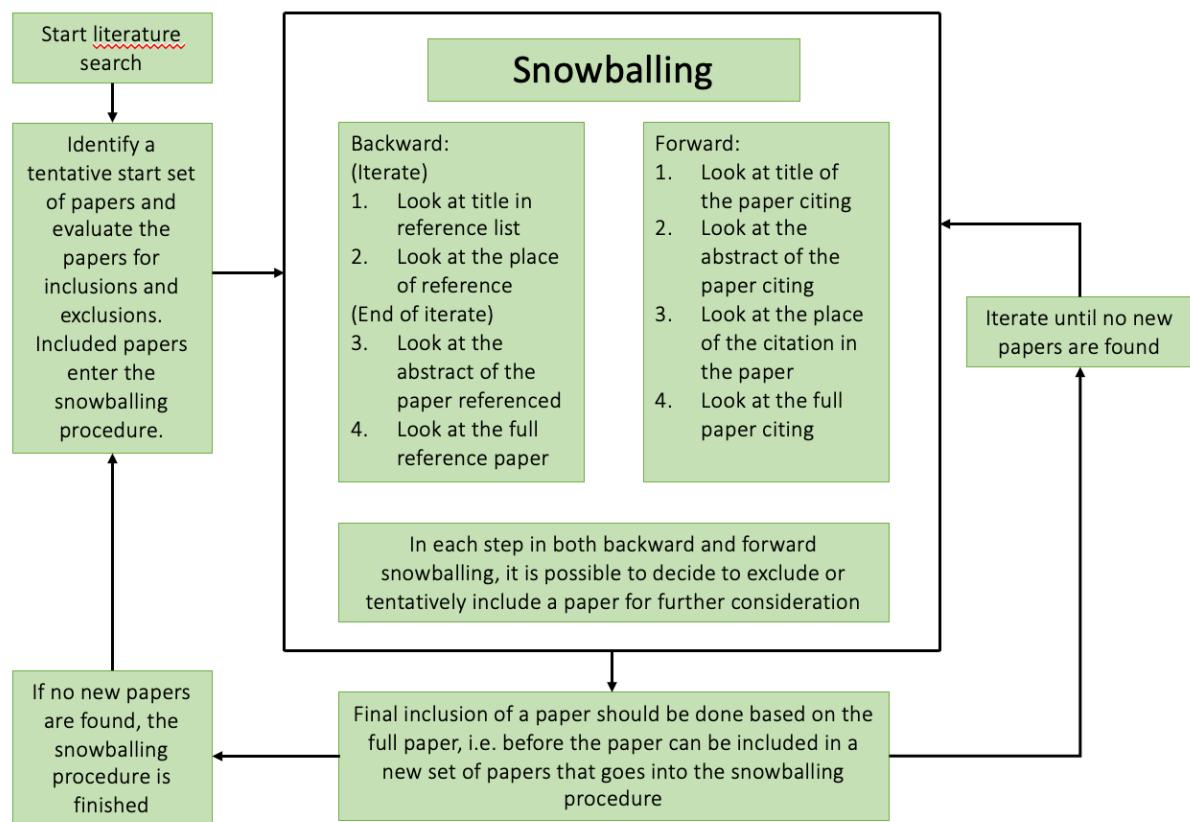
Over the last decades, water color in Norwegian surface waters has increased. This increase in water color is caused by higher concentrations of dissolved natural organic matter. Since surface waters are often used as drinking water sources in Norway, this increase in water color poses a problem. Research by Vogelsang and colleagues (2004) demonstrates chitosan to be very effective removing high molecular weight humic substances from water. After treating the water with chitosan, color and UV absorbance in typical humus-rich Norwegian surface waters were significantly reduced. Meaning, if chitosan, as a biodegradable, organic biopolymer, can effectively replace synthetic polymers like aluminum as a coagulant and/or flocculant in Norwegian water purification systems, they would become more sustainable, environmentally friendly and would contribute to a circular economy. It has been claimed that the concept of circular economy means different things to different stakeholders (Corona et al., 2019; Kirchherr et al., 2017; Rizos et al., 2017). It is therefore important to agree on the definition of circular economy and circularity in the context of this research. Here, we adopt the definition as suggested by Kirchher et al. (2017): *"an economic system that replaces the 'end-of-life' concept with reducing, alternatively reusing, recycling and recovering materials in production/distribution and consumption processes. It operates at the micro level (products, companies, consumers), meso level (eco-industrial parks) and macro level (city, region, nation and beyond), with the aim to accomplish sustainable development, thus simultaneously creating environmental quality, economic prosperity and social equity, to the benefit of current and future generations. It is enabled by novel business models and responsible consumers"*. This definition not only connects circularity with the preeminent goal of sustainable development, but also honors the waste hierarchy.

In this research we are analyzing the compounds of the sludge produced by water purification systems and extrapolating the data for larger areas of Norway. This way, we will be able to determine new potential applications for the waste product, enhancing the sustainability and circularity of Norwegian water treatment, while simultaneously making it less environmentally damaging and increasing the safety for human consumption.

### 3. Methods

#### 3.1. Snowballing: Literature Review

To identify research gaps and to gather valuable background information on the subject, literature research was conducted following the ‘snowballing’ method. This method is debatably the most commonly used method of sampling in systematic literature studies and reviews (Noy, 2008; Webster & Watson, 2002; Wohlin, 2014). When snowballing, the reference list of a paper or the citations to a paper are used to help the researcher find supplementary papers to aid their personal research (Webster & Watson, 2002; Wohlin, 2014). When using this approach, through time more and more knowledge is gathered through expansion of sources, hence the term snowballing. Depending on whether the citations or the reference lists of articles are used as a basis respectively, it is either called forward or backward snowballing (Wohlin, 2014), as explained below in figure 2.



**Fig. 2.** Snowballing procedure. Adapted from “Guidelines for snowballing in systematic literature studies and a replication in software engineering” (Wohlin, 2014).

As can be seen in the figure, backward snowballing implicates using the reference list as a source to find new papers to acquire new information from. Papers can be excluded when they do not match specific criteria, such as language or year of publication. Forward snowballing means finding new interesting papers according to citations of other papers. Whether a citation is worthy of closer examination, may depend on the location of the citation in the article for example. In this research both backward and forward snowballing was used to gather information.

### 3.2. Data collection

“Teta Vannrennsing AS” is a waterworks company that uses chitosan as a coagulant to treat drinking water in a sustainable manner. Their facilities are mainly located in the Oslo region. Data from Teta Vannrennsing AS was gathered to gain a better understanding of chitosan efficiency. It was also used to create a complete overview and to extrapolate the data for a larger area.

Teta Vannrennsing AS uses KitoFlokk™, a chitosan-based precipitant, in this particular case it is made of shrimp and crab shells (Teta Vannrennsing AS, VA-Support AS, year?). According to the data they provided, when using this type of precipitant as opposed to alum, chances of metal residues in drinking water are completely eliminated. It also stabilizes the systems, making them easier to operate, and the sludge production will be cut in half. The sludge that is produced will no longer be special waste that is hard to dispose of. It turns into a biological product, that can, for example, be used for crop growth in agriculture. KitoFlokk™ also reduces the energy consumption of the treatment process in general, as well as its CO<sub>2</sub> emissions. Extrapolation of the data by a mass balance approach was carried out to create an overview of the possibilities of chitosan use and the use of the residue as a project for a larger area of Norway.

Using chitosan as a coagulant would aid the transition of drinking water treatment facilities into more sustainable and circular systems. To get an idea of the feasibility of using humic acid in such ways, we need to create an overview of how much humic acid would be available throughout Norway, and how much could possibly be removed from the water using chitosan as a coagulant in the treatment. We therefore would also need to get an understanding of where humic acid occurs naturally in water sources and how it can be harvested sustainably.

In achieving the goal of gaining an understanding of how much humic acid is potentially available in Norway and creating an overview, this research gathered data from 2378 drinking water treatment facilities and their water input sources, spread throughout the entirety of Norway. Various data sources were used to obtain the information needed. The majority of the data was obtained from Mattilsynet, which is the Norwegian state supervision for plants, fish animals and food. Mattilsynet contains a variety of data sets on water supply systems on land in Norway which are regularly updated. Data sets represented on Mattilsynet include data sets on the water supply systems, which contain information about company names, organizational forms, municipal affiliation, produced water volumes and demographics, but also on intake points and raw water sources, analyses of the drinking water before and after treatment and an overview on types of water treatment used by different plants. When a different source was consulted to acquire the information needed, it was documented in the data overview by stating the alternative source. Table 1 of the appendix shows all additional sources used and for which water source inputs these sources provided data.

### 3.3. Mass balance and extrapolation

To calculate the potential amount of humic acid available in the different water sources throughout Norway, information on the color values of all individual sources was needed. The amount of humic acid can be derived from the color values measured by the drinking water treatment plants. As has been mentioned before, the intensification of the water coloring in Norwegian water sources is caused by (accumulation of) more dissolved natural organic matter in the water. Intensification of water color also affects the dissolved organic carbon ratio in the water sources, which lowers their pH, making the water more acidic (Hongve et al., 2004). Essentially, the higher the color value of a water source, the more humic acid is present (Brakke et al., 1987; Hongve et al., 2004).

The measuring of the water color values is carried out using a water color comparator, depending on comparing water color to hexachloroplatinate  $[\text{PtCl}_6]^{2-}$  stock solution (Škerlep et al., 2020). The measurements are expressed in mg Pt/L, which translates to the amount of dissolved natural organic matter (humic acid) per liter of water treated by the drinking water treatment plants in question. To create this overview and subsequently extrapolate the data as accurately and representatively as possible, there's a focus on the data and measurements of all drinking water treatment plants for the year 2020, since this is the most recent data available.

Because the amount of data gathered was of enormous quantity, it needed to be broken down, reorganized and reformatted for it to be manageable and easier to navigate and oversee. In order to create the overview of how much humic acid is potentially available in Norway, it was necessary to determine which specific information was needed to do so. Isolating said specific information from all gathered data was fundamental. This means a new data file was created in Excel, containing the specific data of interest gathered from the various sources. This resulted in the “master data” excel file. This file initially consisted of 14 columns, which contain the following data for all 2378 individual plants (table 2): column A contains the water plant name, which is the official name of the water plant in question. Column B contains the accompanying individual water plant ID, which is a unique sequence of numbers and letters to specifically identify the particular water plant by. Column C presents the water source input, which is the name of the source of the water input and column D the accompanying water source input ID, which again a unique sequence of numbers and letters to identify the particular water source input by. Column E presents the water source type. This describes whether the input source refers to a lake or a river, for example. Column F portrays the year in which the data in question was collected, and column G presents what kind of analysis was done. In this case, the only kind of analysis used, was the water color analysis. In Column H can be found how many analyses were done on the water source in question. Column I through L contain, in this order, the highest color value measured, the lowest color value measured, the median value for the range of color values measured and the average value for the range of color values measured. All of these values are expressed in Pt/L. Column M portrays the municipality in which the particular plant and its water input sources are located, and column N portrays the county in which the particular plant and its water input sources are located. Leaving some room for notes, column R represents the amount of drinking water treated (output) of the water plant in question in the year 2020. An overview of these columns and what they contain can be found below in table 2.

**Table 2.** Representation of the initial data overview (master data), created by determining the

Column	Factors mapped out in Excel	Explanation
A	Water plant name	Name of the water plant in question
B	Individual water plant ID	Number to identify the particular plant by
C	Water source input	Name of the source of the water input
D	Water source input ID	Number to identify the water input source by
E	Water source type	What kind of water source it is, f.e. lake
F	Year	Year in which the measurements were taken
G	Analysis type	What kind of analysis was done; in this case all are color analyses
H	Number of analyses executed	How many analyses were done on this water source
I	Maximum value of color	Highest color value measured (expressed in Pt/L)
J	Minimum value of color (Pt/L)	Lowest color value measured (expressed in Pt/L)
K	Median value of color (Pt/L)	Median value for the range of color values measured (expressed in Pt/L)
L	Average value of color (Pt/L)	Average value for the range of color values measured (expressed in Pt/L)
M	Municipality	Which municipality the water plant and its source(s) are situated in
N	County	Which county the water plant and its source(s) are situated in
R	Drinking water treated in 2020 (m <sup>3</sup> )	Amount of drinking water treated (output) of the water plant in question in the year 2020

To organize the data further, the next step was to find the duplicates in the Excel spreadsheet and identify them. Duplicates are a problem because they would affect the calculations on potential humic acid availability negatively, making them incorrect. To calculate the potential total amount of humic acid available in Norway, the potential humic acid output per water plant needs to be known. However, since many treatment plants use different water sources as an input for the same plant, it is necessary to look into these individual input sources as well. These different input sources all contribute to one output (the total amount of water treated in m<sup>3</sup>) per treatment plant. This means these different input sources each have a different share in the total input and therefore the total output of the drinking water treatment plant. Below, this is illustrated with an example.

Skullerud Vannbehandlingsanlegg (water plant ID Z0707022019522171190SQFPK) in Oslo commune uses two different lakes as water input sources for the same plant. This means there are two rows for this plant listed in the Excel sheet, one for each water input source, as is presented in table 3. This is because color measurements were taken for each individual water input source, as they can differ per source and location. As a result, the total water output for this plant (94.900.000 m<sup>3</sup> in 2020) is listed twice as well. However, the two water input sources each have a different share in the total output. The main input source for Skullerud Vannbehandlingsanlegg is Maridalsvassdraget, accounting for 90% of the total water input. The other input source, Elvågavassdraget, is responsible for 10% of the total water input (sources on this data can be found in table 1 of the appendix). Adding up these individual water input shares, results in the total water output for Skullerud. Consequently, to avoid overestimating the total amount of water treated and therefore miscalculating the potential humic acid availability, duplicate values for drinking water treated needed to be identified and the correct shares for each individual water input source needed to be determined.

**Table 3.** Representation of how the gathered data is listed in Excel and how this results in duplicated values for the amount of drinking water treated in m<sup>3</sup>. It simultaneously shows how this problem was rectified by determining the individual shares of the water input sources.

Water plant name	Water plant ID	Water source input	Water source input ID	Water source type
Skullerud Vannbehandlingsanlegg	Z0707022019522171 190SQFPK	Maridalsvassdr aget	Z08050722584647111 89DPWQB	Lake
Skullerud Vannbehandlingsanlegg	Z0707022019522171 190SQFPK	Elvågavassdrag et	Z08050722584647411 89YJWIB	Lake

Water source input	Drinking water treated in 2020 (m <sup>3</sup> )	Share	Adjusted share (m <sup>3</sup> )
Maridalsvassdraget	94900000	0.9	85410000.00
Elvågavassdraget	94900000	0.1	9490000.00

Once the duplicates were identified, the following factor to take into account is the average value of color measured (Pt/L) per water source input that contribute to the total input and output of the plants in question and see if the color values differ significantly or not. This was done because determining the exact share per individual input source would not be necessary if the average color values do not differ significantly. Ultimately, in these cases the outcome of the further calculations on potential humic acid availability would not be affected. Therefore, when there was no significant difference in average color value, the choice was made to discard the information of all but one of the input sources. However, if the average color values of the various water input sources did differ significantly, this would impact the further calculations on potential humic acid availability and the exact shares were determined as explained above. The isolation of the duplicates and which information should be kept or discarded was done by adding two extra columns to the spreadsheet. One which leaves space for comments, where X was put to indicate data that could be discarded and Y was put to indicate the value that would be kept

to do the calculations with. Another column was added to write down the subsequent action that was taken accordingly. This had to be done manually. None of the data was ever removed from the spreadsheet, in order to always be able to refer back to the different steps that were taken during the process and to keep the data set complete. An example of what this process looks like is presented in table 4.

**Table 4.** Representation duplicates were identified and how it was determined which information to use for further calculations on the potential humic acid availability.

Water plant name	Input source	Avg. color (Pt/L)	Action	X = remove Y = main value	Water output in 2020	Adjusted share (m <sup>3</sup> ) in 2020
Water plant A	Source 1	2.2	Remove	X	750.000	0
Water plant A	Source 2	2.0	Main value	Y	750.000	750.000
Water plant A	Source 3	2.1	Remove	X	750.000	0

Duplicates with a high amount of treated drinking water are worth looking into, especially when they also have a high color value, because having high values for both of these factors means it is very likely for these plants to have a high humic acid availability.

As is demonstrated in table 4, the water input sources with the lowest average color value compared to the other input sources were selected to execute further calculations with. This was done so, because in the end this will provide the conservative estimate of how much humic acid can possibly be retrieved from drinking water treatment plants across Norway using chitosan as a coagulant. However, even though the results will show a conservative estimate, all data for the individual plants is precise.

Using data from a drinking water treatment plant that presently uses chitosan as a coagulant provides insight in the efficiency of chitosan. A location that already uses chitosan as a coagulant in Norway is Haugesund, Rogaland. Using information provided by the Haugesund plant itself and the information gathered from Mattilsynet, calculations were done on the efficiency of chitosan and how much humic acid is eventually retrieved from the treated water in Haugesund. These calculations resulted in a factor that could be used to apply to all the other drinking water treatment plants. Applying this factor would provide a rough estimation of how much humic acid could potentially be retrieved from each plant if chitosan were to be used as a coagulant instead of aluminum. Below it is described how these calculations were done.

*DM = dry matter*

*OM = organic matter*

In 2019, 15% of the sludge output of the Haugesund plant was dry matter. The sludge production was 19 grams per m<sup>3</sup> treated water. Hence, the amount of dry matter (DM) per m<sup>3</sup> treated water is:

$$(1) \quad 19g * 0,15 = 2,85 g \frac{DM}{m^3}$$

Of the 15% dry matter content in the sludge, 62,6% is organic matter (OM). This means that the amount of organic matter per m<sup>3</sup> treated water is:

$$(2) \quad 2,85 g \frac{DM}{m^3} * 0,626 = 1,7841 g \frac{OM}{m^3}$$

As was retrieved from Mattilsynet and mapped in the Excel spreadsheet, the average color value for the Haugesund treatment plant is 30 Pt/L. This was multiplied by 1000 to convert the unit to Pt/m<sup>3</sup>, making the average color value for the Haugesund plant:

$$(3) \quad 30 \frac{Pt}{L} * 1000 = 30.000 \frac{Pt}{m^3}$$

Dividing the amount of organic matter by the average color value, resulted in the needed factor expressed in g/Pt:

$$(4) \quad \frac{1,781 \frac{g}{m^3}}{30.000 \frac{Pt}{m^3}} = 0,00005947 \frac{g}{Pt}$$

Using the factor calculated above, the potential output of dry natural organic matter (humic acid) was calculated in grams for each individual drinking water treatment plant. The plants were then sorted by county and all results belonging to the same county were added up. This brings forth the potential amount of dry organic matter produced per county, based on the amount of water and color in the water input sources for all individual plants.

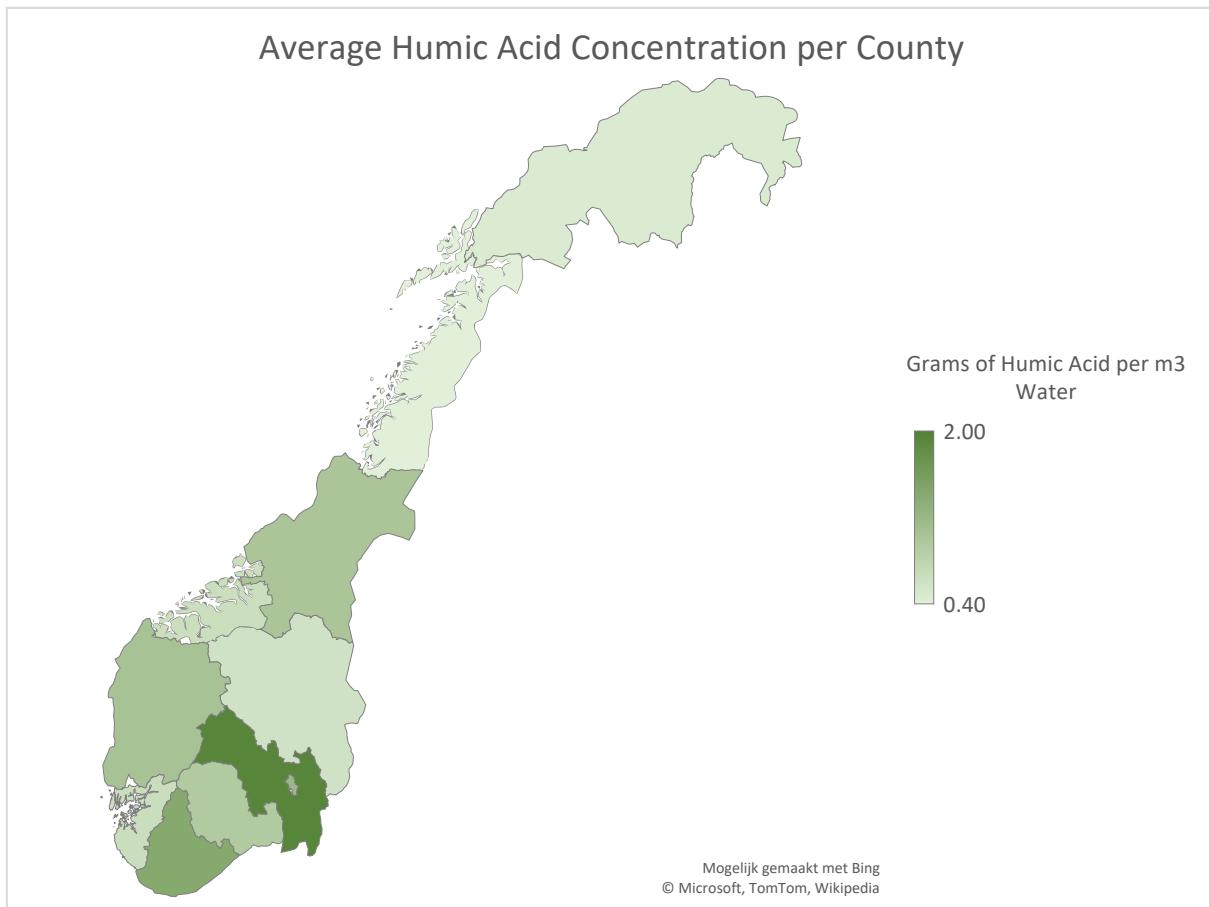
## 4. Results

In this project, a vast amount of data was gathered and assessed. The main goal in this paper was to map the resource availability of humic acid from all drinking water treatment plants to identify potentially rich sources of humic acid. A mass balance approach was used to determine the amount of humic acid that can potentially be removed using chitosan as a coagulant in the water treatment process. The results shown here are conservative estimates, meaning these results provide us with an estimation of the minimum amount of humic acid available in Norway. These results should be used to establish new circular business opportunities which can bring the retrieved humic acid back into the natural system. Additionally, the results provide us with an understanding of where humic acid is occurring naturally and how it can be harvested sustainably.

Using the factor calculated above, the potential output of dry natural organic matter (humic acid) was calculated in grams for each individual drinking water treatment plant. The plants were then sorted by county and all results belonging to the same county were added up. This brings forth the potential amount of dry organic matter produced per county, based on the amount of water and color in the water input sources for all individual plants. Table 5 presents the sum of water produced per county, expressed in m<sup>3</sup>, and the potential total amount of DM available per county, expressed in tons rounded to two decimals, based on the amount of water and grams of DM per m<sup>3</sup> water per county. This information provides an indication of the potential concentration of humic acid across Norway. The tons of DM per county of DM are portrayed by conditional formatting (scaled from green for low values to red for high values, the darker the shade of green, the lower the number, the darker the shade of red, the higher the number). The bottom row presents the potential grand total of water produced by all plants in Norway and the total amount of DM available across the country.

**Table 5.** Water produced and potential tons of DM produced per county.

County	Water produced (in m <sup>3</sup> )	Tons of DM per county
Agder	33159999	47.74
Innlandet	61494390	36.71
Møre og Romsdal	58770176	39.04
Nordland	47701041	19.07
Oslo	95077601	115.21
Rogaland	70563330	47.45
Troms and Finnmark	53131220	25.29
Trøndelag	96742246	98.95
Vestfold and Telemark	52619192	50.29
Vestland	78503481	83.85
Viken	170477615	334.54
<b>Grand Total</b>	<b>818269312</b>	<b>898.14</b>



**Fig. 3.** The relative concentration of humic acid per county, based on the amount of water and color in the water input sources for all individual plants, portrayed by conditional formatting in shades of green. The darker the shade, the higher the potential amount of dry organic matter produced for the particular county. The lighter the shade, the lower the potential amount of dry organic matter produced in the particular county.

In order to show a better indication of the concentration of humic acid across Norway as opposed to total humic acid availability, table 6 shows the calculated values for the average amount of DM in grams per m<sup>3</sup> of water produced per county, portrayed by conditional formatting. These numbers were calculated by dividing the amount of dry humic acid available per county by the m<sup>3</sup> of water produced by the county in question. Figure 3 presents a map showing all counties of Norway and their accompanying relative concentrations of humic acid, represented by shades of green. The darker the shade, the higher the relative concentration of humic acid available in the particular county. The lighter the shade, the lower the relative concentration of humic acid in the particular county. It shows that the counties with the densest concentrations of humic acid per cubic meter of water produced are Viken, Agder and Oslo. With Viken being the county with the highest population density and Oslo coming in second (Statista Research Department, 2020), this is relatively unsurprising. The higher the population density, the more water needs to be treated and produced and therefore the sludge output and humic acid output will be high as well. However, as can be seen in table 7, the high production plants in Viken also show high numbers for color values. Even if the color values for the water input sources in these counties were low, the high-level water processing rates make the humic acid output surge. Interestingly, when looking at population size, Agder is the eighth biggest county (Statista Research Department, 2020) and has a relatively modest output of water compared to the other counties (table

7). Therefore, the concentration of humic acid in the water input sources in Agder must be higher on average than it is in other counties.

**Table 6.** The average concentration of humic acid in grams per m<sup>3</sup> water produced per county, portrayed by conditional formatting (scaled from green for low values to red for high values, the darker the shade of green, the lower the number, the darker the shade of red, the higher the number).

County	Average amount of humic acid in grams per m <sup>3</sup> water
Agder	1.44
Innlandet	0.60
Møre og Romsdal	0.66
Nordland	0.40
Oslo	1.21
Rogaland	0.67
Troms og Finnmark	0.48
Trøndelag	1.02
Vestfold og Telemark	0.96
Vestland	1.07
Viken	1.96

Table 7 presents an overview of the 18 plants with the highest humic acid production rates, sorted by humic acid production in tons per year. Even though the plants are sorted by total amount of humic acid production per year in the far-right column, the average color value and the total water production are presented additionally. These three columns are all portrayed by conditional formatting, making it easier to oversee the results. As is shown here, the drinking water treatment plant with the highest potential humic acid production of Norway is Skullerud Vannbehandlingsanlegg in the county of Oslo. It would produce 101.13 tons of humic acid per year. Although, this is mainly because the water production is extremely high, since the average color value for the water input sources is not particularly high here, namely 19.91 Pt/L. Compared to the average color values for the other plants in table 5, this is actually relatively low. To retrieve the possible yearly amount of humic acid from Skullerud Vannbehandlingsanlegg, a very high amount of chitosan would be needed. However, when looking at the other results presented in table 7, it can be observed that Vannbehandlingsanlegg For Frevar Avd. Vannverket for example has a high value for average color as well as a relatively high water production rate, resulting in a high value for possible humic acid production. Noticeably, when looking at the other data gathered in table 7, there are a few other plants with a high level of average color and relatively low water production rates, therefore displaying a high level of possible humic acid production. Providing this information benefits giving insight in where the feasibility for chitosan use currently lies. These are the locations where immediate decisions could be made, which would lead to changes towards more sustainable water purification.

**Table 7.** The top 18 water plants with the highest humic acid production, sorted by humic acid production per year. The top is representing the plant with the highest humic acid production per year, with the production rates lowering while moving towards the bottom, as can be seen by the conditional formatting (scaled from green for low values to red for high values, the darker the shade of green, the lower the number, the darker the shade of red, the higher the number). The water plant name, as well as their accompanying average color value in Pt/L, their total amount of water produced in m<sup>3</sup> per year, and the county they are situated in are also presented here.

Water plant name	County	Avg. Color (Pt/L)	Water produced/year (m <sup>3</sup> )	Humic acid/year (tons)
Skullerud Vannbehandlingsanlegg	Oslo	19.91	85410000	101.13
Vannbehandlingsanlegg For Frevar Avd. Vannverket (1)	Viken	59.80	14801653	52.64
Vannbehandlingsanlegg For Frevar Avd. Vannverket (2)	Viken	51.00	14801653	44.89
Vannbehandlingsanlegg For Frevar Avd. Vannverket	Viken	40.00	14801653	35.21
R3 Bergtjern	Viken	31.77	16996682	32.11
Vansjø Vannverk	Viken	68.00	7791958	31.51
Vannbehandlingsanlegg Viva	Trøndelag	15.00	27048107	24.13
Inntakshus Grovsil (Beredskap)	Viken	74.00	5404408	23.78
Stokkavatn Krisevannanlegg	Rogaland	8.00	41410173	19.70
Eidsfoss Vannbehandlingsanlegg	Vestfold and Telemark	13.00	23648971	18.28
Tronstadvann Interkommunale	Agder	30.00	8872991	15.83
Inntakshus Grovsil (Beredskap)	Viken	47.30	5404408	15.20
Baterød Vannverk	Viken	39.00	6311631	14.64
Behandlingsanlegg - Bergen Vannverk-Sæddalen	Vestland	21.00	11563522	14.44
Skullerud Vannbehandlingsanlegg	Oslo	24.70	9490000	13.94
Frivold Krise/Nødvann	Agder	38.20	5789884	13.15
Sør-Odal Komm Vannrenseanlegg	Innlandet	100.00	2177021	12.95
Kattås	Viken	17.00	10393825	10.51

## 5. Discussion

As presented by previous research, water color of Norwegian drinking water sources has increased significantly over the last years. This means the amount of natural organic matter occurring in these water sources has increased (B. Eikebrokk et al., 2004; Hongve et al., 2004; Liltved, 2001). Because of the increase in color in surface waters, more NOM has to be removed now than before, increasing sludge production. Using chitosan as a coagulant provides possibilities for the sludge to be reintroduced into the natural system and create a circular process. To create said circular processes based on chitosan sludge, this paper delivers an indication of the concentration of humic acid and an overview of the potential total humic acid availability across Norway.

The current model of consumption is based on a so-called linear economy, also known as the ‘take-make-use-dispose’-model (Andrews, 2015; Jurgilevich et al., 2016). Even though throwing away products at the end of their lifecycle has never been a sustainable business, research shows that it is becoming increasingly unsustainable (Andrews, 2015; Rizos et al., 2017; Sariatli, 2017). Examples of factors contributing to this are the current demand for resources, population growth, inequity, demographics, consumption and wealth (Andrews, 2015; Sariatli, 2017). As opposed to a linear economy, in a circular economy, the goal is to preserve the added value of a product as much as possible and to remove waste from the system (Romero-Hernández & Romero, 2018; Sariatli, 2017). This means to keep products within the economy when they end their lifecycle, making it a resource which can be used effectively over and over again, therefore creating additional value in a closed-loop system (Aboulamer, 2018; Romero-Hernández & Romero, 2018; Sariatli, 2017; Tisserant et al., 2017). The indication of the concentration of humic acid and the potential humic acid availability across Norway given in this paper should be used to identify circular business opportunities which allow for humic acid to be brought back into the natural system. This brings additional value to a product which was previously considered waste, creating a closed-loop system.

The total amount of humic acid potentially available (the humic acid output) in the entirety of Norway, according to the conservative estimation calculated in this paper, comes down to 898,14 tons of 100% dry humic acid per year. This is a relatively small amount. Generally, the results show that the total humic acid output as well as the humic acid concentrations are higher for the counties located in the southern part of the country. Seeing as the increase in color in the water input sources is closely correlated with higher amounts of rainfall, this can be explained by the climatic difference between the northern and southern part of Norway. As has been described before, higher total amounts of rainfall in combination with more periods with extremely intensive precipitation, cause water pathways to change. As a consequence, higher amounts of colored and acidic organic compounds leach from the top layers of the forest floor, ending up in the water sources and making them more acidic and more intensely colored (Ketzler et al., 2021; Škerlep et al., 2020; Wood & Ludwig, 2020). In the southern counties, the climate provides suitable conditions for this process to occur, because overall the climate here is quite temperate. Moreover, extensive amounts of precipitation occur throughout all four seasons (Ketzler et al., 2021). Moving further north the subarctic climate does not only become very dry, permafrost also arises here, inhibiting the leaching of organic compounds (Ketzler et al., 2021).

There is no question about the necessity of having to take action against polluting, linear systems, making systems more circular and sustainable (Aboulamer, 2018; Andrews, 2015; Rizos et al.,

2017; Sariatli, 2017; Tisserant et al., 2017). Replacing aluminum with chitosan as a coagulant in water purification would be a great first step in this direction. The results provide an overview of how much humic acid is potentially available in the entirety of Norway, were chitosan to be implemented as a coagulant replacing aluminum, and which water input sources contain the highest concentration of humic acid. A good place to start implementing this change, is to identify the places where the impact of replacing aluminum with chitosan would be highest. These places would be the individual plants where not only the water production levels are very high, but simultaneously have high average color values for their water input sources. This information can be found in table 7. When looking at the data gathered in table 7, there are a few plants with a high level of average color and relatively low water production rates, therefore displaying a high level of possible humic acid production. This would require a relatively lower amount of chitosan, since the water production levels are lower, but would still yield a high amount of humic acid. For these reasons, it shows that it is more feasible to look into plants on this list with a high color value rather than high water production rates. Accordingly, the locations to focus on to be able to take action most quickly and efficiently, achieving the highest possible impact would be Vannbehandlingsanlegg For Frevar Avd. Vannverket 1 and 2, Vansjø Vannwerk and Inntakshus Grovsil (Beredskap), all of which are located in Viken. Concentrating on these plants first will make the highest direct impact on creating a more sustainable and circular system.

Knowing how much humic acid is potentially available in Norway, possible ways to repurpose it and create additional value can be derived. Research on several purposes humic acid retrieved from chitosan-based sludge could serve has been done, but not extensively. For example, research suggests that humic acid can be used as a fertilizer in crop agriculture or gardening, since it is known to have a positive impact on crop growth, soil properties, nutrient content and yield (Chi & Cheng, 2006; Dinçsoy & Sönmez, 2019; Shehu et al., 2012; Waqas et al., 2014). Another upcycling opportunity would lie in using it as an animal feed supplement in animal agriculture (Chi & Cheng, 2006; Md Shaiful Islam et al., 2005; Waqas et al., 2014). These possibilities to upcycle the sludge coming from chitosan-based water plants propose the opportunity to reintroduce the material to the system and create more circularity. However, to gain a better understanding of how chitosan sludge and humic acid can be repurposed, more research is needed.

Even though all data gathered on individual plant level in this research is precise, the calculations on the total availability of humic acid throughout the country as well as the relative concentration of humic acid per county are conservative estimates. This means the actual values when implementing chitosan as a coagulant could differ from the values calculated in this paper. However, since the calculations were set out to be done using the lowest measured values for the individual plants, it can be assumed that the actual amount of humic acid availability in Norway is higher than the results show here. Another limitation of this research that needs to be taken into account, is the fact that there is a lack of data on the amount of drinking water produced for the Tromsø area. This does not only compromise the total possible output of humic acid for Norway, but there are also no calculations for the relative concentration of humic acid for the water input sources around this area. Not having this information could impact these outcomes. However, since the Tromsø region is quite small and not very densely populated. Moreover, the average color values are relatively low. Therefore, it can be assumed that the lack of data regarding the amount of produced drinking water for the Tromsø area likely does not affect the estimated outcome calculated in this paper significantly.

In this paper an estimation on the humic acid availability when using chitosan as a coagulant was made using a calculated factor based on the efficiency of chitosan in Haugesund, a treatment plant that already uses chitosan as a coagulant. Therefore, research on the efficiency of chitosan in other plants is needed. To gain more insight into chitosan efficiency and to calculate a factor that is more precise, more than one location should be looked into. Further research action could also be directed towards gaining a better understanding of how the sludge from chitosan-based drinking water treatment plants could be reintroduced into the natural systems, creating more circularity and increasing sustainability. Part of creating circularity within this system, is the possibility to take chitosan from the shrimp shell waste of the fishing industry. To keep the system as local as possible, research on the availability of chitosan within the fishing industry in Norway could contribute to gaining a better understanding of establishing a closed-looped, circular Norwegian water purification system.

## 6. Conclusion

This research was carried out to gain an overview of the resource availability of humic acid, mapped with data from all drinking water treatment plants and to identify potentially rich sources of humic acid. This data was used to determine how much humic acid can potentially be removed using chitosan as a coagulant and to find circular business opportunities which allow for humic acid to be brought back into the natural system. The results show that the southern counties, especially Viken, possess the relatively highest concentration of humic acid compared to the more northern counties, which can be clarified by the climatic differences between the regions. Regarding locations where immediate action would have the highest impact, it is recommended to look into the four plants with the highest average color value in Viken, listed in table 5. The total humic acid availability for the entirety of Norway portrays a conservative estimate, which is likely to differ from the actual humic acid availability in reality. Since chitosan is a naturally occurring polymer that poses no threat to either the environment or public health, it is possible to reintroduce the sludge coming from chitosan-based water plants into the natural system. Doing so would create a more circular and sustainable system. Possible ways to reintroduce the sludge into the natural system would be to use it as a fertilizer in crop agriculture or gardening, or to use it as an animal feed supplement in animal agriculture. Future research building on this paper can directed towards finding more circular business opportunities and gaining a more detailed understanding of chitosan efficiency and humic acid concentration throughout Norway.

## 7. References

- Aboulamer, A. (2018). Adopting a circular business model improves market equity value. *Thunderbird International Business Review*, 60(5), 765–769.
- Ahmad, A. L., Sumathi, S., & Hameed, B. H. (2004). Chitosan: A Natural Biopolymer for the Adsorption of Residue Oil from Oily Wastewater. *Adsorption Science & Technology*, 22(1), 75–88.
- Andrews, D. (2015). The circular economy, design thinking and education for sustainability. *Local Economy*, 30(3), 305–315.
- Bates, B. C., Kundzewicz, Z. W., Wu, S., & Palutikof, J. P. (2008). Climate Change and Water:IPCC Technical Paper VI. In *Climate change and water*.
- Bolto, B., Dixon, D., & Eldridge, R. (2004). Ion exchange for the removal of natural organic matter. *Reactive and Functional Polymers*, 60(1–3), 171–182.
- Bough, W. A., & Landes, D. R. (1976). Recovery and Nutritional Evaluation of Proteinaceous Solids Separated from Whey by Coagulation with Chitosan. *Journal of Dairy Science*.
- Bough, W. A., Wu, A. C. M., Campbell, T. E., Holmes, M. R., & Perkins, B. E. (1978). Influence of manufacturing variables on the characteristics and effectiveness of chitosan products. II. Coagulation of activated sludge suspensions. *Biotechnology and Bioengineering*.
- Bough, W.A. (1975). Coagulation with Chitosan—An Aid to Recovery of By-Products from Egg Breaking Wastes. *Poultry Science*.
- Bough, Wayne A. (1975). Reduction of Suspended Solids in Vegetable Canning Waste Effluents by Coagulation with Chitosan. *Journal of Food Science*.
- Bough, Wayne A., Shewfelt, A. L., & Salter, W. L. (1975). Use of Chitosan for the Reduction and Recovery of Solids in Poultry Processing Waste Effluents. *Poultry Science*.
- Brakke, D. F., Henriksen, A., & Norton, S. A. (1987). The relative importance of acidity sources for humic lakes in Norway. *Nature*.
- Bratskaya, S., Avramenko, V., Schwarz, S., & Philippova, I. (2006). Enhanced flocculation of oil-in-water emulsions by hydrophobically modified chitosan derivatives. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 275(1–3), 168–176.
- Bratskaya, S. Y., Avramenko, V. A., Sukhoverkhov, S. V., & Schwarz, S. (2002). Flocculation of humic substances and their derivatives with chitosan. *Colloid Journal*, 64(6), 681–686.
- Cheng, W. P., Chi, F. H., Yu, R. F., & Lee, Y. C. (2005). Using chitosan as a coagulant in recovery of organic matters from the mash and lauter wastewater of brewery. *Journal of Polymers and the Environment*.
- Chi, F. H., & Cheng, W. P. (2006). Use of chitosan as coagulant to treat wastewater from milk processing plant. *Journal of Polymers and the Environment*.
- Corona, B., Shen, L., Reike, D., Rosales Carreón, J., & Worrell, E. (2019). Towards sustainable development through the circular economy—A review and critical assessment on current circularity metrics. In *Resources, Conservation and Recycling* (Vol. 151).
- Crini, G., & Badot, P. M. (2008). Application of chitosan, a natural aminopolysaccharide, for dye removal from aqueous solutions by adsorption processes using batch studies: A review of recent literature. In *Progress in Polymer Science (Oxford)*.
- Delpla, I., Jung, A. V., Baures, E., Clement, M., & Thomas, O. (2009). Impacts of climate change on surface water quality in relation to drinking water production. In *Environment International*.
- Dinçsoy, M., & Sönmez, F. (2019). The effect of potassium and humic acid applications on yield and nutrient contents of wheat (*Triticum aestivum* L. var. Delfii) with same soil properties. *Journal of Plant Nutrition*, 42(20), 2757–2772.
- Divakaran, R., & Pillai, V. N. S. (2002). Flocculation of algae using chitosan. *Journal of Applied Phycology*, 14(5), 419–422.
- Divakaran, R., & Sivasankara Pillai, V. N. (2001). Flocculation of kaolinite suspensions in water by chitosan. *Water Research*.
- Dong, B., Liu, X., Dai, L., & Dai, X. (2013). Changes of heavy metal speciation during high-solid

- anaerobic digestion of sewage sludge. *Bioresource Technology*.
- Edzwald, J. K., & Van Benschoten, J. E. (1990). Aluminum Coagulation of Natural Organic Matter. In *Chemical Water and Wastewater Treatment*.
- Eikebrokk, B., Vogt, R. D., & Liltved, H. (2004). NOM increase in Northern European source waters: Discussion of possible causes and impacts on coagulation/contact filtration processes. *Water Science and Technology: Water Supply*, 4(4), 47–54.
- Eikebrokk, Bjørnar. (1999). Coagulation-direct filtration of soft, low alkalinity humic waters. *Water Science and Technology*, 40(9), 55–62.
- Evans, C. D., Monteith, D. T., & Cooper, D. M. (2005). Long-term increases in surface water dissolved organic carbon: Observations, possible causes and environmental impacts. *Environmental Pollution*, 137(1), 55–71.
- Gaardbo Kuhn, K., Maria Nygård, K., Guzman-Herrador, B., Sunde, L. S., Rimhanen-Finne, R., Trönnberg, L., Rudbeck Jepsen, M., Ruuhela, R., Wong, W. K., & Steen Ethelberg, &. (2020). *Campylobacter infections expected to increase due to climate change in northern europe*. 10, 13874.
- Gasparrini, A., Guo, Y., Sera, F., Vicedo-Cabrera, A. M., Huber, V., Tong, S., de Sousa Zanotti Staglilio Coelho, M., Nascimento Saldiva, P. H., Lavigne, E., Matus Correa, P., Valdes Ortega, N., Kan, H., Osorio, S., Kysely, J., Urban, A., Jaakkola, J. J. K., Ryti, N. R. I., Pascal, M., Goodman, P. G., ... Armstrong, B. (2017). Projections of temperature-related excess mortality under climate change scenarios. *The Lancet Planetary Health*, 1(9), e360–e367.
- Gerente, C., Lee, V. K. C., Le Cloirec, P., & McKay, G. (2007). Application of chitosan for the removal of metals from wastewaters by adsorption - Mechanisms and models review. In *Critical Reviews in Environmental Science and Technology*.
- Gjessing, E. T., Egeberg, P. K., & Håkedal, J. (1999). Natural organic matter in drinking water - The "NOM-typing project", background and basic characteristics of original water samples and NOM isolates. *Environment International*.
- Guibal, E., & Roussy, J. (2007). Coagulation and flocculation of dye-containing solutions using a biopolymer (Chitosan). *Reactive and Functional Polymers*, 67(1), 33–42.
- Guibal, Eric, Van Vooren, M., Dempsey, B. A., & Roussy, J. (2006). A review of the use of chitosan for the removal of particulate and dissolved contaminants. In *Separation Science and Technology*.
- Hindar, A., Garmo, Ø., Austnes, K., & Sample, J. E. (2020). Nasjonal innsjøundersøkelse 2019. NIVA, 7530.
- Hofman, J., Hofman-Caris, R., Nederlof, M., Frijns, J., & Van Loosdrecht, M. (2011). Water and energy as inseparable twins for sustainable solutions. *Water Science and Technology*, 63(1), 88–92.
- Hongve, D., Riise, G., & Kristiansen, J. F. (2004). Increased colour and organic acid concentrations in Norwegian forest lakes and drinking water - A result of increased precipitation? *Aquatic Sciences*, 66(2), 231–238.
- Hrdinka, T., Novický, O., Hanslík, E., & Rieder, M. (2012). Possible impacts of floods and droughts on water quality. *Journal of Hydro-Environment Research*, 6(2), 145–150.
- Huang, C., Chen, S., & Ruhsing Pan, J. (2000). Optimal condition for modification of chitosan: A biopolymer for coagulation of colloidal particles. *Water Research*.
- Hyvärinen, V. (2003). Trends and characteristics of hydrological time series in Finland. *Nordic Hydrology*.
- IPCC. (2012). Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. *Cambridge University Press*.
- Johnson, R. A., & Gallanger, S. M. (1985). Use of Coagulants to Treat Seafood Processing Wastewaters. *Proceedings of the Industrial Waste Conference*.
- Jurgilevich, A., Birge, T., Kentala-Lehtonen, J., Korhonen-Kurki, K., Pietikäinen, J., Saikku, L., & Schösler, H. (2016). Transition towards Circular Economy in the Food System. *Sustainability 2016*, Vol. 8, Page 69, 8(1), 69.
- Kawamura, S. (1991). Effectiveness of natural polyelectrolytes in water treatment. *Journal / American Water Works Association*, 83(10), 88–91.

- Ketzler, G., Römer, W., & Beylich, A. A. (2021). The Climate of Norway. In A. A. Beylich (Ed.), *Landscapes and Landforms of Norway* (pp. 7–29). Springer International Publishing.
- Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. In *Resources, Conservation and Recycling* (Vol. 127, pp. 221–232).
- Krajewska, B. (2005). Membrane-based processes performed with use of chitin/chitosan materials. *Separation and Purification Technology*.
- Liltved, H. (2001). *Testing of a Water Quality Improvement Agent produced by Health & Nature as*.
- Matilainen, A., Vepsäläinen, M., & Sillanpää, M. (2010). Natural organic matter removal by coagulation during drinking water treatment: A review. In *Advances in Colloid and Interface Science*.
- Md Shaiful Islam, K., Islam, K., Schuhmacher, A., & Groppe, J. (2005). Humic Acid Substances in Animal Agriculture. *Pakistan Journal of Nutrition*, 4(3), 126–134.
- Meyssami, B., & Kasaian, A. B. (2005). Use of coagulants in treatment of olive oil wastewater model solutions by induced air flotation. *Bioresource Technology*, 96(3), 303–307.
- Moore, J. K., Johnson, M. G., & Sistrunk, W. A. (1987). Effect of Polyelectrolyte Treatments on Waste Strength of Snap and Dry Bean Wastewaters. *Journal of Food Science*.
- Münchener. (2017). *Natural catastrophe losses at their highest for four years / Munich Re*. Munich RE.
- Niquette, P., Monette, F., Azzouz, A., & Hausler, R. (2004). Impacts of substituting aluminum-based coagulants in drinking water treatment. *Water Quality Research Journal of Canada*, 39(3), 303–310.
- No, H. K., & Meyers, S. P. (2000). Application of chitosan for treatment of wastewaters. In *Reviews of environmental contamination and toxicology*.
- Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology*.
- Renault, F., Sancey, B., Badot, P. M., & Crini, G. (2009). Chitosan for coagulation/flocculation processes - An eco-friendly approach. *European Polymer Journal*, 45(5), 1337–1348.
- Riise, G., Salbu, B., Vogt, R. D., Ranneklev, S. B., & Mykkelbost, T. C. (1994). Mobility of humic substances, major and minor elements in lake Skjervatjern and its catchment area. *Environment International*.
- Rizos, A., Tuokko, K., & Behrens, A. (2017). A review of definitions, processes and impacts. In *Circular economy* (Issue September).
- Romero-Hernández, O., & Romero, S. (2018). Maximizing the value of waste: From waste management to the circular economy. *Thunderbird International Business Review*, 60(5), 757–764.
- Roussy, J., Van Vooren, M., & Guibal, E. (2005). Chitosan for the Coagulation and Flocculation of Mineral Colloids. *Journal of Dispersion Science and Technology*, 25(5), 663–677.
- Ruhsing Pan, J., Huang, C., Chen, S., & Chung, Y. C. (1999). Evaluation of a modified chitosan biopolymer for coagulation of colloidal particles. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*.
- Sariati, F. (2017). Linear Economy Versus Circular Economy: A Comparative and Analyzer Study for Optimization of Economy for Sustainability. *Visegrad Journal on Bioeconomy and Sustainable Development*, 6(1), 31–34.
- Shehu, M. S., Abdul Manan, Z., & Wan Alwi, S. R. (2012). Optimization of thermo-alkaline disintegration of sewage sludge for enhanced biogas yield. *Bioresource Technology*.
- Škerlep, M., Steiner, E., Axelsson, A. L., & Kritzberg, E. S. (2020). Afforestation driving long-term surface water browning. *Global Change Biology*, 26(3), 1390–1399.
- Steinberg, C. E. W., & Steinberg, C. E. W. (2003a). Humic Substances and Global Climate Change. In *Ecology of Humic Substances in Freshwaters*.
- Steinberg, C. E. W., & Steinberg, C. E. W. (2003b). Origin of Humic Substances in Freshwater: Biogeochemical Pathways. In *Ecology of Humic Substances in Freshwaters*.
- Strand, S. P., Nordengen, T., & Østgaard, K. (2002). Efficiency of chitosans applied for flocculation of different bacteria. *Water Research*, 36(19), 4745–4752.
- Strand, S. P., Vårum, K. M., & Østgaard, K. (2003). Interactions between chitosans and bacterial

- suspensions: Adsorption and flocculation. *Colloids and Surfaces B: Biointerfaces*, 27(1), 71–81.
- Tisserant, A., Pauliuk, S., Merciai, S., Schmidt, J., Fry, J., Wood, R., & Tukker, A. (2017). Solid Waste and the Circular Economy: A Global Analysis of Waste Treatment and Waste Footprints. *Journal of Industrial Ecology*, 21(3), 628–640.
- Vik, E. A., Carlson, D. A., Eikum, A. S., & Gjessing, E. T. (1985). Removing Aquatic Humus From Norwegian Lakes. *Journal / American Water Works Association*, 77(3), 58–66.
- Vogelsang, C., Andersen, D. O., Hey, A., Hakonsen, T., Jantsch, T. G., Müller, E. D., Pedersen, M. A., & Varum, K. M. (2004). Removal of humic substances by chitosan. *Water Science and Technology: Water Supply*, 4(5–6), 121–129.
- Wang, J., & Chen, C. (2009). Biosorbents for heavy metals removal and their future. In *Biotechnology Advances*.
- Waqas, M., Ahmad, B., Arif, M., Munsif, F., Khan, A. L., Amin, M., Kang, S.-M., Kim, Y.-H., & Lee, I.-J. (2014). Evaluation of Humic Acid Application Methods for Yield and Yield Components of Mungbean. *American Journal of Plant Sciences*, 2014(15), 2269–2276.
- Wase, D. J., & Wase, J. (2002). Biosorbents for Metal Ions. *CRC Press*.
- Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. *MIS Quarterly*.
- Wohlin, C. (2014). Guidelines for snowballing in systematic literature studies and a replication in software engineering. *ACM International Conference Proceeding Series*.
- Wood, R. R., & Ludwig, R. (2020). Analyzing Internal Variability and Forced Response of Subdaily and Daily Extreme Precipitation Over Europe. *Geophysical Research Letters*, 47(17).
- Yang, G., Zhang, G., & Wang, H. (2015). Current state of sludge production, management, treatment and disposal in China. In *Water Research*.
- Yang, R., Li, H., Huang, M., Yang, H., & Li, A. (2016). A review on chitosan-based flocculants and their applications in water treatment. In *Water Research*.
- Zahrim, A. Y., Tizaoui, C., & Hilal, N. (2010). Evaluation of several commercial synthetic polymers as flocculant aids for removal of highly concentrated C.I. Acid Black 210 dye. *Journal of Hazardous Materials*, 182(1–3), 624–630.

## Appendix

**Table 1.** Water source input IDs and their adjusted source of information.

Water source input ID	Adjusted source
Z0805072258464711189DPWQB	<a href="https://www.oslobyleksikon.no/side/Vannforsyningen">https://www.oslobyleksikon.no/side/Vannforsyningen</a>
Z0805072258464741189YJWIB	<a href="https://www.oslobyleksikon.no/side/Vannforsyningen">https://www.oslobyleksikon.no/side/Vannforsyningen</a>
Z0911262058454011126RKQDL	<a href="https://www.bergen.kommune.no/publisering/api/filer/T542157136">https://www.bergen.kommune.no/publisering/api/filer/T542157136</a>
Z0911262058454091126KHSKY	<a href="https://www.bergen.kommune.no/publisering/api/filer/T542157136">https://www.bergen.kommune.no/publisering/api/filer/T542157136</a>
Z0911262058454111126EGDAM	<a href="https://www.bergen.kommune.no/publisering/api/filer/T542157136">https://www.bergen.kommune.no/publisering/api/filer/T542157136</a>
Z0911262058454141126MFWIJ	<a href="https://www.bergen.kommune.no/publisering/api/filer/T542157136">https://www.bergen.kommune.no/publisering/api/filer/T542157136</a>
Z0911262058454181126OUDVW	<a href="https://www.bergen.kommune.no/publisering/api/filer/T542157136">https://www.bergen.kommune.no/publisering/api/filer/T542157136</a>
Z0911262059352021126JQBOX	<a href="https://vestfoldvann.no/om-oss/">https://vestfoldvann.no/om-oss/</a>
Z0805072259342231189ABTIR	<a href="https://www.glitre.no/om-glitrrevannverket/anleggene/">https://www.glitre.no/om-glitrrevannverket/anleggene/</a>
Z0805072259342251189PPMHC	<a href="https://www.glitre.no/om-glitrrevannverket/anleggene/">https://www.glitre.no/om-glitrrevannverket/anleggene/</a>
Z1605111217216342023YJFPO	<a href="https://www.halden.kommune.no/tjenester/miljo-og-teknisk/vann-og-avlop/vannets-vei/">https://www.halden.kommune.no/tjenester/miljo-og-teknisk/vann-og-avlop/vannets-vei/</a>
Z0805072259580681189BKQJM	<a href="https://niva.brage.unit.no/niva-xmlui/bitstream/handle/11250/2441214/7121-2017.pdf?sequence=1&amp;isAllowed=y">https://niva.brage.unit.no/niva-xmlui/bitstream/handle/11250/2441214/7121-2017.pdf?sequence=1&amp;isAllowed=y</a>
Z0805072259580681189SSRPY	<a href="https://niva.brage.unit.no/niva-xmlui/bitstream/handle/11250/2441214/7121-2017.pdf?sequence=1&amp;isAllowed=y">https://niva.brage.unit.no/niva-xmlui/bitstream/handle/11250/2441214/7121-2017.pdf?sequence=1&amp;isAllowed=y</a>

**Table 2.** Most important information from the master data sheet. From left to right it presents the ID numbers of the individual water treatment plants (Plant ID), the county in which these individual plants are located, the average color value for the individual plants (Avg. Color (Pt/L)), the amount of water produced yearly by these plants (Water produced (m<sup>3</sup>/year)), the yearly output of dry humic acid in grams (HA/Year (grams)) and the output of dry humic acid in tons (HA/Year (tons)).

Plant ID	County	Avg. Color (Pt/L)	Water Produced (m3/year)	HA/Year (grams)	HA/Year (tons)
Z0707022019522171190SQFPK	Oslo	19.91	85410000	101,129,514	101.13
Z0707022019121271190NFIBL	Viken	59.8	14801653	52,639,207	52.64
Z0707022019121271190NFIBL	Viken	51	14801653	44,892,969	44.89
Z0707022019121271190NFIBL	Viken	40	14801653	35,210,172	35.21
Z0707022019221431190TGJQU	Viken	31.77	16996682	32,112,883	32.11
Z0707022020025581190QFKPB	Viken	68	7791958	31,510,366	31.51
Z0707022020090801190BMHYH	Trøndelag	15	27048107	24,128,264	24.13
Z0707022019518071190DPSTH	Viken	74	5404408	23,783,611	23.78
Z0707022020113801190BWHOI	Rogaland	8	41410173	19,701,304	19.70
Z0707022019283471190TTIVM	Vestfold and Telemark	13	23648971	18,283,256	18.28
Z0707022019234011190XXPXY	Agder	30	8872991	15,830,303	15.83
Z0707022019518071190DPSTH	Viken	47.3	5404408	15,202,227	15.20
Z0707022018063311190YJAED	Viken	39	6311631	14,638,755	14.64
Z0911211948592561126KDLAA	Vestland	21	11563522.01	14,441,336	14.44
Z0707022019522171190SQFPK	Oslo	24.7	9490000	13,939,946	13.94
Z0707022019356061190UOEHN	Agder	38.2	5789884	13,153,192	13.15
Z1102091318036070208HAXTR	Innlandet	100	2177021	12,946,744	12.95
Z0707022019498821190PBUHI	Viken	17	10393825	10,508,053	10.51
Z0707022020058001190MWZRZQ	Agder	26	6421160	9,928,526	9.93
Z0707022019132271190NUIRH	Rogaland	30	5417545	9,665,442	9.67
Z0704301341351731190XGHCJ	Viken	114.1	1389695	9,429,813	9.43
Z0805072259342201189VDJEA	Viken	11	13135813.09	8,593,055	8.59
Z0805072300442511189ZGLFK	Rogaland	21.3	6149889	7,790,132	7.79
Z0707022020067491190HAEBR	Vestfold and Telemark	41.5	3025347.75	7,466,573	7.47
Z1312181111122442024IVTDR	Trøndelag	48.818	2437296	7,075,973	7.08
Z0911211948592561126KDLAA	Vestland	24	4851362.683	6,924,253	6.92
Z0707022019592931190FGFSU	Vestfold and Telemark	15.667	7000733	6,522,698	6.52
Z0707022020090801190BMHYH	Trøndelag	4	27048107	6,434,204	6.43
Z0707022019372231190UWFCF	Vestfold and Telemark	32.3	3126001	6,004,676	6.00
Z2001221139063272025TTDPD	Møre og Romsdal	10.4	9578929	5,924,453	5.92
Z0707022019480351190WMZNI	Viken	39	2518352	5,840,889	5.84
Z0707022019214701190PAIEU	Trøndelag	34.63	2835313	5,839,174	5.84
Z07070220190931111190NEDQR	Trøndelag	50.75	1919758	5,794,026	5.79
Z0705302238591131189PZDOM	Trøndelag	84.3	1116684	5,598,295	5.60
Z0911211948592561126KDLAA	Vestland	8	11297693.92	5,374,991	5.37
Z1810090831013642025KZHPR	Trøndelag	29.818	3007876	5,333,796	5.33
Z1402141319137282025TZUF	Vestland	58	1464832	5,052,586	5.05
Z0805072258284771189OODIU	Viken	33	2565291	5,034,409	5.03
Z1002191058130731071IKMAH	Møre og Romsdal	19.15686	4306500	4,906,217	4.91
Z0707022020125481190IXNBY	Møre og Romsdal	27.34	2964471	4,819,962	4.82
Z0705302240281391190NIXMO	Viken	78	1037826	4,814,122	4.81
Z0803301904179913252WPOHD	Vestland	70	1142774	4,757,254	4.76
Z0805072258437461194SSQRQ	Viken	19.111	4160781	4,728,857	4.73
Z0911211948592561126KDLAA	Vestland	32	2458909.853	4,679,404	4.68
Z1804301415359902025QYPBN	Trøndelag	44.111	1763000	4,624,845	4.62
Z0805072300462331194JJRW	Rogaland	12	6149889	4,388,807	4.39
Z16082313922529024GDNXZ	Vestland	20	3614898	4,299,560	4.30
Z1402141319032302024PVND	Vestland	51	1375586	4,172,111	4.17
Z0805072258393811195IVXXC	Viken	37.53	1780923	3,974,858	3.97
Z0707022019273651190CWUTI	Vestfold and Telemark	18	3508183	3,755,370	3.76
Z0805072258466981190BLNUG	Innlandet	10.3	5959269	3,650,297	3.65
Z0805072258466981190BLNUG	Innlandet	10	5959269	3,543,977	3.54
Z0710032241323441195GFBEQ	Troms and Finnmark	13.417	4383580	3,497,698	3.50
Z0710032241323441195GFBEQ	Troms and Finnmark	13.417	4383580	3,497,698	3.50
Z0707022019019621190XPWJN	Viken	45	1211000	3,240,818	3.24
Z0704301343424891189VPLUJ	Vestland	32	1632433	3,106,585	3.11
Z0805072259238031189ZFBY	Innlandet	40.455	1283008	3,086,736	3.09
Z0704301343424891189VPLUJ	Vestland	31	1632433	3,009,505	3.01
Z0805072302138901189FBISE	Trøndelag	23.798	2093029	2,962,195	2.96
Z0705302238577271189UNLGM	Trøndelag	76	632543	2,858,917	2.86
Z2001091104341142025JENHS	Trøndelag	29	1657219	2,858,090	2.86
Z0707022020067491190HAEBR	Vestfold and Telemark	45.8	1008449.25	2,746,739	2.75
Z0704301344313931190RRPJ	Møre og Romsdal	62.5	732000	2,720,753	2.72
Z2001221127235652025UTYCO	Viken	57.25	731894	2,491,848	2.49
Z0911211948592561126KDLAA	Vestland	27	1528511.53	2,454,316	2.45
Z0805072303407991189EUORU	Troms and Finnmark	15.471	2593284	2,385,978	2.39
Z2001151428273932025TQJYO	Vestland	19	2102332	2,375,488	2.38
Z0707022020193951190RMCJP	Trøndelag	31.36	1244958	2,321,821	2.32
Z0707022019404361190FWORV	Innlandet	10	3689980	2,194,431	2.19
Z0705302238523001190JBLNL	Vestland	56.3	643417	2,154,264	2.15
Z1003011250064661028EOKPM	Trøndelag	39.6	892993	2,103,009	2.10
Z0704301341470791189PNZWC	Viken	101	347000	2,084,245	2.08
Z0707022019511741190TSLUN	Viken	15	2314054	2,064,252	2.06
Z1101101347262980192VEKGH	Rogaland	23	1477171	2,020,489	2.02
Z0911211948334421126ITGFW	Agder	26	1257449	1,944,293	1.94
Z0707022019458871190GNUSU	Agder	28.48	1052620	1,782,828	1.78

Z0704301336370441189IUPDM	Innlandet	71	380820	1,607,963	1.61
Z1001191201529613251WWGPM	Møre og Romsdal	18.583	1390172	1,536,322	1.54
Z0707022019107461190MEIHF	Troms og Finnmark	13.611	1892669	1,532,014	1.53
Z2001311514269872024GVUJP	Vestland	22.9	1112306	1,514,808	1.51
Z2002041035159812024LBZIN	Vestland	10.091	2465962	1,479,853	1.48
Z0709110927160291194TWDEG	Nordland	11.8	2085624	1,463,578	1.46
Z0704301337432021189HWBVJ	Viken	29.95	805630	1,434,929	1.43
Z0805072259342201189VDJEA	Viken	10	2345680.909	1,394,976	1.39
Z0707022019205691190TNZKE	Innlandet	10.4	2227319	1,377,570	1.38
Z0704301337406591189ALSWM	Trøndelag	81	280000	1,348,780	1.35
Z0704301337428751189NMORR	Viken	47	481018	1,344,489	1.34
Z0707022019546221190ZDBYP	Vestfold and Telemark	18.231	1215188	1,317,504	1.32
Z0705302239043751189RKQZY	Viken	85	258222	1,305,299	1.31
Z0805072301521351189XFBO	Møre og Romsdal	9	2421262	1,295,932	1.30
Z0904011101253460122JYOOT	Nordland	9.25	2350000	1,292,729	1.29
Z0704301335367631190SANCJ	Trøndelag	48.75	440096	1,275,910	1.28
Z0707022019395871190HYFYV	Møre og Romsdal	21	1011594	1,263,349	1.26
Z0707022019090501190INAZS	Vestfold and Telemark	12.4	1709909	1,260,935	1.26
Z0705302301323621189ZPQHF	Viken	21.111	998812	1,253,980	1.25
Z0705302238518641190EFZYP	Trøndelag	79.66667	256118	1,213,430	1.21
Z0803251228169790116DHWVJ	Møre og Romsdal	27.5	738000	1,206,944	1.21
Z0705302239434321189IAWDZ	Trøndelag	31	650336	1,198,940	1.20
Z2002111328514652025MBSHJ	Vestland	13.25	1508228	1,188,450	1.19
Z0707022020177001190BMLIH	Agder	13	1462186	1,130,431	1.13
Z0707022019200081190WKWQA	Møre og Romsdal	39	476599	1,105,390	1.11
Z0704301341328151190FOGFE	Viken	107.25	170877	1,089,880	1.09
Z0805072301140781194CIEO	Vestland	143	127000	1,080,035	1.08
Z0705302239114821190VIVTR	Viken	101.6	178573	1,078,965	1.08
Z10052509403373325CMXCH	Nordland	5	3611084	1,073,756	1.07
Z0707022019203171190GEZRU	Vestland	16	1103760	1,050,250	1.05
Z2001151132583552025YAZEJ	Vestland	16.5	1010780	991,833	0.99
Z0704301336370441189IUPDM	Innlandet	43.5	380820	985,160	0.99
Z2002110851234912025ZGXBK	Troms og Finnmark	10.9	1494320	968,653	0.97
Z0704301341329761190MRHJG	Viken	57	284900	965,751	0.97
Z0707022019580701190KJVIC	Viken	8.4	1902384	950,332	0.95
Z0704301343470281189GJSGC	Vestland	99	157791	928,999	0.93
Z0803181105009973252BUEUZ	Troms og Finnmark	11.4	1348176	914,007	0.91
Z0707022019026711190FMOQF	Møre og Romsdal	11.17	1365684	907,196	0.91
Z0805072301521351189XFBO	Møre og Romsdal	6.3	2421262	907,152	0.91
Z0704301335492561189GWSQB	Trøndelag	21	708849	885,260	0.89
Z0705302239025121190UEADV	Møre og Romsdal	35	423528	881,552	0.88
Z0707022020065421190BFXDY	Viken	12	1203601	858,938	0.86
Z0712102007096671194YOCNH	Møre og Romsdal	20.3	703716	849,555	0.85
Z2001151338042842025CSEFI	Trøndelag	83	170287	840,538	0.84
Z0709110929542531190WAQTA	Trøndelag	39.36	349823	818,844	0.82
Z0707022019325671190MQVQJ	Møre og Romsdal	4.732	2856352	803,812	0.80
Z0710032241596741189YLXSW	Nordland	37.5	357000	796,155	0.80
Z0707022019466231190FXJYO	Viken	18	729565	780,970	0.78
Z07070220200341190YLHRQ	Agder	40	319000	758,837	0.76
Z080507230330191195RTFAF	Troms og Finnmark	3	4225936	753,949	0.75
Z080507230330191195RTFAF	Troms og Finnmark	3	4225936	753,949	0.75
Z080507230330191195RTFAF	Troms og Finnmark	3	4225936	753,949	0.75
Z1803210946480512025OHIKW	Trøndelag	40	316351	752,536	0.75
Z1910030841493602025YJPL	Viken	11	1146076	749,729	0.75
Z0704301335476951189TDYQN	Trøndelag	25.5	479777	727,575	0.73
Z0704301335433821189TNBRN	Viken	78.7	154009	720,807	0.72
Z0705302239352911189DNVPA	Vestfold and Telemark	18.11	657156	707,758	0.71
Z1803210944562642025SSEZB	Trøndelag	49	241391	703,421	0.70
Z0805072301370031194SFTQV	Møre og Romsdal	16	733971	698,388	0.70
Z0805072302138901189FBISE	Trøndelag	5.6	2093029	697,046	0.70
Z0707022019244761190GGQGL	Rogaland	3.627	3225757	695,788	0.70
Z0704301337308991190KHAYX	Trøndelag	55	203088	664,270	0.66
Z0709110926273361195DOMQE	Nordland	19	580000	655,359	0.66
Z0810301402117800125QUQBC	Innlandet	10.171	1074212	649,758	0.65
Z0805072302511361190EVPBF	Nordland	22.07	494370	648,862	0.65
Z1603041236057382025ZQVZB	Rogaland	26.9	403189	644,999	0.64
Z0707022019064461190EBYMD	Vestland	27	400133	642,490	0.64
Z2001151338036842025SXJPJ	Trøndelag	43	250664	641,000	0.64
Z0707022019264181190NSNGZX	Viken	5	2153685	640,398	0.64
Z0805072258542321194IZBCV	Innlandet	15	712891	635,934	0.64
Z0712102006308541194EAANN	Nordland	15.98	656552	623,941	0.62
Z0704301342415061190TDZZU	Trøndelag	33.5	310000	617,596	0.62
Z0707022020188261190YKSHY	Nordland	5.333	1945656	617,072	0.62
Z0710032241509721190TCXFY	Nordland	19.8	514000	605,238	0.61
Z2001070728480182024FXFDW	Agder	6.848	1472872	599,828	0.60
Z1402141319482522025XWHIG	Vestland	56	179992	599,431	0.60
Z0707022020147851190CBBJC	Troms og Finnmark	9	1086355	581,450	0.58
Z0704301335442821189JSUNM	Viken	38.75	243769	561,757	0.56

Z0705302238523191189AGBRQ	Rogaland	28.8	322262	551,950	0.55
Z0705302238266171189KXZDH	Agder	26.69	344690	547,111	0.55
Z0805072302589841195DZNEX	Nordland	14.125	639118	536,868	0.54
Z1010081402003721048YCNMI	Nordland	7.25	1234340	532,195	0.53
Z0704301341465991189JJINV	Viken	21	413500	516,408	0.52
Z2001091458005462025NKNTF	Trøndelag	39.67	213026	502,566	0.50
Z0707022019130431190RDPUJU	Møre og Romsdal	7.089	1190720	501,987	0.50
Z2001311028193142024VDDOL	Vestland	37	225568	496,338	0.50
Z0805072258437461194SSQRQ	Viken	2	4160781	494,883	0.49
Z0810271430228010156KPWBB	Viken	12.727	640262	484,598	0.48
Z1403060839485992025GMSTK	Møre og Romsdal	24.75	328701	483,809	0.48
Z0705302239586421190MZKQT	Trøndelag	13.5	600882	482,415	0.48
Z0705302301390591190HXFVZ	Innlandet	22.333	361274	479,824	0.48
Z0705302301233221190LADHR	Nordland	9.125	882618	478,965	0.48
Z2001201026424222025RTGCB	Vestland	50	157220	467,494	0.47
Z0704301344344661190NGFNS	Viken	34.8	225620	466,933	0.47
Z0911262059480831126ZEMRY	Vestland	41	188537	459,704	0.46
Z0704301337421791189SRSXV	Møre og Romsdal	36	209928	449,439	0.45
Z0712102007018841190NDRNJ	Nordland	29.13	259029	448,732	0.45
Z0712102007018841190NDRNJ	Nordland	29.13	259029	448,732	0.45
Z07070510161146901260SLDF	Vestland	6	1244958	444,226	0.44
Z001301126501102025LVCAE	Møre og Romsdal	10.5	708239	442,249	0.44
Z07053022395708511890DKLC	Nordland	26	285772	441,866	0.44
Z0704301341302381190MJCQS	Viken	27.3	261889	425,185	0.43
Z0707022019496061190FJLP	Vestland	5	1384432	411,661	0.41
Z1803210939549682025YKEU	Trøndelag	58.2	117075	405,215	0.41
Z2001241440105642025DWHSS	Troms og Finnmark	13.67	484311	393,723	0.39
Z1002251315179491043FPHKJ	Nordland	29	225863	389,530	0.39
Z0805072300487581194QSPWW	Vestland	11.2	582472	387,964	0.39
Z0707022019219131190PZRWV	Vestfold and Telemark	4.3	1481457	378,840	0.38
Z0705302238423761189KNTCV	Viken	100.3	60891	363,205	0.36
Z0705302239075561189BQFEP	Troms og Finnmark	3.681	1647932	360,747	0.36
Z0707022020038691190MTKMX	Troms og Finnmark	5.25	1143021	356,871	0.36
Z0705302239073041190JSQY	Troms og Finnmark	16	369327	351,422	0.35
Z0707022019312671190MQWUB	Viken	2.04	2856352	346,529	0.35
Z2001221427066062024IVSJD	Trøndelag	13.889	419429	346,439	0.35
Z2001021005347512025EJTGF	Møre og Romsdal	5	1140375	339,091	0.34
Z0805072302245551190TXVOR	Trøndelag	56	101626	338,447	0.34
Z0707022020053471190ZRUZG	Møre og Romsdal	17.25	325424	333,839	0.33
Z2001091047257292025QQTGE	Trøndelag	139.5	39957	331,486	0.33
Z0705302301373781189ENKCY	Nordland	6.286	881070	329,369	0.33
Z0707022019033211190ADLD	Vestland	5.185	1063420	327,908	0.33
Z0705302239284671189RLNXT	Vestfold and Telemark	11	496500	324,795	0.32
Z0704301335410421190AFFOK	Trøndelag	13	419043	323,966	0.32
Z1410160905597763252BVPIO	Troms og Finnmark	5.166	1051628	323,083	0.32
Z0805130926253640181LJMvh	Troms og Finnmark	43.7	123926	322,064	0.32
Z0705302238589511190WPIRJ	Møre og Romsdal	8	675807	321,522	0.32
Z0705302240191261190LAGWF	Innlandet	10.16	531576	321,186	0.32
Z0704301343528251189HFZRG	Innlandet	20.3	261985	316,279	0.32
Z2001311035240012024HZKZI	Vestland	43.4	120887	312,009	0.31
Z0709110929538081190MNJOU	Nordland	4	1301778	309,667	0.31
Z0707022019359111190ZERVP	Innlandet	22.4	229669	305,949	0.31
Z0704301335358621190DCESO	Trøndelag	232.5	22070	305,157	0.31
Z0707022019367161190IBIBD	Nordland	2	2522082	299,976	0.30
Z0704301344423431189PDFCF	Møre og Romsdal	21.8	230000	298,183	0.30
Z0707022020137031190HHYAB	Troms og Finnmark	50	100000	297,350	0.30
Z0707022020007671190UBEZR	Viken	2	2495572	296,823	0.30
Z0707022020007671190UBEZR	Viken	2	2495572	296,823	0.30
Z0707022020007671190UBEZR	Viken	2	2495572	296,823	0.30
Z0705302239499691189SUHE	Nordland	43	112467	287,602	0.29
Z0705302239549641190DPHXX	Nordland	23	210154	287,451	0.29
Z0705302239369651190UMDCR	Vestfold and Telemark	18.86	255774	286,877	0.29
Z0712102006515921189TPPYU	Møre og Romsdal	9	515460	275,890	0.28
Z1412011453441842024PDNEX	Møre og Romsdal	11	420379	274,999	0.27
Z0707022018054281190ETUGQ	Troms og Finnmark	5.5	821639	268,746	0.27
Z0707022020045601190ELENX	Troms og Finnmark	3.25	1349921	260,909	0.26
Z0712102006183101194TTMFJ	Møre og Romsdal	4.9	885079	257,915	0.26
Z0805072302138901189FBISE	Trøndelag	2.061	2093029	256,538	0.26
Z0705302240100571190WEEHY	Vestland	61.625	69940	256,319	0.26
Z0704301337446101190QHOMB	Vestland	11	386566	252,880	0.25
Z0705302239558541190TFITF	Nordland	19	222961	251,930	0.25
Z0712102007006361189LMROZ	Nordland	21	200000	249,774	0.25
Z0807031431158140135SMEZD	Møre og Romsdal	11.5	363614	248,677	0.25
Z0704301342306021190GRBTI	Møre og Romsdal	25.5	162885	247,013	0.25
Z0705302240137491190PUARG	Vestland	19	217819	246,120	0.25
Z0705302238596841190YNLXI	Rogaland	10.9	376628	244,139	0.24
Z0704301342388771190GWMRW	Innlandet	32.5	126234	243,982	0.24
Z0707022019448511190GEGPP	Vestland	50.3	80820	241,760	0.24

Z0712102004360281195RGNQN	Nordland	50.2	80391	239,999	0.24
Z0704301335492561189GWSQB	Trøndelag	5.667	708849	238,894	0.24
Z0704301335492561189GWSQB	Trøndelag	5.667	708849	238,894	0.24
Z0710032243348981194LWEDM	Troms og Finnmark	18	223168	238,892	0.24
Z0805072300509091195TGWDFQ	Vestland	40.8	98228	238,338	0.24
Z0704301342561291189FUIHQ	Trøndelag	24.5	163313	237,949	0.24
Z20013110281970020240POFS	Vestland	55.25	72253	237,403	0.24
Z0705302239425891190OXPJF	Vestland	6.8	578066	233,768	0.23
Z2001271257491692024JNAFN	Nordland	6	654986	233,712	0.23
Z1003241441427111077IMAKM	Vestland	35.25	111263	233,243	0.23
Z200122124706602024IVSJD	Trøndelag	9.222	419429	230,028	0.23
Z0704301342436611189LNAHN	Møre og Romsdal	19.25	200000	228,960	0.23
Z2001311023324162024FIFHPX	Vestland	6.3	605821	226,978	0.23
Z2002111326325342025JTMKI	Vestland	15.5	245625	226,413	0.23
Z0707022019534251190VZGFY	Rogaland	12.2	310250	225,097	0.23
Z0704301343344271190BAOW	Troms og Finnmark	8.86	425000	223,934	0.22
Z0711212005120041194SUSTP	Innlandet	14.75	254940	223,629	0.22
Z0805072303388831190XDJCO	Troms og Finnmark	9.893	377715	222,224	0.22
Z0712172010319721194JTDGP	Troms og Finnmark	16.8	222400	222,199	0.22
Z071212006475611194SRIPK	Nordland	10.29	362000	221,525	0.22
Z0705302239020661189XGJAU	Vestland	15.462	229546	211,073	0.21
Z1003020920077071089EPLFK	Innlandet	2	1771651	210,720	0.21
Z1003020920077071089EPLFK	Innlandet	2	1771651	210,720	0.21
Z1003020920077071089EPLFK	Innlandet	2	1771651	210,720	0.21
Z0704301342422501189ODWUA	Møre og Romsdal	10.25	344843	210,205	0.21
Z0805072300265221195HEWFE	Agder	55.86	62826	208,708	0.21
Z0810271502383940156EKZYB	Viken	3.5	1002663	208,699	0.21
Z07053023013749511890WWKC	Nordland	3	1164669	207,789	0.21
Z0705302238254391189FJLBU	Agder	39	89255	207,012	0.21
Z0705302238570801189TACYJ	Vestland	14.385	241878	206,921	0.21
Z0705302239061651189WCAGV	Troms og Finnmark	44.3	78109	205,780	0.21
Z0705302238370761190UAQOA	Innlandet	10.5	328770	205,295	0.21
Z1608090829405722024XZNNV	Rogaland	37	92853	204,313	0.20
Z0704301338033421189FTPBD	Møre og Romsdal	6.857	499498	203,688	0.20
Z0707022020129561190DIHLF	Rogaland	2	1710881	203,492	0.20
Z0705302238440561189HPVUG	Innlandet	3.81	895454	202,893	0.20
Z0704301336422811190XWKXA	Vestland	16	212900	202,579	0.20
Z0709110929474961190QSQJWO	Nordland	24.614	136420	199,691	0.20
Z0704301342278361190JLPAF	Møre og Romsdal	11.17	300000	199,284	0.20
Z0912151504471410170JPBPT	Møre og Romsdal	3	1116400	199,177	0.20
Z0705302239179391189QPNDJ	Trøndelag	98.25	34041	198,899	0.20
Z0705302239077261189SETSQ	Troms og Finnmark	4.13	802130	197,012	0.20
Z0805072303038811194OIMMF	Nordland	6.75	486570	195,320	0.20
Z0705302240254871190RSYZD	Agder	59.8	54619	194,242	0.19
Z0707022019303731190VMQXO	Møre og Romsdal	4.52	722034	194,086	0.19
Z0707022019431801190YETJU	Møre og Romsdal	1.462	2225581	193,503	0.19
Z0705302239374131190YZZYU	Vestfold og Telemark	26.5	121252	191,088	0.19
Z0705302239575341190UXCRI	Nordland	18.8	170266	190,364	0.19
Z1705031420342933252WUZEB	Trøndelag	150.333	21213	189,651	0.19
Z0705302238497741189OYRSB	Vestland	11	289000	189,055	0.19
Z0805072301379431195DINJR	Møre og Romsdal	5.5	572648	187,305	0.19
Z0704301335475041189LDAJG	Trøndelag	39.636	79060	186,357	0.19
Z1004071113092511026SCVNT	Trøndelag	11.5	270000	184,654	0.18
Z2002041035172992024VNAXA	Vestland	18.8	164162	183,539	0.18
Z0704301337442261189WOPTS	Viken	7.98	386566	183,453	0.18
Z0705302238188271190QFJK	Vestland	30	102226	182,381	0.18
Z0805072300171501194SJQSV	Agder	53	57038	179,779	0.18
Z2001171305028672024HIBRI	Møre og Romsdal	14.327	210467	179,324	0.18
Z0705302238344191190QAOTI	Vestland	16	186233	177,204	0.18
Z2001171307553882024VYYZE	Møre og Romsdal	11.5	257220	175,914	0.18
Z0707022019477171190GAYAB	Troms og Finnmark	24.5	120000	174,842	0.17
Z0704301340465881190CISSV	Vestland	22.8	128493	174,226	0.17
Z1002251251287091085JUNJA	Troms og Finnmark	12.723	225863	170,896	0.17
Z0704301335475041189LDAJG	Trøndelag	36.333	79060	170,827	0.17
Z1002050948514230100KOHVV	Vestfold og Telemark	14	202658	168,729	0.17
Z0707022020012701190AJGYC	Rogaland	13.56	207989	167,725	0.17
Z0707022019538011190LBZMI	Vestland	8.25	341792	167,693	0.17
Z07053022394646491190SFQM	Nordland	20	139201	165,566	0.17
Z2001141537304782025OLPDE	Trøndelag	48.5	57087	164,656	0.16
Z0705302239192311190OYNFK	Vestfold og Telemark	24	115268	164,520	0.16
Z0705302239172811190VCTZN	Vestland	5	550369	163,652	0.16
Z0805072301338431195QCNM	Møre og Romsdal	4.7	584020	163,239	0.16
Z1701051019178772024LYKZ	Innlandet	8	335953	159,833	0.16
Z07043013415346911890DVGS	Møre og Romsdal	18	146800	157,144	0.16
Z0707022020085661190CYKFJ	Trøndelag	38	68990	155,908	0.16
Z0707022019104601190WOOJN	Nordland	16.25	160000	154,622	0.15
Z0711212004474671194WXVNN	Innlandet	2	1283391	152,647	0.15
Z2002121255263242025WFIWK	Viken	1	2565043	152,543	0.15

Z0704301339278851190IKIRM	Trøndelag	16	159000	151,292	0.15
Z0805072303378661189CWSDA	Troms and Finnmark	4	635470	151,166	0.15
Z07043013433678011890ZKYF	Troms and Finnmark	15.5	163000	150,251	0.15
Z0704301335420151190FAHYT	Trøndelag	21.2	117513	148,156	0.15
Z0707022019568811190NUKIW	Nordland	6.375	388411	147,255	0.15
Z1010121034096370115RFDMG	Innlandet	2	1234340	146,812	0.15
Z0704301341053861189TZTIP	Vestfold and Telemark	14.5	169761	146,387	0.15
Z0707022019461741190HBQGY	Agder	2	1226264	145,852	0.15
Z0712102007086391194GLMEQ	Møre og Romsdal	7	343857	143,144	0.14
Z0705302239223621189BPTPH	Troms and Finnmark	5	480808	142,968	0.14
Z0705302238314941189PTCVO	Agder	8	298738	142,128	0.14
Z0705302239145071190CILOE	Vestland	3	790339	141,004	0.14
Z0705302239145071190CILOE	Vestland	3	790339	141,004	0.14
Z0704301343443381189BUXT	Vestland	10.5	225000	140,498	0.14
Z0712102007093831190SKIR	Nordland	5.52	427778	140,429	0.14
Z0707022020080031190NIWFP	Rogaland	9.1	257526	139,367	0.14
Z0705302240313601189LOFBK	Agder	4.5	516510	138,226	0.14
Z0804171048178370127LTUHJ	Møre og Romsdal	3.18	701253	132,617	0.13
Z0704301341536071189LCYXX	Møre og Romsdal	39	57000	132,202	0.13
Z0805072259389151190ETSIQ	Viken	5	441425	131,258	0.13
Z0805072303284461189TVIBI	Troms and Finnmark	24.5	90000	131,131	0.13
Z0805072303284461189TVIBI	Troms and Finnmark	24.5	90000	131,131	0.13
Z0705302238349701190AMJP	Troms and Finnmark	4.75	460367	130,046	0.13
Z0704301337284111190UUUVZ	Trøndelag	42.6	51000	129,205	0.13
Z0704301335369291190KYBNE	Trøndelag	3.06	696512	126,750	0.13
Z0704301335369291190KYBNE	Trøndelag	3.06	696512	126,750	0.13
Z0705302239529521189UPRXT	Nordland	7.2	292730	125,342	0.13
Z1104081513143700151CFIEP	Vestland	3.75	561562	125,235	0.13
Z0705302301283881190XYCSB	Viken	13.1	160000	124,649	0.12
Z1004062041257351035ECRDO	Trøndelag	30.67	68057	124,132	0.12
Z0704301341349841189PXEPF	Nordland	9	230000	123,103	0.12
Z0704301343395801189HMHN	Troms and Finnmark	15.25	135510	122,896	0.12
Z0805072303227881189QFKEH	Troms and Finnmark	4	508080	120,862	0.12
Z0704301335429141189LFCVP	Viken	15.75	128400	120,266	0.12
Z2001221427082102024KDDJB	Trøndelag	34	59080	119,459	0.12
Z0705302238420241190IVGZB	Viken	2	1004083	119,426	0.12
Z0705302238420241190IVGZB	Viken	2	1004083	119,426	0.12
Z0805072303289581190VCZEP	Troms and Finnmark	18	111468	119,322	0.12
Z0707022020149821190ZBAEQ	Innlandet	1	1973487	117,363	0.12
Z0707022020149821190ZBAEQ	Innlandet	1	1973487	117,363	0.12
Z0705302240098571189TVPOV	Vestland	25	78475	116,673	0.12
Z0704301341251561190URCDR	Trøndelag	48.8	40150	116,521	0.12
Z1103160857419853252SEKKB	Troms and Finnmark	3	641841	114,511	0.11
Z1909241455374572024EZCWA	Møre og Romsdal	30.5	62634	113,608	0.11
Z0707022019552991190BNXYL	Troms and Finnmark	8.833	215000	112,939	0.11
Z0809101346269790157KXDFR	Nordland	2.1	894000	111,649	0.11
Z2001021245133562025AEZIJ	Trøndelag	19.25	95988	109,887	0.11
Z1801261218015682024VTOEZ	Troms and Finnmark	5.16	358000	109,858	0.11
Z0705302238321991189HXWYD	Vestland	25	72852	108,313	0.11
Z0707022018045061190GBKNK	Møre og Romsdal	14	130050	108,277	0.11
Z0710032242118421189QPSNK	Nordland	43	42264	108,078	0.11
Z1106240837238890130VYTYY	Oslo	15	120991	107,930	0.11
Z1102171200461461030IWLAN	Troms and Finnmark	25	72200	107,343	0.11
Z0805260752535490176KZPUZ	Innlandet	2.33	768468	106,483	0.11
Z0805260752535490176KZPUZ	Innlandet	2.33	768468	106,483	0.11
Z0704301341537491189VLXML	Møre og Romsdal	33	54003	105,981	0.11
Z0705302239406351190XEVTI	Vestland	2.3	769554	105,260	0.11
Z0707022020169191190PZINU	Nordland	11.75	150000	104,816	0.10
Z0811121112435320171GWDIW	Trøndelag	47	36923	103,203	0.10
Z0705302239124111189BRDNE	Viken	5	345757	102,811	0.10
Z0709110929521971189RRZFH	Trøndelag	34	50845	102,808	0.10
Z0705302240111191189QRGFM	Innlandet	2	849378	101,025	0.10
Z0705302240093051189NXYQT	Vestland	20	84227	100,180	0.10
Z0705302239452621190RDUWM	Vestland	2.9	578787	99,819	0.10
Z200115142822272025NCBEU	Vestland	15	111468	99,435	0.10
Z1709121404367212025MKRWP	Viken	12	138700	98,982	0.10
Z1704181400496062025MHBZP	Møre og Romsdal	1.7	973208	98,390	0.10
Z0704301337339601190PWAJC	Viken	31.4	52313	97,687	0.10
Z0711212002368121195ABLIW	Innlandet	9.8	167207	97,449	0.10
Z2001131407231912025CFYAX	Vestland	6	272290	97,159	0.10
Z2001301107480682025HPTEH	Møre og Romsdal	2.2	733957	96,027	0.10
Z0707022020042601190POFXV	Nordland	5.5	283824	92,835	0.09
Z0705302301174921189BIGUY	Viken	7.5	207887	92,723	0.09
Z0705302240313601189LOFBK	Agder	3	516510	92,151	0.09
Z0704301343360681190POWAY	Vestland	12.5	122600	91,138	0.09
Z0705302238515831190WBFLC	Rogaland	15	101761	90,776	0.09
Z0705302238463441190VOAUF	Troms and Finnmark	17.286	88269	90,740	0.09
Z1001270842369021068PGNIK	Vestland	12.25	124454	90,666	0.09

Z0712102006314011194SROWB	Nordland	3	502000	89,562	0.09
Z0704301340346271189GEDPW	Innlandet	2	747805	88,944	0.09
Z0704301339407741189BRGKZ	Trøndelag	106	14000	88,253	0.09
Z0705302238548291190UQTP1	Rogaland	70.5	21007	88,075	0.09
Z0704301335488631189BCBSY	Trøndelag	2	739475	87,953	0.09
Z0705302239410941190AAHSE	Trøndelag	21	70000	87,421	0.09
Z2001220907299572024KRRNF	Vestfold and Telemark	2	731894	87,051	0.09
Z11020913045168001140XRXD	Troms and Finnmark	6.5	220124	85,090	0.09
Z0705302238366911190HEFDI	Troms and Finnmark	5.875	243095	84,934	0.08
Z0805072258542321194IZBCV	Innlandet	2	712891	84,791	0.08
Z0707022019210431190XXLTN	Troms and Finnmark	5	285000	84,745	0.08
Z0705302238520771190ADLXS	Møre og Romsdal	42.6	33271	84,289	0.08
Z1002101338293701093MNZBV	Troms and Finnmark	12.4	113780	83,905	0.08
Z2001131400289152025JNXBZ	Vestland	1.53	921905	83,883	0.08
Z070911092714431194HEVKJ	Nordland	4.83	292000	83,874	0.08
Z1002161243480901017KNQUP	Trøndelag	17	82409	83,315	0.08
Z0902041513087090129JJNVY	Vestland	22.75	61077	82,634	0.08
Z0705302239415141190IHCOO	Vestland	2.2	617907	80,843	0.08
Z0705302301174921189BIGUY	Viken	6.5	207887	80,360	0.08
Z0705302238174411189BCSLV	Agder	3	448367	79,993	0.08
Z0705302240257231189NLFUP	Viken	75.7	17727	79,805	0.08
Z0808200941105890181VYPKZ	Vestland	38.25	35040	79,706	0.08
Z08082221048307325XXOBJ	Møre og Romsdal	7	190000	79,095	0.08
Z1003021440017110129QHFWA	Nordland	13	101104	78,165	0.08
Z0704301341306151189ELMDD	Trøndelag	38.16	34300	77,840	0.08
Z0704301342400121189YGNWI	Møre og Romsdal	42	31122	77,735	0.08
Z0704301337560691189AHDJC	Vestland	3.857	335114	76,867	0.08
Z1712041033429722025ZMSVR	Innlandet	2	642338	76,400	0.08
Z0709281314369570115ARDPY	Nordland	5.3	240000	75,646	0.08
Z0705302238544411189UAARL	Vestland	4.5	280500	75,066	0.08
Z1003120928086471014GPISR	Vestland	21.75	57145	73,915	0.07
Z0705302238456871190VYZVO	Innlandet	9	136249	72,925	0.07
Z20012212358208432024PVEOE	Trøndelag	9.8	124672	72,660	0.07
Z0705302239588631190YWRSW	Troms and Finnmark	7.333	166562	72,637	0.07
Z0705302240123961190DBWRA	Vestland	28.2	43309	72,632	0.07
Z0704301339496811189BUOIY	Vestland	3	405432	72,333	0.07
Z0705302240133891190ULKYX	Trøndelag	67.5	17874	71,750	0.07
Z0805072303406281189BZBMH	Troms and Finnmark	17.64	68277	71,626	0.07
Z0710111031019460108IFMCA	Nordland	2	592329	70,452	0.07
Z0710111031019460108IFMCA	Nordland	2	592329	70,452	0.07
Z0707022019435751190KMZEK	Rogaland	5.4	219000	70,329	0.07
Z1904041456579052025HDLIK	Innlandet	4.3	273164	69,854	0.07
Z0710032242022361190ZCBSS	Troms and Finnmark	2	584000	69,461	0.07
Z0704301341209601190VHJYM	Troms and Finnmark	19	60000	67,796	0.07
Z0707022019446561190KDEXD	Innlandet	2	569924	67,787	0.07
Z0705302238498961189AXLCQ	Møre og Romsdal	1.57	719546	67,182	0.07
Z0705302238408921189QSPTY	Troms and Finnmark	5	225292	66,991	0.07
Z0705302239290571189AUAHJ	Troms and Finnmark	8.6	130000	66,487	0.07
Z0811050943102350151BFTPJ	Trøndelag	26	43000	66,487	0.07
Z0705302238288671189WRZTN	Rogaland	5.823	190000	65,796	0.07
Z0705302238572061189PHPEP	Møre og Romsdal	2.54	433882	65,540	0.07
Z0805072302532111189FOHQQ	Nordland	17.55	62767	65,510	0.07
Z0707022019558061190ONULA	Troms and Finnmark	10.2	107853	65,423	0.07
Z0805072300242941190KZCCM	Agder	35.5	30951	65,343	0.07
Z1106231404050401092IIALM	Innlandet	10.4	105520	65,263	0.07
Z0805072300169061190AZUOO	Agder	44	24909	65,179	0.07
Z0707022020069721190LDEYJ	Nordland	10	108580	64,573	0.06
Z0707022019505701190PVWVV	Vestland	100	10812	64,299	0.06
Z0704301339448021189UVSPN	Vestland	2.4	450000	64,228	0.06
Z0705302238559021189NXWPY	Rogaland	10	107653	64,021	0.06
Z0705302238537321190DDOCE	Møre og Romsdal	37	28939	63,677	0.06
Z0705302301114421189TEIVE	Vestfold and Telemark	2.08	513077	63,466	0.06
Z0705302240212541189BVDBO	Vestland	16	66681	63,448	0.06
Z0705302238236641189FGLSK	Rogaland	13.209	80000	62,843	0.06
Z0705302239280831190SLRLA	Troms and Finnmark	6.6	159675	62,673	0.06
Z0911241452458900154ZHFHG	Vestland	8.094	130147	62,646	0.06
Z2001131400311022025BEOWF	Vestland	9.61	109402	62,524	0.06
Z0707022019400311190MPGNT	Nordland	4	262800	62,515	0.06
Z0704301338404251189NKPVA	Nordland	7.3	140000	60,778	0.06
Z0707022019536141190KDJR	Innlandet	2	510201	60,683	0.06
Z2002101312294822024RIZBI	Troms and Finnmark	9.5	104170	58,852	0.06
Z0707022020078541190KHLGU	Rogaland	6	164304	58,627	0.06
Z0705302239513721189KZCHN	Innlandet	2	489892	58,268	0.06
Z0707022020089191190GPRPR	Nordland	3	325402	58,055	0.06
Z0705302240080891190UVAZH	Nordland	3	324574	57,907	0.06
Z0705302301248501190KCJQI	Nordland	18.8	51429	57,499	0.06
Z2002101525373952025PHBDE	Troms and Finnmark	10	95576	56,839	0.06
Z1002161250599081017OYOVB	Trøndelag	14.7	65000	56,824	0.06

Z2001021245128902025QAXUD	Trøndelag	4	238239	56,672	0.06
Z0705302239337491189UNRDJ	Nordland	11.8	78500	55,087	0.06
Z0712102007380691190EOYGJ	Agder	3	308090	54,966	0.05
Z0709181526010590150QZLOV	Nordland	7	131400	54,701	0.05
Z0712102006479541194MHFHT	Nordland	9.44	96967	54,437	0.05
Z150123128425712025QMSHX	Viken	2.2	412866	54,017	0.05
Z0811121534188360154ODARI	Nordland	5.8	156167	53,866	0.05
Z0804301034251570175NETGV	Nordland	7.5	120000	53,523	0.05
Z2002101505077662025YTNUJ	Troms og Finnmark	16.556	54200	53,365	0.05
Z0710032242000581189DKUVQ	Troms og Finnmark	12.25	73097	53,252	0.05
Z0704301341391871189GSVQQ	Innlandet	20.5	43677	53,248	0.05
Z0805072258570031195DVNOH	Innlandet	2	444150	52,827	0.05
Z0805072258570031195DVNOH	Innlandet	2	444150	52,827	0.05
Z2002101505063732025JTWAY	Troms og Finnmark	5.571	159309	52,780	0.05
Z0912011018564320135AQLTK	Troms og Finnmark	9.3	95000	52,542	0.05
Z1102271150173330100TDABL	Vestland	13	67652	52,302	0.05
Z0707022019114671190QTVO	Møre og Romsdal	13.7	63494	51,731	0.05
Z0705302240017261190QCFGL	Troms og Finnmark	3.5	246041	51,212	0.05
Z2001311023318042024SWDLR	Vestland	2.5	341784	50,815	0.05
Z0804171101184690127EDKHG	Møre og Romsdal	19.86	42966	50,746	0.05
Z0712102007067911890ITOK	Nordland	5.5	154394	50,500	0.05
Z1812180834575693251YXRWR	Vestland	37	22617	49,766	0.05
Z0704301339258921190HMXJI	Troms og Finnmark	23	36298	49,649	0.05
Z0705302239596871189JODLY	Troms og Finnmark	3.417	244080	49,599	0.05
Z0705302238514181190QTDI	Trøndelag	2	415294	49,395	0.05
Z2002111324180992025AOVLX	Vestland	4.67	176769	49,093	0.05
Z0705302239566951189XBPM	Nordland	4.667	176500	48,987	0.05
Z0704301339399511189PNQQM	Trøndelag	8	102956	48,982	0.05
Z0704301339399511189PNQQM	Trøndelag	8	102956	48,982	0.05
Z0704301344372921189LPHDR	Agder	9.5	86645	48,951	0.05
Z0705302238469501190ISSBL	Innlandet	8.2	100325	48,924	0.05
Z1408221607013193251ADZQE	Vestfold og Telemark	2	410734	48,853	0.05
Z0704301342566771189ZIULH	Innlandet	5	163313	48,561	0.05
Z2001311023321162024CJDWP	Vestland	6.3	129329	48,455	0.05
Z2002111253065272025CTPXQ	Vestland	4.75	171396	48,416	0.05
Z2002101525371302025JFEJB	Troms og Finnmark	20.5	39536	48,200	0.05
Z0805072302467491189WEEPL	Nordland	1.5	536190	47,831	0.05
Z0704301337337711190REFEL	Viken	49.8	16074	47,605	0.05
Z0707022020172661190TODVZ	Nordland	3	265000	47,279	0.05
Z0805072303029271190MOGOY	Nordland	15.9	50000	47,279	0.05
Z2001301124153932025TGOEI	Møre og Romsdal	3	265000	47,279	0.05
Z1411050935213092025VVODR	Vestland	14	56690	47,199	0.05
Z0705302239410941190AAHSE	Trøndelag	11.3	70000	47,041	0.05
Z0705302238283191189VYXHS	Agder	4.66	169463	46,963	0.05
Z0712102007170491189EJFZF	Nordland	17.26	44982	46,172	0.05
Z2002041035155292024LSNKI	Vestland	34.6	22423	46,139	0.05
Z0704301340543521189FFGBJR	Nordland	8.75	87600	45,584	0.05
Z0704301337564171189SSPOM	Vestland	5.6	136620	45,499	0.05
Z1512011131298892024ZSHLA	Troms og Finnmark	3	255000	45,495	0.05
Z1904041456584742025BIOFB	Innlandet	3	254686	45,439	0.05
Z0712102004107561195DIQIE	Nordland	6.75	113095	45,399	0.05
Z0704301335411961190FENTJ	Trøndelag	12.2	62467	45,322	0.05
Z0704301339261921190UKWJX	Troms og Finnmark	13	58550	45,266	0.05
Z1001251621299860121NOOXZ	Agder	16.5	45960	45,098	0.05
Z2002101505074032025HKJQE	Troms og Finnmark	25	30240	44,959	0.04
Z001171307559292024TGSQL	Møre og Romsdal	17.95	42041	44,878	0.04
Z0704301341544961189CKTVG	Nordland	9.33	80377	44,598	0.04
Z0712172011160061190YQWMW	Troms og Finnmark	14.25	52560	44,542	0.04
Z0709110929531961189SWZLT	Nordland	1	748717	44,526	0.04
Z0707022019364961190BZKJJ	Vestland	13.2	56064	44,010	0.04
Z2001151138202102025DMNUJ	Trøndelag	1.855	398609	43,973	0.04
Z1002081052130110117ORNZP	Viken	2	369547	43,954	0.04
Z1002081052130110117ORNZP	Viken	2	369547	43,954	0.04
Z0709110927021261190FSHZ	Trøndelag	3.4	215000	43,473	0.04
Z0705302238418811190BGQNG	Troms og Finnmark	65.667	11000	42,957	0.04
Z0707022020143801190TOKNR	Nordland	3	240000	42,818	0.04
Z0704301344426871189VUZZQ	Møre og Romsdal	9.75	72750	42,183	0.04
Z0712102007084241189YDPAQ	Nordland	4.5	156115	41,779	0.04
Z0705302238564101190OKKRC	Rogaland	6.6	105925	41,576	0.04
Z0805072301442481194STJP	Møre og Romsdal	3.9	178037	41,293	0.04
Z0704301339339711190PEVBX	Vestland	3.78	183642	41,282	0.04
Z1103101117097141038PZUXQ	Møre og Romsdal	7.75	89500	41,250	0.04
Z0805072300386861195SSUWM	Rogaland	9.8	70702	41,206	0.04
Z0705302239124111189BRDNE	Viken	2	345757	41,124	0.04
Z0805072301431681189SWUCZ	Møre og Romsdal	7.33	94224	41,074	0.04
Z0901281507406240127AMISY	Vestland	19.5	35040	40,635	0.04
Z0710032243384971194GGIVS	Nordland	14.5	46998	40,527	0.04

Z2002041523387713161NYWWO	Troms and Finnmark	3	225311	40,198	0.04
Z0707022019265881190HTPFW	Nordland	12.8	52526	39,984	0.04
Z1602011332494972025AUPAL	Trøndelag	1.9	352456	39,825	0.04
Z0806161220398183252DPZTW	Viken	21.6	31000	39,821	0.04
Z2001131527180412025HXPQV	Vestland	4.8	139086	39,703	0.04
Z0911262058527201126QBLIE	Viken	19	35000	39,548	0.04
Z0805072303322921190KVHZS	Troms and Finnmark	5.833	113834	39,488	0.04
Z07121202007243851189HJGQL	Nordland	3.9	169000	39,197	0.04
Z1102141230566811087VVNGH	Innlandet	2	328148	39,030	0.04
Z0705302239554141189NEAKL	Nordland	5	131196	39,011	0.04
Z070530223955801189LCQNY	Nordland	19	34510	38,994	0.04
Z0704301344267791190CWLGR	Nordland	5.8	112773	38,898	0.04
Z0704301336366151190LXZWS	Vestland	21.8	30000	38,893	0.04
Z0811271257213673251ZMMIA	Viken	2	325998	38,774	0.04
Z0705302240319931190AYLDD	Viken	46.5	14011	38,745	0.04
Z0805072302522851194VJRJC	Nordland	7.55	86022	38,624	0.04
Z0710032243508551194AGBKJ	Nordland	5.83	111385	38,618	0.04
Z0704301341478711189SHZUL	Møre og Romsdal	5	129279	38,441	0.04
Z0911211948079581126ZGUWK	Nordland	32	20000	38,061	0.04
Z0705302239275641189ZNRO	Vestfold and Telemark	46	13870	37,943	0.04
Z0704301342246511190LLARF	Møre og Romsdal	6.6	96250	37,778	0.04
Z0704301341494871189YAFUC	Møre og Romsdal	3	211415	37,719	0.04
Z0705302239143191190JOQHM	Troms and Finnmark	11.013	57086	37,388	0.04
Z0712172011170301189JIGYP	Troms and Finnmark	7.75	81000	37,332	0.04
Z0704301339366991189WZAOX	Troms and Finnmark	7.5	83614	37,294	0.04
Z1002111514291741027VQNQY	Møre og Romsdal	28.25	22164	37,236	0.04
Z0704301337470461189EJRBX	Viken	21	29542	36,894	0.04
Z0705302239284541190UFDVV	Vestfold and Telemark	5.9	104601	36,702	0.04
Z0712102007087321189RFGZV	Nordland	3.66	166896	36,327	0.04
Z0705302239164561189IJXN	Troms and Finnmark	4.75	127744	36,085	0.04
Z1302221335576963142NRYK	Trøndelag	82	7324	35,716	0.04
Z0704301338338241190THVCW	Nordland	3.25	184733	35,705	0.04
Z2001021259057782025ECHBF	Trøndelag	50.75	11782	35,559	0.04
Z0712172011172341189JLQT	Troms and Finnmark	4.25	140000	35,385	0.04
Z0707022020083861190EOASU	Nordland	8.6	68990	35,284	0.04
Z0705302239109971189ANFZC	Vestland	3	197587	35,251	0.04
Z0705302239109971189ANFZC	Vestland	3	197587	35,251	0.04
Z070530223803961190ZPIE0	Agder	2	296066	35,214	0.04
Z0705302239186661190LRDVZ	Vestfold and Telemark	3	195261	34,837	0.03
Z0805072302513791194PEWLN	Nordland	3	194700	34,736	0.03
Z0705302301395971189HQIGO	Nordland	15.3	38000	34,576	0.03
Z2002041506544513161XXNLG	Troms and Finnmark	17.5	32887	34,226	0.03
Z0705302238568021190OVYXF	Rogaland	2	285492	33,956	0.03
Z0705302239563571190TOUNY	Nordland	4.3	132761	33,950	0.03
Z2001221427086282024KLFZJ	Trøndelag	20.6	27450	33,629	0.03
Z0705302301376111189GSHCS	Viken	2	279582	33,253	0.03
Z0805072303385311189HHAJV	Troms and Finnmark	7.751	71862	33,125	0.03
Z0805072303385311189HHAJV	Troms and Finnmark	7.751	71862	33,125	0.03
Z2001301308146602025AHUCJ	Møre og Romsdal	6.5	85591	33,086	0.03
Z0803251050398790116LFVXY	Møre og Romsdal	4.5	122701	32,837	0.03
Z0705302239578661189GKLUU	Troms and Finnmark	5	109386	32,526	0.03
Z0705302238166431189JITPV	Agder	27	20140	32,339	0.03
Z0805072258559761195YJYMN	Innlandet	1	542658	32,272	0.03
Z0710032241439831195TUPNW	Troms and Finnmark	20.3	26417	31,892	0.03
Z2002101448359652025TUTPF	Troms and Finnmark	5.333	100400	31,842	0.03
Z070430134034771189RGMCV	Innlandet	2	264997	31,519	0.03
Z2002041551186263161FYPWM	Troms and Finnmark	7.333	71822	31,321	0.03
Z0705302239122211189QLESW	Vestland	3	175534	31,317	0.03
Z1402141324146812025TPZK	Rogaland	15.25	34000	30,835	0.03
Z0704301335478741189KKTUE	Trøndelag	18.5	27888	30,682	0.03
Z0710032243472461194CLBCX	Troms and Finnmark	4.75	108000	30,508	0.03
Z0704301344437181189ZFOST	Nordland	8	64000	30,449	0.03
Z0705302240030231189CFDEX	Troms and Finnmark	3	168839	30,123	0.03
Z0707022019162151190UOMHL	Nordland	11.5	44000	30,092	0.03
Z0707022019162151190UOMHL	Nordland	11.5	44000	30,092	0.03
Z0805072303232871190XQPIH	Troms and Finnmark	8.25	61320	30,085	0.03
Z0912101239346340134JCZSI	Innlandet	2	250000	29,735	0.03
Z0704301341011811189BCGTK	Innlandet	6.75	73941	29,682	0.03
Z0707022020182611190ZGANG	Agder	1.9	262226	29,630	0.03
Z0707022020182611190ZGANG	Agder	1.9	262226	29,630	0.03
Z0805072258475721190LHNZS	Innlandet	9.67	51245	29,470	0.03
Z2001308141442025GECPX	Møre og Romsdal	3.5	140963	29,341	0.03
Z0704301341374001190DIOWR	Møre og Romsdal	5.75	85775	29,331	0.03
Z0704301341374001190DIOWR	Møre og Romsdal	5.75	85775	29,331	0.03
Z0705302239443241190TQKCO	Vestland	2.18	226206	29,326	0.03
Z0705302301238291189SQTFR	Nordland	2.575	191335	29,300	0.03
Z0707022020069721190LDEYJ	Nordland	4.5	108580	29,058	0.03
Z0705302239163041189OVFME	Troms and Finnmark	4	121904	28,999	0.03

Z1712041033442802025QADTV	Innlandet	2	243784	28,996	0.03
Z0705302240044431189PBCIQ	Troms og Finnmark	3.5	139189	28,971	0.03
Z0805072303392391194ACAEP	Troms og Finnmark	3.4	142938	28,902	0.03
Z0805072303392391194ACAEP	Troms og Finnmark	3.4	142938	28,902	0.03
Z0705302239059231189EPCVY	Troms og Finnmark	17.5	27605	28,729	0.03
Z0705302238594271189DEDKF	Rogaland	66.6	7189	28,473	0.03
Z080513151224500170AOOFI	Trøndelag	95	5023	28,378	0.03
Z0811191442053020170QTBJA	Nordland	13	36500	28,219	0.03
Z1604191952269903251NLEYZ	Nordland	6	78840	28,132	0.03
Z1006031521096843251QXLLZ	Nordland	4.7	100010	27,954	0.03
Z0708231228123690158NFADV	Trøndelag	1	469093	27,897	0.03
Z0704301338048751189WSEFA	Trøndelag	5.3	88393	27,861	0.03
Z0705302239595301189RVYVG	Troms og Finnmark	3	154526	27,569	0.03
Z0705302238234551189NTUHH	Agder	3	154304	27,529	0.03
Z0705302238234551189NTUHH	Agder	3	154304	27,529	0.03
Z0712102007081641189NCWCN	Nordland	3	153496	27,385	0.03
Z1209251349201733116CIAOH	Vestland	10.5	43800	27,350	0.03
Z2002111324176272025XQRVJ	Vestland	5	91159	27,106	0.03
Z0712172010326261194ATUSD	Troms og Finnmark	3.5	130000	27,059	0.03
Z0911170916429440133TGNQ	Vestland	9	50352	26,950	0.03
Z0712102006490591189LNOTQ	Møre og Romsdal	4.3	104265	26,663	0.03
Z0705302301243541190RZWVDZ	Viken	2	220330	26,206	0.03
Z0705302301243541190RZWVDZ	Viken	2	220330	26,206	0.03
Z0705302301172211189PHSTP	Vestfold og Telemark	2	219944	26,160	0.03
Z1808101311196132025YPRMX	Vestfold og Telemark	1	438000	26,048	0.03
Z0705302239515091189CHASH	Nordland	10	43286	25,742	0.03
Z0705302239515091189CHASH	Nordland	10	43286	25,742	0.03
Z0705302240139291189HWBWE	Vestland	23	18788	25,698	0.03
Z0705302239353001190NQHPV	Innlandet	2.429	175014	25,281	0.03
Z2001021015451602024VZQFS	Møre og Romsdal	2.75	153545	25,111	0.03
Z0807150946261173252KOHQV	Innlandet	42	10000	24,977	0.02
Z1701270953348692025SSIIIB	Vestfold og Telemark	2	209133	24,874	0.02
Z0707022019490911190PMXAI	Troms og Finnmark	22.4	18606	24,786	0.02
Z0705302239498631190VZEEQ	Innlandet	2	208016	24,741	0.02
Z0705302240086861189XONTL	Innlandet	2	206339	24,542	0.02
Z0705302240086861189XONTL	Innlandet	2	206339	24,542	0.02
Z0805072303118171194VYHLF	Troms og Finnmark	7.5	55000	24,531	0.02
Z0805072303394511194CZGJ	Troms og Finnmark	2.13	192740	24,415	0.02
Z0712102007021031190EOGGA	Nordland	11	36641	23,969	0.02
Z0710032241314611195YHHOO	Nordland	10	40201	23,908	0.02
Z2001170934474812024PSYEF	Vestland	5	80000	23,788	0.02
Z0903301128535990175LWZUE	Innlandet	3.5	114273	23,785	0.02
Z1003181731409720123HAAQR	Troms og Finnmark	3	131400	23,443	0.02
Z14051212503767731291AQYR	Troms og Finnmark	28.5	13812	23,410	0.02
Z0805072259095671190GXRYL	Innlandet	2	196447	23,365	0.02
Z0710032241446091195FGHHV	Nordland	14.66	26417	23,031	0.02
Z0805072301037811194WWGZB	Vestland	9.5	40500	22,881	0.02
Z0704301338374771190RJUQT	Nordland	8	48000	22,836	0.02
Z1912191145202272025PXJCL	Innlandet	2	189800	22,575	0.02
Z0710032242122671189MOXRA	Troms og Finnmark	11.5	33000	22,569	0.02
Z0704301340226301190RZCKA	Innlandet	2	189068	22,488	0.02
Z0704301340226301190RZCKA	Innlandet	2	189068	22,488	0.02
Z1001270935004951071DWSXM	Møre og Romsdal	21	17986	22,462	0.02
Z1301151446245570367BGORD	Troms og Finnmark	6.75	55898	22,439	0.02
Z0705302240329271190EOXEG	Agder	38	9908	22,391	0.02
Z070530223902201190DCYEZ	Møre og Romsdal	6.17	60794	22,307	0.02
Z0712102004059541195BOKZO	Trøndelag	28.75	13000	22,227	0.02
Z1012170808404650164FUBSE	Vestland	23	16200	22,159	0.02
Z0705302238473211190YLCD	Troms og Finnmark	4.625	79246	21,797	0.02
Z0805072301429181189RJVTB	Møre og Romsdal	2	182500	21,707	0.02
Z0707022019363431190TIHZR	Troms og Finnmark	6.5	56064	21,672	0.02
Z0705302240057061189XCECT	Troms og Finnmark	5.25	69067	21,564	0.02
Z0705302239577191190PJRGs	Nordland	58	6205	21,403	0.02
Z1301151446229350367HUBGB	Troms og Finnmark	10.5	33977	21,216	0.02
Z1101281410289351098DXLXL	Nordland	3.5	101086	21,041	0.02
Z0712102006248561194IQPQXO	Nordland	18.5	18916	20,811	0.02
Z200122161319222024DDZEK	Trøndelag	0.5	698124	20,759	0.02
Z1112061317376011073RAOHK	Troms og Finnmark	14.75	23657	20,752	0.02
Z1303221019105913112PICGJ	Møre og Romsdal	3.803	91052	20,593	0.02
Z0705302240048441190FCOKV	Troms og Finnmark	19	18171	20,532	0.02
Z0705302240319971189KSWUZ	Agder	16	21468	20,427	0.02
Z1003191231525611084AFMQJ	Agder	21	16343	20,410	0.02
Z0705302239007411189SOZUI	Rogaland	2	171181	20,360	0.02
Z0705302301275901190GJTAP	Innlandet	97.75	3500	20,346	0.02
Z0705302240144331190IUQVQ	Innlandet	2	170556	20,286	0.02
Z0712102004364051195GIYZP	Nordland	14.45	23408	20,115	0.02
Z0707022019349451190DTXJJ	Vestfold og Telemark	46.5	7255	20,063	0.02
Z1501081511001522025ALHWW	Innlandet	8.75	38374	19,968	0.02

Z0704301341242471190JHFNB	Nordland	2	167632	19,938	0.02
Z1102141230551341087HVLGD	Innlandet	2	165998	19,744	0.02
Z0707022020174951190VUGLH	Troms og Finnmark	16.25	20183	19,505	0.02
Z0705302238283191189VYXHS	Agder	1.9	169463	19,148	0.02
Z0705302238246841190JKNLI	Vestland	16	20067	19,094	0.02
Z0704301340506691190WCDQK	Innlandet	2	160000	19,030	0.02
Z2001131400301132025MLKJH	Vestland	2.6	121501	18,787	0.02
Z0704301343353821189KHNJS	Troms og Finnmark	12.6	25000	18,733	0.02
Z0705302240135931190PKEZK	Vestland	2	157358	18,716	0.02
Z0806010859495233251MZEVF	Troms og Finnmark	4.182	75000	18,653	0.02
Z1709261326557832025DQXZW	Vestfold og Telemark	2.5	124117	18,453	0.02
Z0805072302474891194FXATQ	Nordland	6.2	50000	18,436	0.02
Z0805072258532971190YWHPB	Innlandet	13.66	22630	18,384	0.02
Z0805231402199640184DZEYB	Møre og Romsdal	1	308793	18,364	0.02
Z2001151131031182024IJUNP	Vestland	2	154353	18,359	0.02
Z1303211634243143123FPKSM	Vestland	5.83	52454	18,186	0.02
Z0705302240207811190QBUGO	Oslo	32	9540	18,155	0.02
Z2001151158540532025ANNEW	Trøndelag	3.108	97764	18,070	0.02
Z2002111253061642025CNVVI	Vestland	2	150981	17,958	0.02
Z0705302239409461190KRSLD	Vestland	16	18750	17,841	0.02
Z0704301335587311189PUHLK	Trøndelag	10	30000	17,841	0.02
Z0709071345360750122NQLN	Trøndelag	4	73797	17,555	0.02
Z0704301339493881189NNAIF	Vestland	14.67	20000	17,448	0.02
Z0707022020071641190QBOLS	Møre og Romsdal	8.992	32151	17,193	0.02
Z0705302239235161189ORLCN	Vestfold og Telemark	2	144479	17,184	0.02
Z0704301338011711189DCTHK	Møre og Romsdal	5.75	50000	17,098	0.02
Z0805072303372641195FZMUU	Troms og Finnmark	5.962	48180	17,083	0.02
Z1402261200305063252YJFFC	Troms og Finnmark	13.13	21739	16,975	0.02
Z0705302239176691190UYWW	Vestfold og Telemark	2	140286	16,686	0.02
Z0805051021368800109ABEFX	Innlandet	4	70071	16,668	0.02
Z0704301341026761189SWLOM	Innlandet	2	140000	16,652	0.02
Z1003181319357511091CHZWO	Agder	4	68839	16,375	0.02
Z0704301336411161189RAOYN	Viken	1	275000	16,354	0.02
Z0705302239386051190GTXWV	Trøndelag	10	27345	16,262	0.02
Z1803061214265342024GFZPT	Trøndelag	39	7000	16,235	0.02
Z0805072303122341194PPGEE	Troms og Finnmark	6.818	40000	16,219	0.02
Z0805072303326431190XMTEL	Troms og Finnmark	4	68175	16,217	0.02
Z0712102006496131194CFCHP	Nordland	21.8	12500	16,206	0.02
Z0705302239128431190DGYYY	Vestland	3	88187	15,733	0.02
Z0704301341277271190YZTIH	Viken	3.667	71295	15,548	0.02
Z110315093332020169KQCQJ	Nordland	3.03	85380	15,385	0.02
Z1704181343526830250YQGW	Møre og Romsdal	18	14326	15,335	0.02
Z0704301342288091190EEOOA	Møre og Romsdal	5.75	44520	15,224	0.02
Z0705302239456071190WKWYO	Nordland	22	11577	15,147	0.02
Z0707022020075371190DGSLJ	Vestland	5	50908	15,137	0.02
Z0805072303114941194SBNYF	Troms og Finnmark	12.5	20000	14,868	0.01
Z0705302239590501190BGATC	Troms og Finnmark	5.778	43200	14,844	0.01
Z1302261012012193158LDXYV	Innlandet	2.83	86590	14,573	0.01
Z1002231413323890129PIPYY	Agder	3	81506	14,541	0.01
Z1610261446330182025GPFKL	Vestland	6.6	36692	14,402	0.01
Z0705302301154271190WSUVG	Innlandet	23.667	10212	14,373	0.01
Z1810090831023952025MPVBF	Trøndelag	2	120416	14,322	0.01
Z1501211328543502024AWMED	Vestland	3	80000	14,273	0.01
Z0705302301147161189MQYHP	Viken	2.08	115312	14,264	0.01
Z0805051021368800109ABEFX	Innlandet	3.4	70071	14,168	0.01
Z0705302240004911190KTAWZ	Troms og Finnmark	4.2	55500	13,862	0.01
Z0705302240028371189KIJQJ	Troms og Finnmark	3	77321	13,795	0.01
Z200210150505742025EPUXU	Troms og Finnmark	13	17664	13,656	0.01
Z1608251018349302025RIZZO	Vestfold og Telemark	3	75948	13,550	0.01
Z0705302301384221189FWDLR	Innlandet	5.625	40308	13,484	0.01
Z1201091638511031066AITIK	Nordland	7	32000	13,321	0.01
Z0709110929587841189BCAOJ	Trøndelag	1.67	133382	13,247	0.01
Z0704301335310341190RZTUF	Rogaland	2	111250	13,232	0.01
Z0811271314379073251YIXGF	Viken	6	36691	13,092	0.01
Z0704301339293161190GRNMS	Trøndelag	7.07	31009	13,038	0.01
Z0704301342205371190IXFKS	Nordland	3	73050	13,033	0.01
Z0705302240051551189SQGTV	Troms og Finnmark	3	72856	12,998	0.01
Z0805150938508520159EAUKG	Vestfold og Telemark	6.6	33000	12,953	0.01
Z0709110926329671195DAPQL	Trøndelag	7	31054	12,927	0.01
Z0707022019147011190ZTKCF	Troms og Finnmark	3	71456	12,748	0.01
Z0705302239038891190XXFS	Møre og Romsdal	2	106434	12,659	0.01
Z0705302239358311190DCXT	Trøndelag	1.9	112000	12,655	0.01
Z0705302239358311190DCXT	Trøndelag	1.9	112000	12,655	0.01
Z0705302301196901189KHXWI	Viken	2	106317	12,645	0.01
Z0705302301196901189KHXWI	Viken	2	106317	12,645	0.01
Z1312171432121042024OTPYI	Rogaland	2	105681	12,570	0.01
Z0705302240066201190HCGUQ	Troms og Finnmark	15.471	13594	12,507	0.01
Z0705302301325961189YUXJI	Vestfold og Telemark	2.44	85774	12,446	0.01

Z0712102006595671189RXUBZ	Nordland	3	69239	12,353	0.01
Z0712102007078931189DSLUE	Nordland	1	205997	12,251	0.01
Z07070220195863511900DRMY	Møre og Romsdal	7.665	26630	12,139	0.01
Z1105301053506800183AWJHY	Vestland	2	101680	12,094	0.01
Z1302261012012193158LDXYV	Innlandet	2.33	86590	11,998	0.01
Z2002101312273362024KXUEM	Troms and Finnmark	11.333	17800	11,997	0.01
Z1212201456232630395TQFEO	Innlandet	2.25	89575	11,986	0.01
Z0705302239268601190HYQO	Vestfold and Telemark	2	99470	11,831	0.01
Z1002181305367101093NCHJU	Vestland	4	49570	11,792	0.01
Z0805072303397001194WBQXN	Troms and Finnmark	2	98645	11,733	0.01
Z0704301336539221189FGEKJ	Rogaland	4	49115	11,683	0.01
Z0704301337481981189LHVZA	Vestland	3	65000	11,597	0.01
Z0807141114054260157HOPPE	Viken	9.75	20000	11,597	0.01
Z0707022019262561190AGVFO	Nordland	3	64628	11,530	0.01
Z0705302239082211189OTKFP	Viken	8	24223	11,524	0.01
Z0705302239082211189OTKFP	Viken	8	24223	11,524	0.01
Z0705302240058231189VLOBB	Nordland	15	12841	11,455	0.01
Z1003021109513871066SGURT	Nordland	11	17448	11,414	0.01
Z1610281331157862024FLRYF	Vestland	18	10620	11,368	0.01
Z0704301339187711190EFAIT	Vestfold and Telemark	3.8	50000	11,299	0.01
Z0805072303287651189NEZOH	Troms and Finnmark	15.5	12238	11,281	0.01
Z0705302238449031190TZHMR	Troms and Finnmark	3.444	54855	11,235	0.01
Z0704301343326311189GQZIH	Innlandet	2	93949	11,174	0.01
Z0704301343326311189GQZIH	Innlandet	2	93949	11,174	0.01
Z0704301338037981189PFDVY	Møre og Romsdal	2.25	82824	11,082	0.01
Z0705302240143041190IEVEJ	Vestland	37	5000	11,002	0.01
Z1603031310236333252UFWCY	Nordland	15	12313	10,984	0.01
Z0805072303409071189GYRML	Troms and Finnmark	16.775	10971	10,945	0.01
Z1001261733145651029WWAU	Innlandet	3	61300	10,937	0.01
Z0805072301259391195AGZWL	Vestland	6	30574	10,909	0.01
Z0705302301270911190NQQYA	Viken	2	90193	10,728	0.01
Z0705302301270911190NQQYA	Viken	2	90193	10,728	0.01
Z1102231007488813251CEPQI	Troms and Finnmark	2.08	86420	10,690	0.01
Z0704301341397651190LOQDM	Møre og Romsdal	13.3	13500	10,678	0.01
Z0811121500358360154TZWET	Nordland	9.8	18300	10,665	0.01
Z0712102004432081195CHMBI	Innlandet	2	89569	10,653	0.01
Z0805210943136090125UZNVH	Rogaland	9.5	18800	10,621	0.01
Z0704301339368581189PLAES	Troms and Finnmark	8.8	20000	10,467	0.01
Z2002101525363482025AMDGB	Troms and Finnmark	5	35073	10,429	0.01
Z0811111051307690123QCPUD	Nordland	3.5	50000	10,407	0.01
Z0705302301367811190KAVVK	Vestland	5	35000	10,407	0.01
Z0705302301318401190RZEJY	Viken	2	87000	10,348	0.01
Z191219105943372017YBROE	Vestland	2	86157	10,248	0.01
Z08050723021520611940EQQQB	Trøndelag	2	86111	10,242	0.01
Z1112091412202600148YSGJE	Troms and Finnmark	18.07	9469	10,176	0.01
Z0709110926391891195OSSDN	Vestland	5	34129	10,148	0.01
Z0704301338489341189VFCND	Nordland	14	12000	9,991	0.01
Z0705302240188961189IKRVW	Innlandet	2	83754	9,962	0.01
Z0707022020029861190FDVPA	Vestland	9	18410	9,854	0.01
Z0705302240046511190OJMBQ	Nordland	16.2	10193	9,820	0.01
Z0704301343318431189XQQLS	Innlandet	3	55000	9,813	0.01
Z0705302239404241189IFTWQ	Nordland	3	55000	9,813	0.01
Z0707022019567341190ZOYXB	Innlandet	2	81465	9,689	0.01
Z0705302238273811190CWKPE	Rogaland	0.29	561308	9,680	0.01
Z0709110929477571190GXQJV	Nordland	6.5	25000	9,664	0.01
Z2001131400281332025DORLA	Vestland	3	54089	9,650	0.01
Z2002101312298962024MGOBW	Troms and Finnmark	5	32000	9,515	0.01
Z0704301341308061189YSVXB	Trøndelag	13.16	12131	9,494	0.01
Z1310011042222950398XSJJM	Nordland	4.5	35460	9,490	0.01
Z1310011042222950398XSJJM	Nordland	4.5	35460	9,490	0.01
Z0805072259436581190ZIWUU	Viken	3	52875	9,433	0.01
Z0705302239488471189EAMSZ	Innlandet	4	39566	9,412	0.01
Z0705302239488471189EAMSZ	Innlandet	4	39566	9,412	0.01
Z0704301339379441189UTMDK	Troms and Finnmark	6.5	24000	9,277	0.01
Z0712102004426831195DUUNU	Innlandet	2	77889	9,264	0.01
Z0705302239029111190NTCQI	Møre og Romsdal	2	77876	9,263	0.01
Z2002041512255030161LYMN	Troms and Finnmark	6.75	22996	9,231	0.01
Z0805072303389861190TWZIW	Troms and Finnmark	7.489	20692	9,216	0.01
Z1411241410361132024KXXLP	Vestland	12.75	12093	9,169	0.01
Z0704301337562281189KPBHF	Vestland	3	51287	9,150	0.01
Z0704301341388921190CBVDC	Møre og Romsdal	3	51000	9,099	0.01
Z0705302239490811189SZNLF	Nordland	2	75179	8,942	0.01
Z2002101312281362024TKLQU	Troms and Finnmark	5	30000	8,921	0.01
Z1009241229466791014PUUGU	Trøndelag	10	14995	8,918	0.01
Z1002180922573101093EOPRF	Vestland	5.67	26320	8,875	0.01
Z1405261135264973138BGCOY	Vestland	33	4453	8,739	0.01
Z0705302301343451190DZGXY	Nordland	5.3	27556	8,685	0.01
Z0707022019420321190YZQEC	Troms and Finnmark	7.333	19758	8,616	0.01

Z0707022019420321190YZQEC	Troms og Finnmark	7.333	19758	8,616	0.01
Z0805072303407091189DXGJP	Troms og Finnmark	4.667	30573	8,485	0.01
Z0705302239391521189CHOEZ	Vestland	35.3	4000	8,397	0.01
Z1112091348244010148SIDLS	Troms og Finnmark	22	6418	8,397	0.01
Z0705302301135451190PFUVY	Viken	2	70469	8,382	0.01
Z0704301341371071190JAWME	Møre og Romsdal	5	28185	8,381	0.01
Z140103155820899325GZZGF	Trøndelag	8.5	16500	8,341	0.01
Z0704301338315911189VRLFN	Viken	15	9343	8,334	0.01
Z1002171810099183252VPLUY	Møre og Romsdal	3.5	40000	8,326	0.01
Z1604081559534882024MADNI	Troms og Finnmark	26	5359	8,286	0.01
Z0805072303327221190NYFSP	Troms og Finnmark	3.5	39742	8,272	0.01
Z1502241259307370379MFREM	Vestland	33	4173	8,190	0.01
Z0812121017184450153OCXXQ	Vestland	18.8	7146	7,989	0.01
Z0705302240318801190RCTXT	Agder	2	66882	7,955	0.01
Z0705302239066621189MGCPT	Troms og Finnmark	3.5	37819	7,872	0.01
Z0909151247434280178IWXGD	Troms og Finnmark	7.33	18000	7,846	0.01
Z0805072302326121195NZUAJ	Trøndelag	15.5	8500	7,835	0.01
Z0805072302326121195NZUAJ	Trøndelag	15.5	8500	7,835	0.01
Z0711281321199930158LEMUU	Nordland	9.3	14000	7,743	0.01
Z0705302239586371189TBNWJ	Troms og Finnmark	10.67	12195	7,738	0.01
Z0805072300294871194THISL	Agder	3	43233	7,713	0.01
Z0705302240222331190KPMVC	Innlandet	2	64753	7,702	0.01
Z0811131217302760130CMQUJ	Nordland	4.53	28553	7,692	0.01
Z0707022019441061190STEXI	Vestland	12.7	10176	7,686	0.01
Z0805072302492281189FGJRE	Nordland	4	32303	7,684	0.01
Z0805072303403771195FKUBT	Troms og Finnmark	8.8	14660	7,672	0.01
Z0705302240120471190LVHT	Innlandet	6.6	19350	7,595	0.01
Z1112301047353240167KDMBC	Rogaland	2	63665	7,572	0.01
Z0704301337528141190RDPOD	Trøndelag	2	63515	7,554	0.01
Z0805072303325691190XLEVR	Troms og Finnmark	3.833	33015	7,526	0.01
Z0707022019401901190VNFB	Innlandet	2	62087	7,385	0.01
Z0707022019530001190YQGWD	Vestland	3	40937	7,304	0.01
Z0710032241399881195AVFBN	Troms og Finnmark	3.5	35044	7,294	0.01
Z1003020920105661089PTMLD	Innlandet	2	61152	7,273	0.01
Z0705302238423761189KNTCV	Viken	2	60891	7,242	0.01
Z0705302238423761189KNTCV	Viken	2	60891	7,242	0.01
Z0805072300465581194LOZNJ	Vestland	9	13505	7,228	0.01
Z0805072259086531189TVLVU	Innlandet	2	60363	7,180	0.01
Z0909211410379180178RKCE	Nordland	6.7	18000	7,172	0.01
Z0912161539477670129TMMVM	Vestland	4	30000	7,136	0.01
Z0705302239161131190KJPH	Vestland	3	39679	7,079	0.01
Z0903171059110820153NTZDD	Trøndelag	5.4	21666	6,958	0.01
Z0705302239491931190XIRKF	Nordland	7	16520	6,877	0.01
Z0903161343062420131ANBDS	Nordland	6.4	18000	6,851	0.01
Z0712172011162431190PSYOH	Troms og Finnmark	3.25	35040	6,772	0.01
Z0704301334229761190PVHZK	Møre og Romsdal	2.71	42000	6,769	0.01
Z2001131400284732025NFNEK	Vestland	1.28	88176	6,712	0.01
Z0712102004130591195WDTUJ	Nordland	15	7510	6,699	0.01
Z0805072259187081189QEDDM	Innlandet	2	56189	6,683	0.01
Z2001021015454652024ZDDFU	Møre og Romsdal	2	55973	6,657	0.01
Z0704301335491361189SQOVI	Trøndelag	0.98	114000	6,644	0.01
Z1403041348107692025SLRNA	Viken	30	3712	6,623	0.01
Z0707022019156801190AGTVW	Innlandet	2	55202	6,566	0.01
Z0805072302290751195URLEY	Trøndelag	1	110000	6,542	0.01
Z2001091432319772025WEWMO	Trøndelag	14	7803	6,497	0.01
Z0712102004215841195OGXKM	Nordland	2.5	43295	6,437	0.01
Z1302060937058753138SDILW	Nordland	3	36000	6,423	0.01
Z0709110926388301195LILJ	Trøndelag	18.3	5891	6,411	0.01
Z1105110854365841075QSSXB	Nordland	10.3	10450	6,401	0.01
Z1312171433349862025LRSVW	Rogaland	2	53748	6,393	0.01
Z1309041057127143105FFZSN	Troms og Finnmark	5	21470	6,384	0.01
Z0805072259407921194SJCSY	Viken	2	53632	6,379	0.01
Z0805072259407921194SJCSY	Viken	2	53632	6,379	0.01
Z1606101122141002024THQIA	Vestland	30.5	3500	6,348	0.01
Z2001131400304672025LLPIZ	Vestland	0.8	133399	6,347	0.01
Z0909071036438950135QJYZJ	Nordland	3	35539	6,341	0.01
Z0808221312373770126NJUI	Viken	1.95	54479	6,318	0.01
Z0705302239342901190HABSR	Trøndelag	15.6	6800	6,309	0.01
Z0705302240022171190RAXPU	Troms og Finnmark	3	35068	6,256	0.01
Z0704301340229841190UYDBH	Innlandet	2	52588	6,255	0.01
Z1102141230538061087ZXBPK	Innlandet	2	52256	6,215	0.01
Z0712102004438101195LTZYP	Innlandet	2	51683	6,147	0.01
Z070430133939511189PNGQM	Trøndelag	1	102956	6,123	0.01
Z0707022020140011190QLCBO	Troms og Finnmark	5.75	17831	6,097	0.01
Z2001151131021562024DKAQL	Vestland	2	51030	6,070	0.01
Z0712172008033881195ECGGX	Vestland	3	33820	6,034	0.01
Z2001131400277002025ZRWXO	Vestland	2.36	42579	5,976	0.01
Z0705302238584381189DVDFS	Møre og Romsdal	3	32845	5,860	0.01

Z0705302301295901189HSBFA	Viken	2	49000	5,828	0.01
Z0705302301345441190FRGGQ	Rogaland	1.15	85026	5,815	0.01
Z0705302239119111190HCTFK	Troms og Finnmark	8.5	11472	5,799	0.01
Z0705302240298901189RIUNG	Innlandet	2	48008	5,710	0.01
Z1112211348051101067RAVMK	Troms og Finnmark	12	7991	5,703	0.01
Z1704181400536112024XNLOS	Møre og Romsdal	1.8	53096	5,684	0.01
Z1608251018273662024XZPZZ	Vestfold og Telemark	3	31665	5,649	0.01
Z0903200915471860161WINFN	Nordland	3	31536	5,626	0.01
Z2001151132579582025HAAUO	Vestland	15.3	6183	5,626	0.01
Z0705302240055301189QUZRV	Nordland	3	31446	5,610	0.01
Z1301260722027963251GMLXT	Møre og Romsdal	4.3	21900	5,600	0.01
Z2002101525368752025GJRG0	Troms og Finnmark	8	11668	5,551	0.01
Z0806131439353520176ILROJ	Innlandet	2.5	37298	5,545	0.01
Z0704301341259801190YJIDA	Trøndelag	2	45677	5,433	0.01
Z0709110929470241189FTGJP	Trøndelag	2	45574	5,421	0.01
Z1004070920128881026QAVNW	Trøndelag	4.5	20151	5,393	0.01
Z0705302239169251189KSXSW	Troms og Finnmark	3.25	27888	5,390	0.01
Z0704301335516711189IRSPI	Trøndelag	3.5	25550	5,318	0.01
Z2002101505058632025LWLHU	Troms og Finnmark	5	17664	5,252	0.01
Z0707022019451071190NDRCL	Innlandet	3	29360	5,238	0.01
Z0805072300155871189NYFGZ	Agder	35.1	2500	5,218	0.01
Z1003021148085921011IGXUN	Oslo	5	17448	5,188	0.01
Z0705302240275541189STCHA	Agder	2.63	33014	5,164	0.01
Z1702161138460852025TIGCY	Viken	10.25	8447	5,149	0.01
Z2001131527165612025BUZBY	Vestland	3.45	25000	5,129	0.01
Z0704301340540731190PJEPKA	Vestfold og Telemark	2	42888	5,101	0.01
Z0705302238338191189ZOYIR	Viken	2	42275	5,028	0.01
Z0712102007011771190WKRYE	Nordland	24	3500	4,995	0.00
Z1202141248335151067XSSAC	Møre og Romsdal	14	6000	4,995	0.00
Z1402172034178863251MKYJO	Nordland	3	27761	4,953	0.00
Z130115102404733142PMIEO	Vestland	30	2759	4,922	0.00
Z1801161159334453131DUPTV	Nordland	8.28	9888	4,869	0.00
Z0704301336321601190RZMAR	Viken	29	2823	4,869	0.00
Z1102141230535241087HAABD	Innlandet	2	40804	4,853	0.00
Z0705302301399691189PLNHH	Viken	2	40150	4,775	0.00
Z0704301337529661190XKUNF	Trøndelag	2	40000	4,758	0.00
Z0704301337529661190XKUNF	Trøndelag	2	40000	4,758	0.00
Z0707022019544501190UGUHP	Innlandet	2	39923	4,748	0.00
Z0705302239562051190LPPGW	Innlandet	6	13298	4,745	0.00
Z0705302238307601190TISNV	Agder	3	26478	4,724	0.00
Z071210200630201194SISGG	Nordland	18.667	4228	4,694	0.00
Z1007061950414363251EZICL	Nordland	4.38	18000	4,689	0.00
Z0705302239341331190HPCVR	Innlandet	4	19473	4,632	0.00
Z2001141821237292025VNAQH	Trøndelag	1.5	51030	4,552	0.00
Z1002050948508920100UPJHJ	Vestfold og Telemark	5	15266	4,539	0.00
Z1202091353148400236IFRXO	Vestland	18	4234	4,532	0.00
Z2002041453456823161KGHTM	Troms og Finnmark	4	19047	4,531	0.00
Z0704301343210061190AVYUP	Innlandet	2	37965	4,516	0.00
Z0704301343210061190AVYUP	Innlandet	2	37965	4,516	0.00
Z0704301335544921189AQSM	Trøndelag	4	18859	4,486	0.00
Z0808221312373770126NJUDI	Viken	1.38	54479	4,471	0.00
Z0705302238410231189CGIFO	Innlandet	2.75	27259	4,458	0.00
Z0705302238410231189CGIFO	Innlandet	2.75	27259	4,458	0.00
Z140909083310773251JYVYS	Vestland	3	24847	4,433	0.00
Z0811121112435320171GWDIW	Trøndelag	2	36923	4,392	0.00
Z0811121112435320171GWDIW	Trøndelag	2	36923	4,392	0.00
Z0704301338343031190UBLJW	Nordland	3.5	21000	4,371	0.00
Z080331133042353252ZMWPE	Viken	15	4900	4,371	0.00
Z1003020920093631089DTJTK	Innlandet	2	36741	4,370	0.00
Z1003020920093631089DTJTK	Innlandet	2	36741	4,370	0.00
Z0705302301407831190MDQXO	Viken	2.7	26900	4,319	0.00
Z0705302238245051190PQOCB	Agder	3	24091	4,298	0.00
Z0704301336347631189ZVLFC	Innlandet	3.3	21618	4,243	0.00
Z0704301336347631189ZVLFC	Innlandet	3.3	21618	4,243	0.00
Z1605091530334182025LNCGC	Viken	18.25	3900	4,233	0.00
Z2001091047254322025OBJNG	Trøndelag	2	35567	4,230	0.00
Z0705302239379631189YGADY	Innlandet	2	35159	4,182	0.00
Z0712102006388531194HGWVJ	Nordland	3	23373	4,170	0.00
Z1310101438068143144NBURN	Troms og Finnmark	15.332	4568	4,165	0.00
Z0704301335373081190GGZPA	Trøndelag	2.36	29000	4,070	0.00
Z0704301341315891189JFPYY	Nordland	3	22500	4,014	0.00
Z1805110929215722025VESCL	Troms og Finnmark	16	4200	3,996	0.00
Z002041541284513161WDFSQ	Troms og Finnmark	3	22161	3,954	0.00
Z0704301341416311190TEQD	Møre og Romsdal	3.41	19455	3,945	0.00
Z0805141517517070163AIXW	Innlandet	2	33000	3,925	0.00
Z1704181342395872024PGYEZ	Møre og Romsdal	5	13194	3,923	0.00
Z0705302239536441190PAJYW	Innlandet	4	16425	3,907	0.00
Z0709110929597791190RWBC	Trøndelag	5.5	11860	3,879	0.00

Z0910211118493330135WELUU	Viken	2	32000	3,806	0.00
Z0908061324120930126KLDYW	Vestland	8	7974	3,794	0.00
Z0909241232553120134DIQRD	Trøndelag	10.6	6000	3,782	0.00
Z0704301341367861189YIDRG	Trøndelag	3	20900	3,729	0.00
Z0805072303410221190GRMV	Troms and Finnmark	10.514	5950	3,720	0.00
Z0704301341201331190JQFVO	Trøndelag	31	2000	3,687	0.00
Z0812030943404200170EMMFL	Rogaland	2	31000	3,687	0.00
Z0812030943404200170EMMFL	Rogaland	2	31000	3,687	0.00
Z0812030943404200170EMMFL	Rogaland	2	31000	3,687	0.00
Z0805072259044751190WUEAW	Innlandet	2	30886	3,674	0.00
Z0709110929461961189WIZZR	Viken	41	1504	3,667	0.00
Z0704301340230671190QSIL	Innlandet	5.08	12034	3,636	0.00
Z0705302301289601190CMPTK	Rogaland	2	30300	3,604	0.00
Z0707022019154041190DPCVS	Troms and Finnmark	5	12031	3,577	0.00
Z0707022019582381190NBBLA	Vestland	5	12014	3,572	0.00
Z0704301343250911190ASIIF	Troms and Finnmark	6	10000	3,568	0.00
Z1006250950144331016YKNQK	Vestland	5	12000	3,568	0.00
Z1310110946106433111MRAEK	Trøndelag	8.5	7053	3,565	0.00
Z0705302301315971190JPDYB	Innlandet	0.495	121078	3,564	0.00
Z0705302301144221189YAHFH	Viken	2	29805	3,545	0.00
Z0705302301145741189UCXBJ	Viken	2	29783	3,542	0.00
Z0704301337470691190RKJLO	Vestland	2	29542	3,514	0.00
Z1704181330540542024VIPNC	Møre og Romsdal	1.83	32080	3,491	0.00
Z0705302238428031190CHHUU	Viken	11.5	5072	3,469	0.00
Z0712172010171661194XOIXC	Møre og Romsdal	5	11623	3,456	0.00
Z0803041316596540159GLXFS	Vestland	3	19353	3,453	0.00
Z1701270941040943125DZJLT	Troms and Finnmark	3	19337	3,450	0.00
Z1402121459450262025LJGOJ	Oslo	8	7178	3,415	0.00
Z0704301340589281189IIQXQ	Vestland	1	57135	3,398	0.00
Z0704301341395871190EHFHQ	Møre og Romsdal	1	56868	3,382	0.00
Z0704301342457401190BWLOP	Innlandet	6.2	9125	3,365	0.00
Z1705222048498073251SFCRZ	Viken	14	4022	3,349	0.00
Z0712172010338761194JBBNU	Troms and Finnmark	7	8000	3,330	0.00
Z0705302239132951190IORUG	Møre og Romsdal	10	5568	3,311	0.00
Z2001171305019592024CZGHJ	Møre og Romsdal	7.6	7286	3,293	0.00
Z0811121500358360154TZWET	Nordland	3	18300	3,265	0.00
Z0805072259188991189PJQBU	Innlandet	2	27277	3,244	0.00
Z0705302239518691190CMBHS	Innlandet	2	26488	3,150	0.00
Z070530223927421189NXMLQ	Troms and Finnmark	5	10585	3,147	0.00
Z1002180922573101093EOPRF	Vestland	2	26320	3,131	0.00
Z0805260753383320176WSJOI	Innlandet	2.5	21009	3,124	0.00
Z0705302301266971189YDDZP	Nordland	10.5	5000	3,122	0.00
Z0705302239148591190BKPBG	Vestland	3	17328	3,091	0.00
Z0704301340460901190QGOFE	Nordland	10	5181	3,081	0.00
Z1405071422041693101JPLYL	Vestland	3.75	13812	3,080	0.00
Z0911262058529441126AUPQP	Viken	3	17255	3,078	0.00
Z0704301335423721190TSMC	Trøndelag	1	50400	2,997	0.00
Z0704301335423721190TSMC	Trøndelag	1	50400	2,997	0.00
Z0707022019329341190YQXXX	Innlandet	2	25143	2,991	0.00
Z0910300910147590159YAQJV	Troms and Finnmark	4.5	11000	2,944	0.00
Z1309041037105073105HHYQF	Troms and Finnmark	27	1824	2,929	0.00
Z0705302240077611190KCARD	Nordland	10	4923	2,928	0.00
Z1003011124271901020VYRMZ	Viken	19.7	2492	2,920	0.00
Z1002041238135261040PIGTA	Trøndelag	8	6062	2,884	0.00
Z1109111713221700143MBVFW	Vestland	14.68	3300	2,881	0.00
Z1904301240159652024UOUYK	Nordland	3	16004	2,855	0.00
Z1802121040384712024VHDKK	Troms and Finnmark	10	4800	2,855	0.00
Z0704301342519051189SRDHI	Innlandet	9	5330	2,853	0.00
Z0704301342519051189SRDHI	Innlandet	9	5330	2,853	0.00
Z0705302301402471189XEHPP	Nordland	7	6671	2,777	0.00
Z0705302240297821189HVZQX	Agder	3	15454	2,757	0.00
Z0705302239520221190GAMZY	Nordland	3	15301	2,730	0.00
Z1002111606547481029ANUBT	Nordland	3	15250	2,721	0.00
Z2001171305023232024MWDAH	Møre og Romsdal	0.322	140841	2,697	0.00
Z0803071100354810155MZATE	Møre og Romsdal	5.74	7900	2,697	0.00
Z0910301127145473252LSUBX	Vestland	2	22610	2,689	0.00
Z0707022019310271190HUTNI	Vestland	3	15065	2,688	0.00
Z0710032242011001190KQAYO	Troms and Finnmark	2.5	17827	2,650	0.00
Z0704301342415181189OVWJN	Møre og Romsdal	4.31	10311	2,643	0.00
Z1102251302529961038ZBAJC	Trøndelag	4	11000	2,617	0.00
Z2001170934470042024MYTGM	Vestland	5	8800	2,617	0.00
Z1002050943561240100UHVXC	Vestfold and Telemark	3.8	11476	2,593	0.00
Z1010131443359351067UROGE	Troms and Finnmark	52.5	826	2,579	0.00
Z0704301342263801190ZYGIS	Møre og Romsdal	1.23	34760	2,543	0.00
Z0704301337523481190YBVX	Møre og Romsdal	8.3	5100	2,517	0.00
Z100421145530793251AJQRE	Oslo	7	6000	2,498	0.00
Z0705302301370471190HUIEO	Innlandet	2.403	17356	2,480	0.00
Z1106220912420580156WKASU	Viken	3	13817	2,465	0.00

Z0705302240002631190LFEKR	Troms and Finnmark	5.67	7300	2,462	0.00
Z0705302239050061189YNHPP	Viken	2	20635	2,454	0.00
Z0705302239168171189HGKNC	Vestland	3	13725	2,449	0.00
Z1203261440478430244ZATUQ	Agder	21	1958	2,445	0.00
Z0705302239248361189LKP <small>R</small> E	Troms and Finnmark	5	8190	2,435	0.00
Z1803231414169790382AXZXZ	Viken	6.5	6300	2,435	0.00
Z1803231414169790382AXZXZ	Viken	6.5	6300	2,435	0.00
Z0705302238158191190MENZL	Agder	3	13636	2,433	0.00
Z0709181415284250105XMUV	Viken	2	20434	2,430	0.00
Z1602011311123812025RPAXO	Trøndelag	1.9	21474	2,426	0.00
Z0705302238506561190JBKPL	Vestland	13.33	3050	2,418	0.00
Z0705302301130051189JLQZ	Vestfold and Telemark	2.3	17566	2,403	0.00
Z0704301341497991189TKIWJ	Møre og Romsdal	2	20000	2,379	0.00
Z0704301341497991189TKIWJ	Møre og Romsdal	2	20000	2,379	0.00
Z0704301335425191190LOBFW	Trøndelag	6	6598	2,354	0.00
Z0705302301377811190KNOFM	Viken	2	19696	2,343	0.00
Z0705302301377811190KNOFM	Viken	2	19696	2,343	0.00
Z1501200951223383251QOJGO	Rogaland	5	7694	2,288	0.00
Z0705302240271531189RWEYQ	Agder	3	12809	2,285	0.00
Z1509251033144992024MVOQH	Trøndelag	7.25	5299	2,285	0.00
Z1509251033144992024MVOQH	Trøndelag	7.25	5299	2,285	0.00
Z0705302239229461190TIMZV	Vestfold and Telemark	9.19	4150	2,268	0.00
Z070722019554661190FINK	Møre og Romsdal	6.573	5752	2,248	0.00
Z0704301335554521189FHYDX	Trøndelag	2	18859	2,243	0.00
Z0704301335554521189FHYDX	Trøndelag	2	18859	2,243	0.00
Z1010312053292953252WLSZJ	Møre og Romsdal	2	18600	2,212	0.00
Z0704301336550061189LAMYY	Rogaland	4.45	8200	2,170	0.00
Z0804220958139550181RJD0V	Nordland	4.04	9000	2,162	0.00
Z0707022019595411190OIDOG	Agder	3	12087	2,156	0.00
Z1212201454278430395PZSBG	Innlandet	1.5	24127	2,152	0.00
Z1701270953361962024RCVGP	Vestfold and Telemark	1	36137	2,149	0.00
Z13020708254989431188MOEI	Møre og Romsdal	7.5	4816	2,148	0.00
Z0705302238347011190ZCNQI	Troms and Finnmark	8	4500	2,141	0.00
Z1302111303377503146ECACO	Innlandet	3.6	10000	2,141	0.00
Z0705302238347011190ZCNQI	Troms and Finnmark	8	4500	2,141	0.00
Z2001131527156962025YGDOR	Vestland	4	9000	2,141	0.00
Z1805021046002860367BUF <small>S</small> F	Innlandet	3.5	10220	2,127	0.00
Z0712102007168261189OKYAK	Nordland	3.7	9645	2,122	0.00
Z0704301339288481190IHTX	Trøndelag	2	17722	2,108	0.00
Z0705302239445011189BUMAM	Vestland	2.6	13575	2,099	0.00
Z0704301336448631190WXPAR	Rogaland	9.5	3700	2,090	0.00
Z0712102007363241189XESGW	Innlandet	2	17565	2,089	0.00
Z1508201122376293251TEPWZ	Møre og Romsdal	10	3500	2,081	0.00
Z1211050847391943129FSNZM	Trøndelag	5	7000	2,081	0.00
Z1211050847391943129FSNZM	Trøndelag	5	7000	2,081	0.00
Z0704301341375801190GTMIC	Møre og Romsdal	5.8	6000	2,070	0.00
Z1210171052529093140FRJLK	#N/B	2	17021	2,024	0.00
Z0907070820207343251FXRUR	Innlandet	2	17017	2,024	0.00
Z0705302239017751189UIDRB	Møre og Romsdal	2	17000	2,022	0.00
Z1106091524414901070EFMTV	Troms and Finnmark	2	17000	2,022	0.00
Z1503231053259212025QTSPR	Vestland	21.25	1600	2,022	0.00
Z1106091524414901070EFMTV	Troms and Finnmark	2	17000	2,022	0.00
Z0705302238474501190SPXUR	Troms and Finnmark	4.667	7257	2,014	0.00
Z0705302238474501190SPXUR	Troms and Finnmark	4.667	7257	2,014	0.00
Z0712102004562081195VKDYS	Møre og Romsdal	2.2	15210	1,990	0.00
Z2001221427088742024RAEIC	Trøndelag	2	16647	1,980	0.00
Z0705302239357011190MMTPY	Nordland	6.6	5000	1,963	0.00
Z070530223933131190HNQQC	Vestland	25.8	1275	1,956	0.00
Z0707022019449451190NWPLD	Vestland	5	6570	1,954	0.00
Z0811061058584753251QRCIW	Viken	8.3	3947	1,948	0.00
Z1704181345518172024JEIAI	Møre og Romsdal	2.6	12576	1,945	0.00
Z1010151346421881016IUMYZ	Vestland	39.5	826	1,940	0.00
Z0704301342307911190WNHTQ	Innlandet	2	15900	1,891	0.00
Z0705302238164001189BNBJ	Agder	13	2439	1,886	0.00
Z0704301337417831190USYLW	Vestland	3.5	9024	1,878	0.00
Z0905181433274230184THNWA	Innlandet	13.3	2365	1,871	0.00
Z0707022019226691190MVFMZ	Rogaland	2	15700	1,867	0.00
Z1007081038211730133MPRZY	Møre og Romsdal	2	15700	1,867	0.00
Z0705302238124021189HGGNL	Agder	4.7	6665	1,863	0.00
Z0705302238124021189HGGNL	Agder	4.7	6665	1,863	0.00
Z0705302239390481189ULVFF	Vestland	15.4	2000	1,832	0.00
Z1602011331186852024DVLM	Trøndelag	6	5123	1,828	0.00
Z1905101010396152025KWZYM	Innlandet	7	4383	1,825	0.00
Z0810291029229393251TUNDB	Viken	9	3400	1,820	0.00
Z0705302239495511190TPPEED	Nordland	9	3378	1,808	0.00
Z0705302238562961190IJZCB	Vestland	2	15149	1,802	0.00
Z2002101312287512024XCODY	Troms and Finnmark	5.5	5500	1,799	0.00
Z1003161627069573251BVTR	Nordland	3	10000	1,784	0.00

Z1011111308547440136WLPNK	Nordland	5	6000	1,784	0.00
Z0707022020100551190WBDVM	Troms and Finnmark	7.45	4000	1,772	0.00
Z0705302238379821190LVAXV	Innlandet	5.625	5266	1,762	0.00
Z2002101312267622024PPHKC	Troms and Finnmark	9	3260	1,745	0.00
Z0705302301291331190ISVHN	Viken	2	14600	1,737	0.00
Z0705302301291331190ISVHN	Viken	2	14600	1,737	0.00
Z0704301339368461190QFFHN	Vestland	2.25	12940	1,731	0.00
Z0908181218356400127ASMMB	Viken	2	14550	1,731	0.00
Z0908181218356400127ASMMB	Viken	2	14550	1,731	0.00
Z0705302238492991189IOWMT	Innlandet	5	5800	1,725	0.00
Z0707022019407681190JLYNF	Vestland	5	5783	1,720	0.00
Z0811061022541600179KSQIV	Innlandet	2.25	12778	1,710	0.00
Z2001311514254942024LFOMM	Vestland	2	14357	1,708	0.00
Z1003151655370981037ZOFTT	Trøndelag	10.5	2700	1,686	0.00
Z1102281127593481081ZIMPD	Vestland	5.67	5000	1,686	0.00
Z0810151546523190131LJRZM	Nordland	25	1130	1,680	0.00
Z0705302239203621189JTFYG	Vestfold and Telemark	2	14067	1,673	0.00
Z0805072259035571189ECUPT	Innlandet	2	14000	1,665	0.00
Z0704301341229251190ICBOU	Troms and Finnmark	2	14000	1,665	0.00
Z1212201457347060395RPABZ	Innlandet	5.4	5170	1,660	0.00
Z1212201457347060395RPABZ	Innlandet	5.4	5170	1,660	0.00
Z0705302240240831190CRIOE	Agder	3	9283	1,656	0.00
Z0705302301211411189AHSEQ	Vestland	2.67	10400	1,651	0.00
Z0809011228326783252VGHBW	Viken	5	5518	1,641	0.00
Z0809011228326783252VGHBW	Viken	5	5518	1,641	0.00
Z2001151132573722025LZXDB	Vestland	3.3	8310	1,631	0.00
Z0807291045132810126BMBYW	Innlandet	2.2	12450	1,629	0.00
Z2002041558451003161SGZRV	Troms and Finnmark	3	9000	1,606	0.00
Z2002041558451003161SGZRV	Troms and Finnmark	3	9000	1,606	0.00
Z0704301341485601189NGMKW	Møre og Romsdal	1.33	19500	1,542	0.00
Z0704301344246811190HUUQJ	Innlandet	2	12921	1,537	0.00
Z1002081119128410117PCXOQ	Viken	2	12821	1,525	0.00
Z0705302238466911189BBFRU	Viken	5.25	4847	1,513	0.00
Z1604070907498922024MFACC	Viken	4.1	6170	1,504	0.00
Z1308090857564283112SRQDW	Troms and Finnmark	4	6288	1,496	0.00
Z0704301337352701189QDHAM	Innlandet	8	3144	1,496	0.00
Z2001311320447632024POTWB	Trøndelag	4	6271	1,492	0.00
Z0705302240132601190NFCNB	Innlandet	2	12515	1,489	0.00
Z0707022019379661190ZDNER	Vestland	2	12509	1,488	0.00
Z1312171432228332024LKDBL	Rogaland	2	12508	1,488	0.00
Z1312171432228332024LKDBL	Rogaland	2	12508	1,488	0.00
Z1312181111215552024UMKIR	Trøndelag	2	12463	1,482	0.00
Z0705302239306131190RGCVR	Trøndelag	3.5	7100	1,478	0.00
Z0808151040309700124MTOXH	Vestfold and Telemark	2	12173	1,448	0.00
Z0707022019055131190TTFJ	Vestland	5	4840	1,439	0.00
Z0704301344277931190GMOWL	Nordland	3.7	6500	1,430	0.00
Z1704181340451292025DMVWG	Møre og Romsdal	1.4	16963	1,412	0.00
Z1606100837223882025MZLKV	Troms and Finnmark	3	7840	1,399	0.00
Z1012030955148070125WTDES	Viken	2	11684	1,390	0.00
Z1305141243322103129QLYWO	Troms and Finnmark	3	7789	1,390	0.00
Z1305141243322103129QLYWO	Troms and Finnmark	3	7789	1,390	0.00
Z0805072301419731195ONWNW	Møre og Romsdal	0.7	33325	1,387	0.00
Z1312171432158612025SDNTR	Rogaland	2	11581	1,377	0.00
Z1202011223137901073FTCFS	Nordland	9.9	2300	1,354	0.00
Z0805072258532971190YWHPB	Innlandet	1	22630	1,346	0.00
Z0805072258532971190YWHPB	Innlandet	1	22630	1,346	0.00
Z1005191044230681099FGVWM	Vestfold and Telemark	1.8	12426	1,330	0.00
Z0704301338473271190VAMY	Vestfold and Telemark	13	1699	1,314	0.00
Z0806061400543660172YVCXN	Nordland	4.5	4900	1,311	0.00
Z1002050948519390100PQQIY	Vestfold and Telemark	4	5509	1,310	0.00
Z0811101244207780164XHMUR	Trøndelag	1	22000	1,308	0.00
Z0704301334220581190KVPHB	Viken	2	11000	1,308	0.00
Z1911261519437972025DWNHN	Trøndelag	4	5500	1,308	0.00
Z0705302240270321190FSRSK	Agder	2	10996	1,308	0.00
Z0907291658269990153XWAUW	Trøndelag	3	7300	1,302	0.00
Z0705302239198671189FPUJL	Vestfold and Telemark	2	10897	1,296	0.00
Z200211125305022025EHHYJ	Vestland	2	10866	1,292	0.00
Z0705302238530881190LOYDW	Vestland	1.08333	20000	1,289	0.00
Z1008301316146441090NXZWS	Troms and Finnmark	9.4	2297	1,284	0.00
Z1410021013005472025OCZWQ	Viken	21.5	1000	1,279	0.00
Z120117072251971093WLRUB	Nordland	5	4260	1,267	0.00
Z0805072259190031189RMDPX	Innlandet	2	10589	1,259	0.00
Z0805072259190031189RMDPX	Innlandet	2	10589	1,259	0.00
Z0707022019346701190KJDEL	Rogaland	9.3	2265	1,253	0.00
Z1810311453402432024ZLOFQ	Trøndelag	1	21000	1,249	0.00
Z0908311355084083251CRLKS	Viken	2	10422	1,240	0.00
Z0908311355084083251CRLKS	Viken	2	10422	1,240	0.00
Z1202141223088830165LNJRJ	Nordland	4	5151	1,225	0.00

Z0705302240301411189JOJRV	Agder	3.75	5490	1,224	0.00
Z0712102007000551189GDBHQ	Nordland	2	10176	1,210	0.00
Z1002181001591811093MQLOG	Vestland	3.7	5500	1,210	0.00
Z0805072259039431190JQDX	Innlandet	5	4056	1,206	0.00
Z1401231009076580365XYDU	Møre og Romsdal	2	10080	1,199	0.00
Z0705302238590951190NBBYZ	Møre og Romsdal	2	10000	1,189	0.00
Z0705302239558481189JTPT	Nordland	5	4000	1,189	0.00
Z1001081252552990212VXFW	Innlandet	5	4000	1,189	0.00
Z1302111502434790388UWCYB	Vestland	2	9963	1,185	0.00
Z1302111502434790388UWCYB	Vestland	2	9963	1,185	0.00
Z2001311514264212024IVFGS	Vestland	2	9943	1,183	0.00
Z1408220931151863101NVFRD	Troms og Finnmark	5	3925	1,167	0.00
Z0707022020049881190CCNSQ	Troms og Finnmark	3.5	5487	1,142	0.00
Z0707022020049881190CCNSQ	Troms og Finnmark	3.5	5487	1,142	0.00
Z1803051032461892024YOSPJ	Trøndelag	2	9500	1,130	0.00
Z1212201457025290395HNMCH	Innlandet	4.66	4062	1,126	0.00
Z0705302239211841189WBVEB	Vestfold og Telemark	2	9406	1,119	0.00
Z1905271430256252024MSPUP	Innlandet	4.14	4513	1,111	0.00
Z1402131209163922024ZRYYL	Vestfold og Telemark	8	2332	1,109	0.00
Z0704301343383431189HSCNA	Vestland	4.25	4348	1,099	0.00
Z0907291658269990153XWAUW	Trøndelag	2.5	7300	1,085	0.00
Z0712102006238451194XQGMA	Nordland	2.143	8464	1,079	0.00
Z1305050854200033252HDFEF	Innlandet	1.5	12045	1,074	0.00
Z0811071425498050159UFVDI	#N/B	3	6000	1,070	0.00
Z0811071425498050159UFVDI	#N/B	3	6000	1,070	0.00
Z0704301336569151189YIKRA	Vestland	6	3000	1,070	0.00
Z1705020940438643251ZQCTX	Vestland	3	6000	1,070	0.00
Z1803231612008262024TQMGI	Innlandet	2.89	6196	1,065	0.00
Z0705302239511901190WVNTC	Nordland	2	8937	1,063	0.00
Z07053022392116821190DXWL	Vestfold og Telemark	2	8904	1,059	0.00
Z0712102007009591189WQWWL	Nordland	5.9	3000	1,053	0.00
Z1702091404011632025KSGHD	Viken	2	8800	1,047	0.00
Z0705302301286621190MQHXV	Viken	2	8796	1,046	0.00
Z0911161523366360161APSMC	Møre og Romsdal	2	8760	1,042	0.00
Z0911161523366360161APSMC	Møre og Romsdal	2	8760	1,042	0.00
Z1501081511016802024NBEBD	Innlandet	4	4310	1,025	0.00
Z1004071539231441026UIJNU	Trøndelag	2	8585	1,021	0.00
Z1604250955410252024GRBZT	Viken	6	2795	997	0.00
Z1202100835229993252GTGSA	Viken	2	8138	968	0.00
Z1202100835229993252GTGSA	Viken	2	8138	968	0.00
Z1004181244183573252OAKMF	Innlandet	1.3	12400	959	0.00
Z0712102007175651190WPIGD	Nordland	7.85	2041	953	0.00
Z0710032242018981190LYZHL	Troms og Finnmark	2	8000	952	0.00
Z1110170858176230151AFTGL	Møre og Romsdal	2	8000	952	0.00
Z0705302239141391189PHMUT	Troms og Finnmark	1.5	10585	944	0.00
Z0705302240129721189UIGZY	Innlandet	3	5237	934	0.00
Z1503171205187223252UDZSU	Vestfold og Telemark	2	7800	928	0.00
Z1312171432185992025TDNBW	Rogaland	2	7797	927	0.00
Z0704301337503361190QVJFP	Møre og Romsdal	3	5100	910	0.00
Z1604251358001202025UJEQX	Møre og Romsdal	2	7600	904	0.00
Z1001271232208831017YIZON	Nordland	3	5000	892	0.00
Z1101061340493701079DKGHU	Vestland	5	3000	892	0.00
Z1208091011426753126GGSECG	Rogaland	1	14999	892	0.00
Z0705302238561331190YOHFG	Møre og Romsdal	3.3	4521	887	0.00
Z1309031431096503144KQGJF	Viken	4.25	3452	872	0.00
Z1103251318422160100SOBCV	Møre og Romsdal	2	7300	868	0.00
Z1501071157417803156JGSQF	Vestland	2	7300	868	0.00
Z071210200640117194EWDWO	Nordland	13.3	1095	866	0.00
Z0709110927202261194RDFLG	Vestland	5	2900	862	0.00
Z1004191442239673252LQALO	Innlandet	4	3585	853	0.00
Z0705302238417401190RWHNR	Viken	2	7156	851	0.00
Z0705302301283851189EYFMY	Vestfold og Telemark	10.4	1352	836	0.00
Z1208081103197553251KGPBF	Innlandet	2	7000	833	0.00
Z1402131209163922024ZRYYL	Vestfold og Telemark	6	2332	832	0.00
Z0707022019442931190MFOZL	Vestland	3	4606	822	0.00
Z1810090831033672025KGNO	Trøndelag	2	6796	808	0.00
Z0705302240151491189DVVDX	Innlandet	6.7	2011	801	0.00
Z0909171458041410131DOTEU	Viken	3.8	3500	791	0.00
Z0705302240103661190KXSSD	Innlandet	2	6617	787	0.00
Z0811031502177610151UMHAO	Nordland	3	4400	785	0.00
Z0712102007230201189FGGBI	Nordland	3	4400	785	0.00
Z1904061816492330128TBBEA	Nordland	3	4400	785	0.00
Z1501111855168633251TNsve	Vestland	2	6570	781	0.00
Z1803021402019832025MATAP	Viken	11	1160	759	0.00
Z070530223959191190VBMMG	Troms og Finnmark	12	1050	749	0.00
Z2002101312302882024SNOFW	Troms og Finnmark	5	2517	748	0.00
Z0707022020138551190EMQAT	Innlandet	2	6250	743	0.00
Z0704301335411961189PFPYA	Rogaland	8.5	1459	738	0.00

Z1003151645571301037DBWOI	Trøndelag	2	6200	737	0.00
Z1312181247131233112XWYSS	Nordland	13.5	900	723	0.00
Z1203010845376100149LEYFR	Vestland	2	6000	714	0.00
Z0811071112359760153GMOKA	Innlandet	2	6000	714	0.00
Z1502090855047882024BTPXG	Oslo	6	2000	714	0.00
Z2001311023313742024IKLGM	Vestland	6	2000	714	0.00
Z1704031638488482025GFNXT	Trøndelag	2.077	5693	703	0.00
Z1608251018341022024UPCVT	Vestfold and Telemark	3	3885	693	0.00
Z0704301338371521189JRYRM	Viken	3	3875	691	0.00
Z0704301338371521189JRYRM	Viken	3	3875	691	0.00
Z0705302301205691190QBUUJ	Viken	3	3857	688	0.00
Z0705302301205691190QBUUJ	Viken	3	3857	688	0.00
Z0805072300097651195HNSLC	Vestfold and Telemark	4.6	2500	684	0.00
Z0705302239384801190GDLFO	Vestland	2.3	5000	684	0.00
Z1508291015168693185OBYUN	Agder	2.3	5000	684	0.00
Z0707022019167381190RBHRQ	Vestland	2	5706	679	0.00
Z0707022019167381190RBHRQ	Vestland	2	5706	679	0.00
Z0707022019167381190RBHRQ	Vestland	2	5706	679	0.00
Z1810171322382532025IJNJO	Trøndelag	6	1870	667	0.00
Z0807310849538310173FVIAK	Viken	2.2	5035	659	0.00
Z1908081052567712024QJHXJ	Viken	1	11000	654	0.00
Z1310211356255573101FTDJW	Viken	2	5474	651	0.00
Z1902172026310010128UXZMN	Trøndelag	2	5400	642	0.00
Z0908101043311300176YZEUW	Vestfold and Telemark	1	10650	633	0.00
Z0705302301354991189KKJCM	Nordland	3	3496	624	0.00
Z0805141516282690163EVTOX	Innlandet	2	5222	621	0.00
Z0705302238306161190QKTEL	Agder	12	865	617	0.00
Z0707022019471491190RYYUH	Vestland	3.4	3032	613	0.00
Z0705302240226861189MCMJD	Innlandet	2	5042	600	0.00
Z0807310849538310173FVIAK	Viken	2	5035	599	0.00
Z1310181328581673127DXFUX	Viken	2	5000	595	0.00
Z0810291252292120178JGSVY	Troms and Finnmark	2	5000	595	0.00
Z0705302238166461190YNDWQ	Agder	4.3	2322	594	0.00
Z0704301335506301189AOEVC	Trøndelag	2	4950	589	0.00
Z1312181111180722025HXPQT	Trøndelag	2.167	4516	582	0.00
Z0704301339352211189JQSJA	Oslo	8	1200	571	0.00
Z0704301335400571190QQJKN	Trøndelag	1	9500	565	0.00
Z1108261045106951085HWWAU	Troms and Finnmark	9.333	1000	555	0.00
Z0704301335530131189KUMHW	Trøndelag	2	4646	553	0.00
Z0707022019301511190CMIJQ	Vestfold and Telemark	2.5	3628	539	0.00
Z0705302239241641190BHFQZ	Vestfold and Telemark	5.38	1679	537	0.00
Z0812121235266750181ADZTP	Møre og Romsdal	3	3000	535	0.00
Z1207101353543670366UWKMS	Innlandet	2	4500	535	0.00
Z0704301342470181189CZMOG	Innlandet	1	8900	529	0.00
Z1703241405500042024AFNUS	Troms and Finnmark	4	2225	529	0.00
Z0811100747276510131DJTCY	Innlandet	2	4322	514	0.00
Z1302051250191270381PBEHO	Rogaland	1	8600	511	0.00
Z0911171349536210125CVXST	Viken	2	4245	505	0.00
Z1102141230561181087GUQQR	Innlandet	2	4189	498	0.00
Z0705302301386001189EPGEU	Innlandet	1.063	7837	495	0.00
Z1212201457025290395HNMCH	Innlandet	2	4062	483	0.00
Z0705302239454031190PESLX	Nordland	2.03	4000	483	0.00
Z1310011440497423125IZSZ	Trøndelag	2	4000	476	0.00
Z1608292051421393251KYOUNG	Viken	2	4000	476	0.00
Z1709050927235273251CPHDB	Nordland	3.6	2194	470	0.00
Z0705302301369141190IXOUM	Viken	2	3876	461	0.00
Z0705302301369141190IXOUM	Viken	2	3876	461	0.00
Z0710111035242400108CNYCB	Nordland	1.54	4933	452	0.00
Z0704301340427881190DZXSZ	Innlandet	2	3765	448	0.00
Z0705302239106761190CEPDL	Troms and Finnmark	3	2509	448	0.00
Z0910190911580633251RTJNM	Viken	13	577	446	0.00
Z0712102006331511194TFZVP	Nordland	10	750	446	0.00
Z0705302239436801190KYWBO	Vestland	2.5	3000	446	0.00
Z1405221502180992024OFDRV	Viken	2	3714	442	0.00
Z1801091531086922025TEOOM	Viken	12.25	600	437	0.00
Z0707022019390721190MCTPI	Vestland	3	2435	434	0.00
Z0704301344467911189ITXGV	Viken	20.5	354	432	0.00
Z0704301343324941189WJGUT	Innlandet	2	3600	428	0.00
Z0707022019281021190FFUFW	Møre og Romsdal	1.66	4312	426	0.00
Z0705302301137671190HUMOJ	Viken	2	3566	424	0.00
Z1602231942149503251XROEX	Nordland	3.75	1900	424	0.00
Z0704301340228161190IZGXX	Innlandet	2	3554	423	0.00
Z1709010728501823251MAZYI	Vestland	2	3536	421	0.00
Z1901221229153492025JQURY	Viken	7	1000	416	0.00
Z1312161520230143146CQSOT	Vestland	2	3496	416	0.00
Z0910070844370470128ZKGCV	Viken	1.9	3591	406	0.00
Z0910070844370470128ZKGCV	Viken	1.9	3591	406	0.00
Z0704301339433851189JHFTR	Vestland	8.5	800	404	0.00

Z0705302240152731189LHNXM	Vestland	6.5	1042	403	0.00
Z0705302239449621190SCANB	Innlandet	2	3302	393	0.00
Z1003191115172661026ZPAWU	Møre og Romsdal	1	6500	387	0.00
Z1003191115172661026ZPAWU	Møre og Romsdal	1	6500	387	0.00
Z1007061313442761030BSCFH	Viken	2	3240	385	0.00
Z1312171433361352024CELGT	Rogaland	2	3212	382	0.00
Z07070220200093911900EQBJ	Møre og Romsdal	1.595	4018	381	0.00
Z0704301340302211189ICHKR	Vestland	4	1600	381	0.00
Z0704301338531181189LZDPI	Rogaland	6.2	1000	369	0.00
Z0705302238351001190YLSVM	Viken	2	3089	367	0.00
Z1103011757013551075JOXPJ	Trøndelag	2	3000	357	0.00
Z1404041335009792024HXZOS	Vestland	2	3000	357	0.00
Z2001100958515402024JARSM	Trøndelag	2	3000	357	0.00
Z0905081040307760123YMQMA	Viken	2	2980	354	0.00
Z0905081040307760123YMQMA	Viken	2	2980	354	0.00
Z0707022018058871190RIWLZ	Innlandet	2.533	2345	353	0.00
Z0912141635132720172OEGTK	Oslo	16	363	345	0.00
Z0704301340349261190VHVKH	Innlandet	3	1904	340	0.00
Z2001131400272332025CLKNS	Vestland	5.33	1071	339	0.00
Z0803131328518400153JWCGW	Nordland	1	5707	339	0.00
Z0712102007095981190SJZRE	Nordland	3	1869	333	0.00
Z0805141432287660163MDSIK	Viken	2	2768	329	0.00
Z0705302239015651190ALVMZ	Vestland	1	5500	327	0.00
Z1002030935041201037ILEIM	Vestland	2.3	2385	326	0.00
Z1802061251213222025USBYF	Innlandet	4	1364	324	0.00
Z1002231413192790129LBLLG	Agder	3	1800	321	0.00
Z1212171626074573252ERAVU	Vestland	1	5393	321	0.00
Z0705302301150711190QXPZJ	Vestfold and Telemark	2.84	1884	318	0.00
Z1410301240308103110ACHNX	Viken	2	2666	317	0.00
Z0712102007354461189TAMCP	Innlandet	2	2612	311	0.00
Z0712102007354461189TAMCP	Innlandet	2	2612	311	0.00
Z0810100905196893251LKMDQ	Viken	2.67	1930	306	0.00
Z0910190911077103251NKBAW	Viken	5	1010	300	0.00
Z0705302239079371189KKPPD	Vestland	4	1250	297	0.00
Z1004121138294103252HEOTL	Viken	1	5000	297	0.00
Z1401161257034042024IPGGB	Viken	2	2500	297	0.00
Z1601151112067303138HSQOF	Innlandet	2	2500	297	0.00
Z0705302239062771189VTYMK	Vestland	3	1650	294	0.00
Z1007061313442761030BSCFH	Viken	1.5	3240	289	0.00
Z1002030935041201037ILEIM	Vestland	2	2385	284	0.00
Z0705302238479161189JAIPV	Viken	4.75	1000	282	0.00
Z1603181041581022024GFARG	Vestland	9	527	282	0.00
Z0704301342341851190PGUDK	Innlandet	1	4730	281	0.00
Z0712102007358381189ZPDXP	Innlandet	2	2361	281	0.00
Z0704301340372621189MHNJR	Innlandet	1.5	3125	279	0.00
Z0704301340403401190HTVDS	Innlandet	2	2338	278	0.00
Z0712102007368031189SNPUR	Innlandet	2	2337	278	0.00
Z0707022020077061190IIIFNX	Møre og Romsdal	2.845	1630	276	0.00
Z0704301343510881189QPAYD	Oslo	6	771	275	0.00
Z120207101835435251YDKZI	Innlandet	2	2300	274	0.00
Z1405051252559660384IQKGL	Innlandet	2	2300	274	0.00
Z0811131231453990182OKQNL	Viken	1.5	3000	268	0.00
Z0705302238295601189VMJWC	Agder	3	1493	266	0.00
Z0705302301353651189OVPTV	Viken	0.095	47000	266	0.00
Z0705302239127251189HMYEX	Viken	2	2232	265	0.00
Z0705302239001741190NGQIM	Vestland	1	4380	260	0.00
Z2001221358214972024YQVQK	Trøndelag	2	2190	260	0.00
Z0705302239035851190MVCJF	Møre og Romsdal	1.75	2502	260	0.00
Z0704301337388031190NTLNC	Vestland	3	1441	257	0.00
Z0704301340371211190LEGRU	Innlandet	1.5	2880	257	0.00
Z0705302239004781189ELAO	Rogaland	0.03	143504	256	0.00
Z0803121249387190125ONVAE	Viken	2	2030	241	0.00
Z0712102006484381194NZZAN	Nordland	3.13	1279	238	0.00
Z0704301335389581189WPXFE	Rogaland	2	2000	238	0.00
Z0704301340195201190DVIDQ	Vestland	5	800	238	0.00
Z1111101235176093251RPMZX	Oslo	2	2000	238	0.00
Z0902061007433590179FZIZW	Nordland	2	1995	237	0.00
Z1401251810467033251DZVCI	Nordland	5.77	690	237	0.00
Z0704301341423491189LWKM	Viken	2	1977	235	0.00
Z0807172140238840161GKCHB	Vestland	2.6	1500	232	0.00
Z0810100905196893251LKMDQ	Viken	2	1930	230	0.00
Z1108290857269430136NLGAT	Nordland	2.9	1300	224	0.00
Z0911161222369790179JTHJ	Oslo	2	1875	223	0.00
Z1102141230548681087QTDBZ	Innlandet	2	1799	214	0.00
Z1004191442239673252LQALO	Innlandet	1	3585	213	0.00
Z0705302239240411189CHRKQ	Vestfold and Telemark	2	1780	212	0.00
Z0705302239240411189CHRKQ	Vestfold and Telemark	2	1780	212	0.00
Z2001091047249252025LKCMO	Trøndelag	4	890	212	0.00

Z0705302301166341190YICFS	Viken	1.9	1864	211	0.00
Z0705302239150591189RFHBA	Troms and Finnmark	4	876	208	0.00
Z1902141253178062025GVMEQ	Trøndelag	2.883	1200	206	0.00
Z0704301341436771189MYTNN	Viken	17	200	202	0.00
Z0707022019268331190GISFF	Viken	3	1106	197	0.00
Z0704301343328691189XLMUM	Innlandet	5	648	193	0.00
Z0704301338529311189QCRCRT	Rogaland	1	3208	191	0.00
Z0805131104152660124OYSOO	Innlandet	2	1577	188	0.00
Z0705302239054851190IXHYO	Troms and Finnmark	2.272	1387	187	0.00
Z0704301339286591190HSGTE	Trøndelag	1	3100	184	0.00
Z0704301340505711189ANEDA	Innlandet	2	1546	184	0.00
Z0704301339443461189ZNHLV	Vestland	2	1500	178	0.00
Z0705302239205751190UBMSK	Troms and Finnmark	3	1000	178	0.00
Z1604110820535353251BGWVB	Innlandet	2	1460	174	0.00
Z1604110820535353251BGWVB	Innlandet	2	1460	174	0.00
Z1106210715032300152BPUVM	Møre og Romsdal	2	1420	169	0.00
Z1602011335288332025SEBBT	Trøndelag	2	1411	168	0.00
Z1104110919424680222GQUZK	Nordland	0.353	7970	167	0.00
Z2002111324184762025XVUXI	Vestland	2	1400	167	0.00
Z1307261055118723251BQLSZ	Innlandet	2.5	1080	161	0.00
Z0705302238169011190TUXPH	Agder	1.9	1379	156	0.00
Z0705302238169011190TUXPH	Agder	1.9	1379	156	0.00
Z0704301343221181190EJWE	Innlandet	3	845	151	0.00
Z0704301340272051190SZIMR	Oslo	2	1225	146	0.00
Z0704301340272051190SZIMR	Oslo	2	1225	146	0.00
Z0906121442480760132CWTVY	Innlandet	1	2432	145	0.00
Z1509041341545263184YMKGK	Trøndelag	2	1200	143	0.00
Z0705302301120141190QPPLB	Viken	5.5	432	141	0.00
Z0705302239218501190YVMPU	Vestfold and Telemark	5.53	400	132	0.00
Z1303131000272920389XLZPL	Oslo	2	1100	131	0.00
Z0704301344344891189WOWMS	Innlandet	1	2196	131	0.00
Z0705302240236061190JLJA	Viken	2.4	900	128	0.00
Z07043013374804411890OURY	Vestland	3	700	125	0.00
Z1308221502341093173TXCFR	Viken	2	1050	125	0.00
Z0811100733105280162HVIKT	Innlandet	1	2075	123	0.00
Z0705302238433361189NLIWE	Innlandet	3	688	123	0.00
Z0705302239158051190SYTAP	Troms and Finnmark	1.5	1350	120	0.00
Z1411141412348442025SBTZA	Viken	2	1000	119	0.00
Z1703070851242672024HNUEB	Innlandet	2	1000	119	0.00
Z0704301343340241189UMRBH	Innlandet	2	1000	119	0.00
Z0705302239075391190FLILC	Viken	2	999	119	0.00
Z0704301336391451190UPXOP	Vestland	1.25	1572	117	0.00
Z0811271335536653251AZIXD	Viken	4	468	111	0.00
Z1604122039583713251AEXED	Nordland	3	600	107	0.00
Z0704301340345251189XLGLI	Innlandet	2	872	104	0.00
Z1001220845546801091OLMSB	Nordland	5.8	300	103	0.00
Z0704301340392111189GJZH	Innlandet	0.66	2631	103	0.00
Z0704301336311811190SERQF	Viken	3	572	102	0.00
Z0904271426440270154RMLTJ	Viken	2	850	101	0.00
Z1001221122477980124CCCKCY	Trøndelag	3	560	100	0.00
Z1309121436410323113CJKQ	Rogaland	2	840	100	0.00
Z1001221122477980124CCCKCY	Trøndelag	3	560	100	0.00
Z0909171246318790174ZWVOF	Oslo	2	814	97	0.00
Z1101041545168571070HOFYK	Viken	3.25	500	97	0.00
Z0704301343510881189QPAYD	Oslo	2	771	92	0.00
Z0704301338074871189YLHHP	Viken	3	500	89	0.00
Z0704301338184291190YWKN	Viken	3	500	89	0.00
Z1510061057353263197BRBCM	Viken	2	720	86	0.00
Z1510061057353263197BRBCM	Viken	2	720	86	0.00
Z0705302239333211189GDFGO	Innlandet	2	700	83	0.00
Z1204250901259543251HENPS	Oslo	3.5	400	83	0.00
Z0704301342193061190SSGDL	Nordland	27.46	50	82	0.00
Z0704301338305771189IFROK	Viken	2.7	500	80	0.00
Z0704301340374381190EMKZT	Oslo	3	449	80	0.00
Z0705302238420441189FRHFG	Innlandet	2	665	79	0.00
Z0903180959252693252PBUFK	Viken	1	1323	79	0.00
Z1901031305461812024RPHGT	Innlandet	2	650	77	0.00
Z2001061350161082024YTSBX	Vestland	2	636	76	0.00
Z0811121403345080154JYUJJ	Nordland	3	400	71	0.00
Z1002151145268701010CADJH	Vestfold and Telemark	4	300	71	0.00
Z0705302239403021189YSWKX	Vestfold and Telemark	2	600	71	0.00
Z0707022019058971190GHXTX	Innlandet	2	600	71	0.00
Z1404101145278310374ZZEMX	Vestland	12	100	71	0.00
Z0704301340361071190YILZC	Oslo	5	235	70	0.00
Z1512171203556650380PEQFK	Innlandet	2	579	69	0.00
Z0804251057144870126BYEUX	Innlandet	5.75	194	66	0.00
Z1709291256210833251STSGZ	Viken	1	1100	65	0.00
Z1208231109364673116JDTEJ	Innlandet	3	350	62	0.00

Z0704301338508051189ODHHX	Troms and Finnmark	3	350	62	0.00
Z2001131400297542025AJNAD	Vestland	1.84	555	61	0.00
Z0704301338451711190BWUHJ	Rogaland	2	500	59	0.00
Z10112910430583932510VZSB	Viken	2	500	59	0.00
Z1301141034283103100VGOOS	Viken	1	1000	59	0.00
Z1309241334132470398VGVN	Vestfold and Telemark	1	1000	59	0.00
Z120709131759075325TQPYC	Oslo	2	494	59	0.00
Z1108161518532760225FXFWX	Innlandet	10	98	58	0.00
Z0712102007183511190LOYWZ	Nordland	3.1	310	57	0.00
Z0705302240191241189VLUUH	Innlandet	5.5	167	55	0.00
Z0807140807593033252GNNBB	Rogaland	2	450	54	0.00
Z1404241330551473176MNYXV	Innlandet	3	300	54	0.00
Z0903180959252693252PBUFK	Viken	0.67	1323	53	0.00
Z1304041317343663110NLRG	Vestland	2.4	364	52	0.00
Z1502051059175903252WINZP	Viken	2	420	50	0.00
Z1902121311331132025UVNCH	Rogaland	2	400	48	0.00
Z111081447210310243KDAV	Viken	1	792	47	0.00
Z0809051127301510131KMRTE	Vestland	3	245	44	0.00
Z0704301340546521189LGGDD	Nordland	1	724	43	0.00
Z0810011547348730180DAGGB	Viken	1	700	42	0.00
Z1507091339463023170AUKVH	Nordland	13.25	50	39	0.00
Z0904221206241050157JBKQK	Rogaland	2	300	36	0.00
Z1810261438534740396BIGQJ	Viken	4.5	129	35	0.00
Z1006100946259833252JIFAH	Viken	2	290	34	0.00
Z1403191421227433144LEWUL	Rogaland	2	283	34	0.00
Z1701261503406812024SLBJ	Nordland	3.58	150	32	0.00
Z0705302238397281189GLSYC	Innlandet	2	261	31	0.00
Z1402181242346323160BYNDH	Vestland	1	500	30	0.00
Z1402181242346323160BYNDH	Vestland	1	500	30	0.00
Z0705302240106821190NYRJE	Trøndelag	3	150	27	0.00
Z0811271339283093251LBMGH	Viken	2	217	26	0.00
Z0811271339283093251LBMGH	Viken	2	217	26	0.00
Z1602111521183243134SGZFK	Rogaland	1	430	26	0.00
Z1010271110454361075PHLPN	Nordland	17.75	24	25	0.00
Z1511041144368493251RHIMB	Rogaland	2	204	24	0.00
Z08070208121877801287TMZH	Viken	4	100	24	0.00
Z0908261408312173251GKEGJ	Oslo	2	199	24	0.00
Z0811261002142763251BQBDP	Viken	2	170	20	0.00
Z0811271328229723251ZTQNU	Viken	2	152	18	0.00
Z1109191126290960112RMDMV	Viken	1	300	18	0.00
Z1703121912425643251CXFWJ	Innlandet	2	150	18	0.00
Z0704301338395161190UCYOP	Rogaland	2	143	17	0.00
Z2001151132570682025IVYVL	Vestland	3	95	17	0.00
Z0705302238353271190VIEOI	Innlandet	2.5	108	16	0.00
Z2002111330383652025TPKUW	Vestland	2	128	15	0.00
Z0704301336195281190ZUSFL	Innlandet	2	126	15	0.00
Z1103071029545760130FTZTQ	Viken	2	120	14	0.00
Z1103071029545760130FTZTQ	Viken	2	120	14	0.00
Z0907231005013453251UWFRD	Rogaland	2	100	12	0.00
Z170127095337133025OCMEJ	Vestfold and Telemark	1	183	11	0.00
Z1102221025430031072HEJF	Innlandet	1	180	11	0.00
Z1102221025430031072HEJF	Innlandet	1	180	11	0.00
Z1410270954191193142MCGBF	Viken	12	15	11	0.00
Z0704301338396911190SJLYY	Rogaland	15	11	10	0.00
Z1611221121498922025MQFIC	Viken	2	50	6	0.00
Z1003110929364980117DFSHA	Innlandet	4.5	22	6	0.00
Z1107251435559780153ZNNDR	Troms and Finnmark	1	55	3	0.00
Z0704301336016671189XIBII	Innlandet	12	1	1	0.00
Z200210150506675025XLTAB	Troms and Finnmark	5	1	0	0.00
Z0704301341470791189PNZWC	Viken	101	0	-	0.00
Z1402251258146323105CKPMT	Nordland	6	0	-	0.00
Z1402251258146323105CKPMT	Nordland	0	0	-	0.00
Z1402251258146323105CKPMT	Nordland	0	0	-	0.00
Z1402251258146323105CKPMT	Nordland	0	0	-	0.00
Z0707022020113801190BWHOI	Rogaland	14	0	-	0.00
Z0707022019283471190TTIVM	Vestfold and Telemark	31	0	-	0.00
Z0704301342143521189IGZKX	Møre og Romsdal	0	153000	-	0.00
Z1801151134299032025UMIDR	Vestfold and Telemark	32.69	0	-	0.00
Z1801151134299032025UMIDR	Vestfold and Telemark	36	0	-	0.00
Z0707022019518071190DPSTH	Viken	42.5	0	-	0.00
Z0805072303303191195RTFAF	Troms and Finnmark	3	0	-	0.00
Z0712172011167621189ZWZQI	Troms and Finnmark	5.5	0	-	0.00
Z0805072258437461194SSQRQ	Viken	2	0	-	0.00
Z0805072258437461194SSQRQ	Viken	2	0	-	0.00
Z0805072258437461194SSQRQ	Viken	2	0	-	0.00
Z0805072258437461194SSQRQ	Viken	2	0	-	0.00
Z0704301338555711189YMPZM	Rogaland	0	0	-	0.00
Z0704301338555711189YMPZM	Rogaland	0	0	-	0.00

Z0707022019331351190KKMDS	Innlandet	2	0	-	0.00
Z0707022019331351190KKMDS	Innlandet	0	3668455	-	0.00
Z10052509403373325CMXCH	Nordland	23	0	-	0.00
Z0707022019312671190MQWUB	Viken	2.17	0	-	0.00
Z0809090930421290156GOGQX	Trøndelag	2	0	-	0.00
Z0809090930421290156GOGQX	Trøndelag	0	0	-	0.00
Z0709110929542531190WAQTA	Trøndelag	0	349823	-	0.00
Z09011191506527190130EEFPH	Vestfold and Telemark	0	2592	-	0.00
Z0707022019325671190MQVQJ	Møre og Romsdal	0	0	-	0.00
Z0707022019325671190MQVQJ	Møre og Romsdal	0	0	-	0.00
Z0707022019325671190MQVQJ	Møre og Romsdal	0	0	-	0.00
Z2002121255263242025WFIWK	Viken	1	0	-	0.00
Z0904271533392923251LMKGT	Viken	0	900	-	0.00
Z2002121255263242025WFIWK	Viken	1	0	-	0.00
Z0906041506105360132OEYRF	Trøndelag	0	8820	-	0.00
Z0707022020149821190ZBAEQ	Innlandet	0	1973487	-	0.00
Z0707022020007671190UBEZR	Viken	2	0	-	0.00
Z0707022020007671190UBEZR	Viken	0	0	-	0.00
Z0707022020007671190UBEZR	Viken	2	0	-	0.00
Z0707022020007671190UBEZR	Viken	2	0	-	0.00
Z0910200743418300155FIHLR	Trøndelag	0	5052	-	0.00
Z0805072301521351189XFBD	Møre og Romsdal	9	0	-	0.00
Z0904011101253460122JYOOT	Nordland	0	0	-	0.00
Z1102091318036070208HAXTR	Innlandet	100	0	-	0.00
Z0707022020149821190ZBAEQ	Innlandet	1	0	-	0.00
Z0707022020149821190ZBAEQ	Innlandet	1	0	-	0.00
Z1003020920077071089EPLFK	Innlandet	2	0	-	0.00
Z0707022020129561190DIHLF	Rogaland	2	0	-	0.00
Z0707022020129561190DIHLF	Rogaland	2	0	-	0.00
Z0704301343424891189VPLUJ	Vestland	34	0	-	0.00
Z2002111328514652025MBSHJ	Vestland	15.333	0	-	0.00
Z0709110929538081190MNJOU	Nordland	4	0	-	0.00
Z0911121948334421126ITGFW	Agder	43	0	-	0.00
Z1010081402003721048YCNMI	Nordland	12.9	0	-	0.00
Z0707022020065421190BFXDY	Viken	12	0	-	0.00
Z07053023013749511890WWKC	Nordland	4.25	0	-	0.00
Z0805072258345891190XIFFV	Viken	0	6454	-	0.00
Z1910030841493602025YJPPL	Viken	46	0	-	0.00
Z1910030841493602025YJPPL	Viken	0	0	-	0.00
Z2001021005347512025EJTGF	Møre og Romsdal	19.5	0	-	0.00
Z2001021005347512025EJTGF	Møre og Romsdal	8.5	0	-	0.00
Z2001021005347512025EJTGF	Møre og Romsdal	12	0	-	0.00
Z2001311514269872024GVUJP	Vestland	38.4	0	-	0.00
Z0705302238420241190IVGZB	Viken	2	0	-	0.00
Z0705302238420241190IVGZB	Viken	2	0	-	0.00
Z0705302238420241190IVGZB	Viken	2	0	-	0.00
Z0705302238420241190IVGZB	Viken	2	0	-	0.00
Z2001131400289152025JNXBZ	Vestland	0	0	-	0.00
Z2001131400289152025JNXBZ	Vestland	0	0	-	0.00
Z2001131400289152025JNXBZ	Vestland	0	0	-	0.00
Z2001131400289152025JNXBZ	Vestland	0	0	-	0.00
Z0705302238440561189HPVUG	Innlandet	3.81	0	-	0.00
Z0705302240111191189QRGFM	Innlandet	2	0	-	0.00
Z0705302239077261189SETSQ	Troms og Finnmark	4.13	0	-	0.00
Z0705302239406351190XVTI	Vestland	2	0	-	0.00
Z0805260752535490176KZPUZ	Innlandet	2.333	0	-	0.00
Z0704301340346271189GEDPW	Innlandet	2	0	-	0.00
Z0704301340346271189GEDPW	Innlandet	2	0	-	0.00
Z0704301340346271189GEDPW	Innlandet	2	0	-	0.00
Z0704301335488631189BCBSY	Trøndelag	8.5	0	-	0.00
Z0704301335488631189BCBSY	Trøndelag	2	0	-	0.00
Z0704301335488631189BCBSY	Trøndelag	2	0	-	0.00
Z2001220907299572024KRRNF	Vestfold and Telemark	2	0	-	0.00
Z2001220907299572024KRRNF	Vestfold and Telemark	2	0	-	0.00
Z2001220907299572024KRRNF	Vestfold and Telemark	2	0	-	0.00
Z0805072258542321194IZBCV	Innlandet	2	0	-	0.00
Z0805072258542321194IZBCV	Innlandet	2	0	-	0.00
Z0704301335492561189GWSQB	Trøndelag	5.667	0	-	0.00
Z200122161319222024DDZEK	Trøndelag	0.5	0	-	0.00
Z0705302240096701189YBEWG	Innlandet	0	47024	-	0.00
Z0705302238589511190WPIRJ	Møre og Romsdal	7.9	0	-	0.00
Z0705302240148801189LDKPZ	Innlandet	0	55000	-	0.00
Z1712041033429722025ZMSVR	Innlandet	2.5	0	-	0.00
Z1712041033429722025ZMSVR	Innlandet	2.833	0	-	0.00
Z0707022019446561190KDEXD	Innlandet	0	569924	-	0.00
Z0705302301140481190HWERV	Viken	0	29884	-	0.00
Z0707022019446561190KDEXD	Innlandet	0	0	-	0.00

Z0707022019446561190KDEXD	Innlandet	0	0	-	0.00
Z0705302301306591189LGCEY	Viken	0	49776	-	0.00
Z0707022019446561190KDEXD	Innlandet	0	0	-	0.00
Z0805072258559761195YJYMN	Innlandet	0	0	-	0.00
Z0805072258559761195YJYMN	Innlandet	0	0	-	0.00
Z0805072259097551190IUKDW	Innlandet	0	19000	-	0.00
Z0705302240313601189LOFBK	Agder	4.3	0	-	0.00
Z0705302301114421189TEIVE	Vestfold and Telemark	2	0	-	0.00
Z0705302301114421189TEIVE	Vestfold and Telemark	2	0	-	0.00
Z0707022019536141190KDJR	Innlandet	2	0	-	0.00
Z0901200925193120177KGVF	Innlandet	0	2592	-	0.00
Z0707022019536141190KDJR	Innlandet	2	0	-	0.00
Z0805072303038811194OIMMF	Nordland	9.875	0	-	0.00
Z0705302239223621189BPTPH	Troms and Finnmark	5	0	-	0.00
Z0708231228123690158NFADV	Trøndelag	0	0	-	0.00
Z0805072258570031195DVNOH	Innlandet	2	0	-	0.00
Z0805072259389151190ETSIQ	Viken	4	0	-	0.00
Z0805072259389151190ETSIQ	Viken	0	0	-	0.00
Z1808101311196132025YPRMX	Vestfold and Telemark	2	0	-	0.00
Z2001221427066062024IVSJD	Trøndelag	8.444	0	-	0.00
Z2001221427066062024IVSJD	Trøndelag	12	0	-	0.00
Z0705302238514181190QTDFI	Trøndelag	2	0	-	0.00
Z1501231328425712025QMSHX	Viken	3.25	0	-	0.00
Z1501231328425712025QMSHX	Viken	2	0	-	0.00
Z1501231328425712025QMSHX	Viken	3.88	0	-	0.00
Z1408221607013193251ADZQE	Vestfold and Telemark	2	0	-	0.00
Z0705302239183921189LGDPS	Vestfold and Telemark	0	17481	-	0.00
Z1408221607013193251ADZQE	Vestfold and Telemark	2	0	-	0.00
Z0705302239284671189RLNXT	Vestfold and Telemark	0	496500	-	0.00
Z0704301337442261189WOPTS	Viken	22	0	-	0.00
Z0807031431158140135SMEZD	Møre og Romsdal	14	0	-	0.00
Z0705302239258841190NSFDD	Vestfold and Telemark	0	153300	-	0.00
Z0705302239258841190NSFDD	Vestfold and Telemark	0	153300	-	0.00
Z0705302239124111189BRDNE	Viken	47.5	0	-	0.00
Z0705302239124111189BRDNE	Viken	7.5	0	-	0.00
Z0705302238200251189OUHKP	Agder	0	39128	-	0.00
Z0705302239124111189BRDNE	Viken	4.5	0	-	0.00
Z0805072300171501194SJQSV	Agder	0	57038	-	0.00
Z0705302239124111189BRDNE	Viken	2	0	-	0.00
Z0705302239124111189BRDNE	Viken	2.5	0	-	0.00
Z0705302239124111189BRDNE	Viken	45.5	0	-	0.00
Z0805072259068451195VQGHC	Innlandet	0	33500	-	0.00
Z0705302239124111189BRDNE	Viken	2	0	-	0.00
Z0705302239124111189BRDNE	Viken	8.5	0	-	0.00
Z0705302239124111189BRDNE	Viken	2	0	-	0.00
Z0705302239124111189BRDNE	Viken	2	0	-	0.00
Z0705302239124111189BRDNE	Viken	15	0	-	0.00
Z0705302239124111189BRDNE	Viken	2	0	-	0.00
Z0704301341021261189RMEAB	Innlandet	0	19656	-	0.00
Z0811271257213673251ZMMIA	Viken	2	0	-	0.00
Z0811271257213673251ZMMIA	Viken	2	0	-	0.00
Z0811271257213673251ZMMIA	Viken	2	0	-	0.00
Z0712102007380691190EOYGJ	Agder	3	0	-	0.00
Z0705302301376111189GSHCS	Viken	2	0	-	0.00
Z0704301336411161189RAOYN	Viken	1	0	-	0.00
Z1904041456579052025HDLIK	Innlandet	5	0	-	0.00
Z0704301340347771189RGMCV	Innlandet	2	0	-	0.00
Z0704301340347771189RGMCV	Innlandet	2	0	-	0.00
Z0707022020182611190ZGANG	Agder	1.9	0	-	0.00
Z0707022020182611190ZGANG	Agder	0	0	-	0.00
Z0707022020182611190ZGANG	Agder	1.9	0	-	0.00
Z0705302240211221189JPAYX	Innlandet	0	15000	-	0.00
Z0707022020182611190ZGANG	Agder	0	262226	-	0.00
Z0707022020182611190ZGANG	Agder	0	0	-	0.00
Z1712041033442802025QADTV	Innlandet	2	0	-	0.00
Z2001021245128902025QAXUD	Trøndelag	59.5	0	-	0.00
Z0705302239443241190TQKCO	Vestland	2.36	0	-	0.00
Z0707022019552991190BNXYL	Troms and Finnmark	8.833	0	-	0.00
Z2001171305028672024HIBRI	Møre og Romsdal	14.32	0	-	0.00
Z1701270953348692025SSII	Vestfold and Telemark	2	0	-	0.00
Z1701270953348692025SSII	Vestfold and Telemark	2	0	-	0.00
Z0705302240086861189XONTL	Innlandet	2	0	-	0.00
Z0705302240086861189XONTL	Innlandet	3.95	0	-	0.00
Z0704301342294171190GZSPI	Møre og Romsdal	0	35000	-	0.00
Z0705302301262611190JATCR	Vestland	0	202100	-	0.00
Z0705302301262611190JATCR	Vestland	0	0	-	0.00
Z0805072259095671190GXRYL	Innlandet	2	0	-	0.00

Z0704301340226301190RZCKA	Innlandet	2	0	-	0.00
Z0704301340226301190RZCKA	Innlandet	2	0	-	0.00
Z0712172011010061189QSPGV	Møre og Romsdal	0	562202	-	0.00
Z0705302239027461190DHVMQ	Vestland	0	165179	-	0.00
Z0704301338338241190THVCW	Nordland	3.25	0	-	0.00
Z0705302239566951189XBPMM	Nordland	0	0	-	0.00
Z0705302239353001190NQHPV	Innlandet	2.429	0	-	0.00
Z0705302239353001190NQHPV	Innlandet	2.429	0	-	0.00
Z0705302239007411189SOZUI	Rogaland	2	0	-	0.00
Z0705302240144331190IUQVQ	Innlandet	2	0	-	0.00
Z0705302240144331190IUQVQ	Innlandet	2	0	-	0.00
Z0705302238238191189VYXHS	Agder	4.66	0	-	0.00
Z0712102007087321189RGZV	Nordland	3	0	-	0.00
Z0705302238580711189KCACX	Vestland	0	164627	-	0.00
Z0705302238580711189KCACX	Vestland	0	0	-	0.00
Z0705302238580711189KCACX	Vestland	0	0	-	0.00
Z0705302238580711189KCACX	Vestland	0	0	-	0.00
Z1706160929121933252DLWER	Viken	0	162643	-	0.00
Z1706160929121933252DLWER	Viken	2	0	-	0.00
Z0705302239084731190TNHUR	Vestfold and Telemark	0	158045	-	0.00
Z0705302239084731190TNHUR	Vestfold and Telemark	0	0	-	0.00
Z2001151131031182024IJNP	Vestland	2	0	-	0.00
Z0705302239235161189ORLCN	Vestfold and Telemark	2	0	-	0.00
Z200117130502323024MWDAH	Møre og Romsdal	2.5	0	-	0.00
Z0805072301594721195UAHNT	Møre og Romsdal	0	5745	-	0.00
Z0705302239176691190JYYWW	Vestfold and Telemark	2	0	-	0.00
Z0705302239176691190JYYWW	Vestfold and Telemark	2	0	-	0.00
Z0704301335504301189XATUC	Trøndelag	0	140000	-	0.00
Z0704301335504301189XATUC	Trøndelag	0	0	-	0.00
Z0704301335504301189XATUC	Trøndelag	0	0	-	0.00
Z070530224004431189PBICQ	Troms and Finnmark	3.5	0	-	0.00
Z2001131400304672025LLPIZ	Vestland	0.8	0	-	0.00
Z0709110929587841189BCAOJ	Trøndelag	2	0	-	0.00
Z0704301343375611190JCGS	Trøndelag	0	63000	-	0.00
Z0704301339370141189TAVDL	Troms and Finnmark	0	10000	-	0.00
Z0705302239164561189IJIXN	Troms and Finnmark	4.75	0	-	0.00
Z2001131400301132025MLKJH	Vestland	13	0	-	0.00
Z1810090831023952025MPVBF	Trøndelag	0	0	-	0.00
Z0805072302328521189EAJPY	Nordland	0	5683648	-	0.00
Z0704301339271911190UMPSN	Trøndelag	0	15000	-	0.00
Z0712102007240611189CYLBW	Nordland	0	112898	-	0.00
Z0712102007240611189CYLBW	Nordland	32.88	0	-	0.00
Z0705302239499691189SRUHE	Nordland	2.5	0	-	0.00
Z0705302239499691189SRUHE	Nordland	10.3	0	-	0.00
Z0705302239358311190ODCXT	Trøndelag	1.9	0	-	0.00
Z0705302239358311190ODCXT	Trøndelag	1.9	0	-	0.00
Z0705302239358311190ODCXT	Trøndelag	1.9	0	-	0.00
Z0705302239358311190ODCXT	Trøndelag	1.9	0	-	0.00
Z0704301335310341190RZTUF	Rogaland	2	0	-	0.00
Z1312171432121042024OTPYI	Rogaland	2	0	-	0.00
Z0705302239284541190UFDVV	Vestfold and Telemark	5.9075	0	-	0.00
Z0705302239268601190HYVQO	Vestfold and Telemark	2	0	-	0.00
Z0805072303397001194WBQXN	Troms and Finnmark	2	0	-	0.00
Z0805072303397001194WBQXN	Troms and Finnmark	2	0	-	0.00
Z2001151236333772025TAUUM	Viken	42.17	0	-	0.00
Z2001021245137352025QFQJO	#N/B	0	0	-	0.00
Z0704301343326311189GQZIH	Innlandet	2	0	-	0.00
Z0705302301270911190NQQYA	Viken	0	0	-	0.00
Z0705302301270911190NQQYA	Viken	0	0	-	0.00
Z0705302301270911190NQQYA	Viken	0	0	-	0.00
Z0705302301270911190NQQYA	Viken	0	0	-	0.00
Z1212201456232630395TQFEO	Innlandet	2.25	0	-	0.00
Z0911262100460621126EGKRN	Nordland	7.8	0	-	0.00
Z1302261012012193158LDXYV	Innlandet	100	0	-	0.00
Z0805072259107221194IOGEN	Innlandet	0	6750	-	0.00
Z1302261012012193158LDXYV	Innlandet	3.6	0	-	0.00
Z1302261012012193158LDXYV	Innlandet	5	0	-	0.00
Z0704301340392111189JGIZH	Innlandet	0	2631	-	0.00
Z0805072302152061194OEQQB	Trøndelag	2	0	-	0.00
Z0805072302152061194OEQQB	Trøndelag	2	0	-	0.00
Z0705302301325961189YUXJI	Vestfold and Telemark	2.44	0	-	0.00
Z0709111124527950116OBTNI	Innlandet	0	80506	-	0.00
Z0704301341421931189JHGXC	Viken	0	5728	-	0.00
Z1003011341526221028AAQZM	Innlandet	0.4	0	-	0.00
Z0709111124527950116OBTNI	Innlandet	0	0	-	0.00
Z0709111124527950116OBTNI	Innlandet	0	0	-	0.00
Z0709111124527950116OBTNI	Innlandet	0	0	-	0.00

Z07091111245279501160BTNI	Innlandet	0	0	-	0.00
Z07091111245279501160BTNI	Innlandet	0	0	-	0.00
Z07091111245279501160BTNI	Innlandet	0	0	-	0.00
Z07091111245279501160BTNI	Innlandet	0	0	-	0.00
Z2001170934474812024PSYEF	Vestland	9	0	-	0.00
Z1003311024427300117NIUNP	Viken	0	6465	-	0.00
Z1608251018349302025RIZZO	Vestfold and Telemark	3	0	-	0.00
Z0704301341011811189BCGCK	Innlandet	6.75	0	-	0.00
Z0709071345360750122NQCLN	Trøndelag	5	0	-	0.00
Z0707022019147011190ZTKCF	Troms and Finnmark	3	0	-	0.00
Z0705302240100571190WEEHY	Vestland	61.625	0	-	0.00
Z0704301337341191190PUWOK	Viken	0	6400	-	0.00
Z0704301335211671190BIAHD	Agder	0	25000	-	0.00
Z1003181326148841091LYNGO	Agder	3	0	-	0.00
Z0705302239361481189QYPAK	Trøndelag	0	65591	-	0.00
Z0705302239361481189QYPAK	Trøndelag	0	0	-	0.00
Z1009241229466791014PUUGU	Trøndelag	0	14995	-	0.00
Z1010081356094380166EEBWL	Møre og Romsdal	2	0	-	0.00
Z1010081356094380166EEBWL	Møre og Romsdal	2	0	-	0.00
Z1010081356094380166EEBWL	Møre og Romsdal	2	0	-	0.00
Z1010081356094380166EEBWL	Møre og Romsdal	2	0	-	0.00
Z0707022019401901190VNFB	Innlandet	0	0	-	0.00
Z1001261733145651029WWWAU	Innlandet	3	0	-	0.00
Z1001261733145651029WWWAU	Innlandet	3	0	-	0.00
Z1001261733145651029WWWAU	Innlandet	3	0	-	0.00
Z1003020920105661089PTMLD	Innlandet	2.33	0	-	0.00
Z0705302239200281189YPBNW	Troms and Finnmark	0	350	-	0.00
Z1102070844335290192HKRIT	Vestfold and Telemark	0	12577	-	0.00
Z2001131527168362025ZHLFQ	Vestland	0	61091	-	0.00
Z2001131527174472025PFBCZ	Vestland	0	0	-	0.00
Z07091111245279501160BTNI	Innlandet	0	80506	-	0.00
Z1102161836247743252NGVMU	Viken	0	1320	-	0.00
Z1101051323350381014YMAZF	Viken	0	5000	-	0.00
Z0704301338339911190RMUUG	Nordland	0	675	-	0.00
Z0704301338192531190NBKVQ	Viken	0	59000	-	0.00
Z0704301338192531190NBKVQ	Viken	0	0	-	0.00
Z1611111237400802024SDRHG	Innlandet	2	0	-	0.00
Z1611111237400802024SDRHG	Innlandet	2	0	-	0.00
Z100913131110850100SCQDI	Troms and Finnmark	0	5000	-	0.00
Z0911021219369100184MOFXZ	Troms and Finnmark	0	14824	-	0.00
Z0805072259187081189QEEDM	Innlandet	2	0	-	0.00
Z1106061358228070170AQNBY	Innlandet	0	6060	-	0.00
Z2001021015454652024ZDDFU	Møre og Romsdal	0	0	-	0.00
Z0808221312373770126NJUI	Viken	2	0	-	0.00
Z1110121426267851099ZCZDN	Nordland	0	3100	-	0.00
Z0808221312373770126NJUI	Viken	2.48	0	-	0.00
Z0808221312373770126NJUI	Viken	1.53	0	-	0.00
Z0808221312373770126NJUI	Viken	2.42	0	-	0.00
Z0808221312373770126NJUI	Viken	1.63	0	-	0.00
Z0704301340229841190UYDBH	Innlandet	2	0	-	0.00
Z0704301337562281189KPBHF	Vestland	56.25	0	-	0.00
Z1001052154527073252RWCTU	Viken	0	2500	-	0.00
Z0704301342288091190EOEOA	Møre og Romsdal	5.75	0	-	0.00
Z0712102004368841195AWCBO	Nordland	0	43060	-	0.00
Z0712102004368841195AWCBO	Nordland	31.5	0	-	0.00
Z0704301336474471189LIRYK	Vestland	0	1000000	-	0.00
Z0705302238338191189ZOYIR	Viken	2	0	-	0.00
Z0707022019544501190UGUHP	Innlandet	0	0	-	0.00
Z0705302239488471189EAMSZ	Innlandet	2	0	-	0.00
Z0704301343210061190AVYUP	Innlandet	2	0	-	0.00
Z0711212004556341189MECPW	Innlandet	0	100	-	0.00
Z0705302240137841189QWHIK	Trøndelag	0	150	-	0.00
Z0705302240146021190XSGKO	Trøndelag	0	200	-	0.00
Z0811121112435320171GWDIW	Trøndelag	2	0	-	0.00
Z0811121112435320171GWDIW	Trøndelag	2	0	-	0.00
Z0704301338555711189YMPZM	Rogaland	0	0	-	0.00
Z0811121112435320171GWDIW	Trøndelag	2	0	-	0.00
Z0811121112435320171GWDIW	Trøndelag	2	0	-	0.00
Z1701270953361962024RCVGP	Vestfold and Telemark	1	0	-	0.00
Z0705302240223491190LSBQX	Innlandet	0	2525	-	0.00
Z0705302239379631189YGADY	Innlandet	2	0	-	0.00
Z0811111342434920130IHF	Troms and Finnmark	4.5	0	-	0.00
Z0710032243489601194MXXXU	Nordland	0	19820	-	0.00
Z0705302301367811190KAVVK	Vestland	5	0	-	0.00
Z0704301342263801190ZYGIS	Møre og Romsdal	1.248	0	-	0.00
Z0705302239479091190OVBUG	Nordland	0	4500	-	0.00
Z1004202314110553251IKLVM	Viken	0	1200	-	0.00
Z0805201006033590107OSBUK	Nordland	0	5000	-	0.00

Z0805072301419731195ONWNW	Møre og Romsdal	0.8	0	-	0.00
Z091021118493330135WELUU	Viken	2	0	-	0.00
Z0908211421308420171WLFZC	Møre og Romsdal	0	3000	-	0.00
Z0805072302170131195MREUX	Trøndelag	0	31786	-	0.00
Z0805072302170131195MREUX	Trøndelag	1.5	0	-	0.00
Z1608251018273662024XZPZZ	Vestfold and Telemark	3	0	-	0.00
Z1608251018330932025IFRRR	Vestfold and Telemark	49	0	-	0.00
Z0806161220398183252DPZTW	Viken	4.3	0	-	0.00
Z0705302239487151189FOCHK	Nordland	0	12531	-	0.00
Z0805072303407091189DXGJP	Troms and Finnmark	4.667	0	-	0.00
Z0910021039168900151SOYRU	Troms and Finnmark	0	1000	-	0.00
Z0705302238410231189CGIFO	Innlandet	2.75	0	-	0.00
Z0705302239518691190CMBHS	Innlandet	2	0	-	0.00
Z0704301335516711189IRSPI	Trøndelag	3.5	0	-	0.00
Z0704301335516711189IRSPI	Trøndelag	3.5	0	-	0.00
Z0705302301309141189SQINP	Vestland	0	2190	-	0.00
Z1003011341526221028AAOOZM	Innlandet	0.4	0	-	0.00
Z0707022019329341190YOXXX	Innlandet	2	0	-	0.00
Z0704301335374051190QCWUR	Trøndelag	1	0	-	0.00
Z0805072258532971190YWHPB	Innlandet	0	0	-	0.00
Z0805072258532971190YWHPB	Innlandet	7	0	-	0.00
Z0704301341315891189JFPYY	Nordland	0	22500	-	0.00
Z0704301341315891189JFPYY	Nordland	0	0	-	0.00
Z0704301341315891189JFPYY	Nordland	0	0	-	0.00
Z0709110927103611194WOQJA	Nordland	0	480	-	0.00
Z0704301341315891189JFPYY	Nordland	0	0	-	0.00
Z0705302240066271189KHHIG	Troms and Finnmark	0	174119	-	0.00
Z0704301336347631189ZVLFC	Innlandet	3.3	0	-	0.00
Z0704301336347631189ZVLFC	Innlandet	3.3	0	-	0.00
Z0704301336347631189ZVLFC	Innlandet	3.3	0	-	0.00
Z0704301341367861189YIDRG	Trøndelag	2	0	-	0.00
Z0705302239050061189YNHPP	Viken	2	0	-	0.00
Z0705302239050061189YNHPP	Viken	2	0	-	0.00
Z0705302239050061189YNHPP	Viken	2.5	0	-	0.00
Z1004070920128881026QAVNW	Trøndelag	0	0	-	0.00
Z1010081356094380166EEBWL	Møre og Romsdal	2	0	-	0.00
Z1010081356094380166EEBWL	Møre og Romsdal	2	0	-	0.00
Z1010081356094380166EEBWL	Møre og Romsdal	2	0	-	0.00
Z1010081356094380166EEBWL	Møre og Romsdal	2	0	-	0.00
Z0704301341497991189TKIWJ	Møre og Romsdal	2	0	-	0.00
Z0704301341497991189TKIWJ	Møre og Romsdal	2	0	-	0.00
Z0707022020040581190CAXOE	Vestland	0	19539	-	0.00
Z0705302240167681190YYVDC	Trøndelag	0	250	-	0.00
Z0707022020040581190CAXOE	Vestland	0	0	-	0.00
Z1010312053292953252WLSZJ	Møre og Romsdal	2	0	-	0.00
Z0707022020140011190QLCBO	Troms and Finnmark	5.75	0	-	0.00
Z0705302301130051189JXLOZ	Vestfold and Telemark	2.3	0	-	0.00
Z1312171432074652024UGSUW	Rogaland	0	8972	-	0.00
Z0907070820207343251FXRUR	Innlandet	2	0	-	0.00
Z1106091524414901070EFMTV	Troms and Finnmark	2	0	-	0.00
Z1106091524414901070EFMTV	Troms and Finnmark	2	0	-	0.00
Z1106091524414901070EFMTV	Troms and Finnmark	2	0	-	0.00
Z1106091524414901070EFMTV	Troms and Finnmark	2	0	-	0.00
Z0704301342307911190WNHTQ	Innlandet	0	0	-	0.00
Z0705302240140561189QEEXQ	Innlandet	0	58977	-	0.00
Z0705302240297821189HVZQX	Agder	3	0	-	0.00
Z0705302238370761190UAQOA	Innlandet	0	328770	-	0.00
Z1905271430265932024UUTKO	Innlandet	2	0	-	0.00
Z1905271430265932024UUTKO	Innlandet	0	14974	-	0.00
Z0705302301291331190ISVHN	Viken	0	14600	-	0.00
Z0705302301291331190ISVHN	Viken	0	0	-	0.00
Z1402121532121673119UYJBL	Nordland	0	77292	-	0.00
Z0705302301291331190ISVHN	Viken	2	0	-	0.00
Z0705302238158191190MENZL	Agder	3	0	-	0.00
Z0707022019379661190ZDNER	Vestland	2	0	-	0.00
Z0707022019379661190ZDNER	Vestland	2	0	-	0.00
Z1312171432228332024LKDBL	Rogaland	2	0	-	0.00
Z0807291045132810126GBMBYW	Innlandet	2.2	0	-	0.00
Z2001021259057782025ECHBF	Trøndelag	0	0	-	0.00
Z0704301334220581190KVPHB	Viken	2	0	-	0.00
Z0705302238418811190BGQNG	Troms and Finnmark	65.667	0	-	0.00
Z1908081052567712024QJHXJ	Viken	1	0	-	0.00
Z1908081052567712024QJHXJ	Viken	0	0	-	0.00
Z0705302239198671189FPUJL	Vestfold and Telemark	2	0	-	0.00
Z1403241024183362024ZZFGF	Innlandet	0	14	-	0.00
Z0705302239274241189NXMLQ	Troms and Finnmark	5	0	-	0.00
Z0707022019325671190MQVQJ	Møre og Romsdal	0	2856352	-	0.00
Z0908311355084083251CRLKS	Viken	2	0	-	0.00

Z0908311355084083251CRLKS	Viken	2	0	-	0.00
Z0705302239208841190FWYZH	Troms and Finnmark	0	10000	-	0.00
Z0705302239208841190FWYZH	Troms and Finnmark	0	0	-	0.00
Z1408220946030803129URVRD	Møre og Romsdal	0	10000	-	0.00
Z1302111303377503146ECACO	Innlandet	3.6	0	-	0.00
Z1801161159334453131DUPTV	Nordland	8.28	0	-	0.00
Z1409251512181922024COMFF	Viken	2	0	-	0.00
Z1409251512181922024COMFF	Viken	2.33	0	-	0.00
Z0704301338315911189VRLFN	Viken	15	0	-	0.00
Z1003011341526221028AOQZM	Innlandet	0.2	0	-	0.00
Z0805072303122341194PPGEE	Troms and Finnmark	0	40000	-	0.00
Z0804220958139550181RJD0V	Nordland	4.04	0	-	0.00
Z0705302238166461190YNDWQ	Agder	0	2322	-	0.00
Z2002041558451003161SGZRV	Troms and Finnmark	3	0	-	0.00
Z0705302239216821190DXWL	Vestfold and Telemark	2	0	-	0.00
Z1702091404011632025KSGHD	Viken	15	0	-	0.00
Z1409251512181922024COMFF	Viken	2	0	-	0.00
Z1409251512181922024COMFF	Viken	0	0	-	0.00
Z1210150909509153145BYOQO	Nordland	0	250	-	0.00
Z1504151045358703251WIEDE	Rogaland	0	27500	-	0.00
Z1504151111235293251NCPYD	Rogaland	0	8000	-	0.00
Z1310181328581673127DXFUX	Viken	0	5000	-	0.00
Z1409251512181922024COMFF	Viken	8.66	0	-	0.00
Z0811101152530230135SMIAC	Innlandet	0	186670	-	0.00
Z1702091404011632025KSGHD	Viken	2	0	-	0.00
Z1702091404011632025KSGHD	Viken	2	0	-	0.00
Z1508291001165603185RWKRZ	Agder	0	3000	-	0.00
Z1004071539231441026UIJNU	Trøndelag	2	0	-	0.00
Z1202100835229993252GTGSA	Viken	2	0	-	0.00
Z1202100835229993252GTGSA	Viken	2	0	-	0.00
Z1202100835229993252GTGSA	Viken	2	0	-	0.00
Z0705302238595351189JFLLE	Møre og Romsdal	0	4642	-	0.00
Z0908061324120930126KLDYW	Vestland	8	0	-	0.00
Z0908061324120930126KLDYW	Vestland	8	0	-	0.00
Z0803071100354810155MZATE	Møre og Romsdal	5.74	0	-	0.00
Z1305141243322103129QLYWO	Troms and Finnmark	4	0	-	0.00
Z1603052015315343251UKUEB	Nordland	0	1700	-	0.00
Z150120095122338251QOIGO	Rogaland	0	0	-	0.00
Z160425135800120205UJEQX	Møre og Romsdal	2	0	-	0.00
Z1103231054229951080VUBFM	Møre og Romsdal	0	7300	-	0.00
Z1103231054229951080VUBFM	Møre og Romsdal	0	0	-	0.00
Z0907291658269990153XWAUW	Trøndelag	3	0	-	0.00
Z1510262055572733251RRGU	Rogaland	0	13153	-	0.00
Z1001052154527073252RWCTU	Viken	0	2500	-	0.00
Z0907291658269990153XWAUW	Trøndelag	3	0	-	0.00
Z1402121459450262025LGOJ	Oslo	8	0	-	0.00
Z1211050847391943129FSNZM	Trøndelag	5	0	-	0.00
Z1211050847391943129FSNZM	Trøndelag	5	0	-	0.00
Z1104110919424680222GQUZK	Nordland	0	7970	-	0.00
Z1211050847391943129FSNZM	Trøndelag	5	0	-	0.00
Z0705302301393521190ZUZUP	Vestland	0	6781	-	0.00
Z0705302301393521190ZUZUP	Vestland	0	0	-	0.00
Z0705302301393521190ZUZUP	Vestland	0	0	-	0.00
Z0705302301393521190ZUZUP	Vestland	0	0	-	0.00
Z1003191115172661026ZPAWU	Møre og Romsdal	1	0	-	0.00
Z1003311024427300117NIUNP	Viken	0	6465	-	0.00
Z1003311024427300117NIUNP	Viken	0	0	-	0.00
Z2001311320447632024POTWB	Trøndelag	4	0	-	0.00
Z0901191506527190130EFEPEH	Vestfold and Telemark	0	2592	-	0.00
Z2001311320447632024POTWB	Trøndelag	4	0	-	0.00
Z2001311320447632024POTWB	Trøndelag	4	0	-	0.00
Z1003151645571301037DBWOI	Trøndelag	2	0	-	0.00
Z1803231612008262024TQMGI	Innlandet	2.89	0	-	0.00
Z1604070907498922024MFACC	Viken	14.25	0	-	0.00
Z1011150902492981091SSWPF	#N/B	3	0	-	0.00
Z1704031638488482025GFNXT	Trøndelag	2.077	0	-	0.00
Z1707181104332842024EKCXO	Viken	0	383	-	0.00
Z1704031638488482025GFNXT	Trøndelag	2.077	0	-	0.00
Z1801262125464823251CYWIL	Viken	0	5600	-	0.00
Z1801262125464823251CYWIL	Viken	0	0	-	0.00
Z1801262125464823251CYWIL	Viken	0	0	-	0.00
Z0809011228326783252VGHBW	Viken	2	0	-	0.00
Z0904011101253460122JYOOT	Nordland	0	2350000	-	0.00
Z2002101312287512024XCODYD	Troms and Finnmark	0	0	-	0.00
Z2002101312287512024XCODYD	Troms and Finnmark	0	0	-	0.00

Z07053022403014111189JOJRV	Agder	0	5490	-	0.00
Z07053022403014111189JOJRV	Agder	3	0	-	0.00
Z1310211356255573101FTDJW	Viken	2	0	-	0.00
Z1212171626074573252ERAVU	Vestland	8	0	-	0.00
Z1212171626074573252ERAVU	Vestland	1.5	0	-	0.00
Z1509251033144992024MVOQH	Trøndelag	7.25	0	-	0.00
Z0807310849538310173FVIK	Viken	2	0	-	0.00
Z0810291252292120178JGSVY	Troms and Finnmark	2	0	-	0.00
Z2002101505066752025XLTAB	Troms and Finnmark	0	0	-	0.00
Z2002101505066752025XLTAB	Troms and Finnmark	0	0	-	0.00
Z1105131447003990100CAEFQ	Vestland	5.5	0	-	0.00
Z1803051229225442025WOVGG	Rogaland	5	0	-	0.00
Z1004202314110553251KLVM	Viken	0	1200	-	0.00
Z0705302238347011190ZCNQI	Troms and Finnmark	8	0	-	0.00
Z1805301342176952024UJSXC	Vestland	0	4015	-	0.00
Z1806151240079623103XWKOM	Innlandet	0	1700	-	0.00
Z0705302238347011190ZCNQI	Troms and Finnmark	8	0	-	0.00
Z0712102007230201189FGGBI	Nordland	0	0	-	0.00
Z1801262125464823251CYWIL	Viken	0	5600	-	0.00
Z1904061816492330128TBBEA	Nordland	3	0	-	0.00
Z0712102006320301194SISGG	Nordland	0	0	-	0.00
Z0705302239229461190TIMZV	Vestfold and Telemark	9.19	0	-	0.00
Z0705302239229461190TIMZV	Vestfold and Telemark	9.19	0	-	0.00
Z1806282020448753252TCLRB	Nordland	0	2	-	0.00
Z1212201457025290395HNMCH	Innlandet	4.66	0	-	0.00
Z1408220931151863101INVFRD	Troms and Finnmark	0	0	-	0.00
Z0704301338371521189JRYRM	Viken	3	0	-	0.00
Z14052215021809920240FDRV	Viken	2	0	-	0.00
Z0707022019301511190CMIJQ	Vestfold and Telemark	2.5	0	-	0.00
Z1004191442239673252LQALO	Innlandet	4.75	0	-	0.00
Z1812100954088882024KMGZY	Trøndelag	2.2	0	-	0.00
Z1104110919424680222GQUZK	Nordland	0	7970	-	0.00
Z0705302301137671190HUMOJ	Viken	2	0	-	0.00
Z0704301340228161190IZGXX	Innlandet	2	0	-	0.00
Z0705302301275901190GTAP	Innlandet	2	0	-	0.00
Z1312161520230143146CQSOT	Vestland	2	0	-	0.00
Z1901281001411382025FQLZY	Vestfold and Telemark	0	5040	-	0.00
Z0705302239449621190SCANB	Innlandet	2	0	-	0.00
Z2002101312267622024PPHKC	Troms and Finnmark	0	0	-	0.00
Z0704301338529311189QCRC	Rogaland	0	0	-	0.00
Z0704301338529311189QCRC	Rogaland	0	0	-	0.00
Z1807042221289033252QQRPK	Viken	0	3200	-	0.00
Z1807042221289033252QQRPK	Viken	0	0	-	0.00
Z1807042254254073252QYTZA	Viken	0	0	-	0.00
Z1409251512181922024COMFF	Viken	2	0	-	0.00
Z1903172046586730128UJKWP	Viken	0	11650	-	0.00
Z1807042254254073252QYTZA	Viken	0	0	-	0.00
Z0805141432287660163MDSIK	Viken	2	0	-	0.00
Z0705302301371651190ONIXW	Vestland	0	2690	-	0.00
Z0705302301371651190ONIXW	Vestland	0	0	-	0.00
Z0705302301371651190ONIXW	Vestland	0	0	-	0.00
Z0705302301371651190ONIXW	Vestland	0	0	-	0.00
Z2002101312302882024SNOFW	Troms and Finnmark	0	0	-	0.00
Z2002101312302882024SNOFW	Troms and Finnmark	0	0	-	0.00
Z2002101312307832024OKVNL	Troms and Finnmark	16.333	0	-	0.00
Z0705302238166461190YNDWQ	Agder	4.3	0	-	0.00
Z0707022019595411190OIDOG	Agder	0	12087	-	0.00
Z0704301336413871190OGCOE	Vestland	2	0	-	0.00
Z1701270953321992025AKSKZ	Vestfold and Telemark	0	0	-	0.00
Z1701270953321992025AKSKZ	Vestfold and Telemark	0	0	-	0.00
Z1701270953321992025AKSKZ	Vestfold and Telemark	0	0	-	0.00
Z1701270953321992025AKSKZ	Vestfold and Telemark	0	0	-	0.00
Z0704301344344891189WOWMS	Innlandet	1	0	-	0.00
Z0704301344344891189WOWMS	Innlandet	1	0	-	0.00
Z0803121249387190125ONVAE	Viken	2	0	-	0.00
Z2002101312277462024IQANL	Troms and Finnmark	0	2000	-	0.00
Z2002101312277462024IQANL	Troms and Finnmark	0	0	-	0.00
Z0705302301166341190YICFS	Viken	6.5	0	-	0.00
Z0707022020077061190IIFNX	Møre og Romsdal	0	0	-	0.00
Z0705302238169011190TUXPH	Agder	1.9	0	-	0.00
Z1802061251208042025ZWPLIC	Innlandet	0.6	0	-	0.00
Z0903180959252693252PBUFK	Viken	0	1323	-	0.00
Z0903180959252693252PBUFK	Viken	0	0	-	0.00
Z0903180959252693252PBUFK	Viken	0	0	-	0.00
Z0903180959252693252PBUFK	Viken	0.33	0	-	0.00
Z2001131527184162025JPZYP	Vestland	0	10500	-	0.00
Z1110111500067261086JOBZ	Oslo	0	1323	-	0.00
Z1110111500067261086JOBZ	Oslo	0	0	-	0.00

Z2001151131026762024BLBJB	Vestland	0	103753	-	0.00
Z0707022019268331190GISFF	Viken	3	0	-	0.00
Z1709291256210833251STSGZ	Viken	1	0	-	0.00
Z1709291256210833251STSGZ	Viken	1	0	-	0.00
Z1709291256210833251STSGZ	Viken	1	0	-	0.00
Z1308221502341093173TXCFR	Viken	2	0	-	0.00
Z1308221502341093173TXCFR	Viken	1	0	-	0.00
Z1108261045106951085HWWAU	Troms and Finnmark	9,333	0	-	0.00
Z1301141034283103100VGOOS	Viken	1	0	-	0.00
Z1301141034283103100VGOOS	Viken	1	0	-	0.00
Z0704301343342141189MMOEP	Innlandet	2	0	-	0.00
Z1309241334132470398GVVN	Vestfold and Telemark	2	0	-	0.00
Z1309241334132470398GVVN	Vestfold and Telemark	2	0	-	0.00
Z1309261247033393145JSADQ	#N/B	3	0	-	0.00
Z1901221229153492025JQURY	Viken	2	0	-	0.00
Z1901221229153492025JQURY	Viken	2	0	-	0.00
Z1901221229153492025JQURY	Viken	2	0	-	0.00
Z1901221229153492025JQURY	Viken	2	0	-	0.00
Z1805301342176952024UJSXC	Vestland	0	4015	-	0.00
Z1901221229153492025JQURY	Viken	3	0	-	0.00
Z1901221229153492025JQURY	Viken	2	0	-	0.00
Z1901221229153492025JQURY	Viken	4	0	-	0.00
Z2002101312284942024IHBDV	Troms and Finnmark	0	3000	-	0.00
Z0904271426440270154RMLTJ	Viken	2	0	-	0.00
Z0909171246318790174ZWVOF	Oslo	33	0	-	0.00
Z0810011547348730180DAGGB	Viken	1	0	-	0.00
Z0705302240053021189QRFCW	Innlandet	2	0	-	0.00
Z1401241400007162025BGWOU	Innlandet	0	690	-	0.00
Z2002101448351872025DZETL	Troms and Finnmark	0	127428	-	0.00
Z2002101448355162025FHDXM	Troms and Finnmark	0	100000	-	0.00
Z1401241400007162025BGWOU	Innlandet	0	0	-	0.00
Z1602111521183243134SGZFK	Rogaland	1	0	-	0.00
Z1602111521183243134SGZFK	Rogaland	1	0	-	0.00
Z1502051059175903252WINZP	Viken	2	0	-	0.00
Z1902121311331132025UVNCH	Rogaland	2	0	-	0.00
Z2002121307123982025GAAKS	Viken	22	0	-	0.00
Z2002130829426902024UGPHB	Oslo	5.35	0	-	0.00
Z2002141248053442024GPWQG	Rogaland	2	0	-	0.00
Z2002141248053442024GPWQG	Rogaland	2	0	-	0.00
Z2002141248053442024GPWQG	Rogaland	2	0	-	0.00
Z2002181255238532025GJSYG	Vestland	13	0	-	0.00
Z2002181255242742025CJOOU	Vestland	11	0	-	0.00
Z2002181255242742025CJOOU	Vestland	12	0	-	0.00
Z2002181255242742025CJOOU	Vestland	12	0	-	0.00
Z2002181255252712025ABQYG	Vestland	75	0	-	0.00
Z2002181255257862025XHSZM	Vestland	20	0	-	0.00
Z2002181255257862025XHSZM	Vestland	10	0	-	0.00
Z2002181255257862025XHSZM	Vestland	10	0	-	0.00
Z2002181255257862025XHSZM	Vestland	20	0	-	0.00
Z2002181255257862025XHSZM	Vestland	20	0	-	0.00
Z2002181255268552025ZDGBT	Vestland	3	0	-	0.00
Z1403191421227433144LEWUL	Rogaland	2	0	-	0.00
Z2002241320165372024HNOLX	Agder	131.7	0	-	0.00
Z2002241322511182024XQVNU	Agder	35.8	0	-	0.00
Z2002241322514102024OUOUA	Agder	3	0	-	0.00
Z2002281108578682024CCICD	Trøndelag	17	0	-	0.00
Z2002281422307752024BDIPH	Trøndelag	33.623	0	-	0.00
Z2002281422312832024SAOGD	Trøndelag	2	0	-	0.00
Z2002281422312832024SAOGD	Trøndelag	28.413	0	-	0.00
Z2002281422322282024BULUZ	Trøndelag	19.745	0	-	0.00
Z2002281422329092024ECDIJ	Trøndelag	2	0	-	0.00
Z2002281422331942024ADKVI	Trøndelag	2	0	-	0.00
Z2002281437058432024ULYRO	Trøndelag	0.238	0	-	0.00
Z2002281437061772024WABIT	Trøndelag	0.45	0	-	0.00
Z2002281437064592024XQNYZ	Trøndelag	0.585	0	-	0.00
Z2002281437070042024WNWBU	Trøndelag	54.6	0	-	0.00
Z2002281437076452024IVUKV	Trøndelag	0.078	0	-	0.00
Z2002281437079372024IRBIK	Trøndelag	0.025	0	-	0.00
Z2002281437079372024IRBIK	Trøndelag	0	0	-	0.00
Z1404101145278310374ZZEMX	Vestland	11	0	-	0.00
Z2003050905288042024WQDER	Nordland	17	0	-	0.00
Z2003050915290332024JCZVE	Nordland	14.95	0	-	0.00
Z2003050915290332024JCZVE	Nordland	14.95	0	-	0.00
Z2003050915294532024EHXXX	Nordland	32.05	0	-	0.00
Z2003051056235612024NAPVG	Nordland	14.6	0	-	0.00
Z2003091345395992025RVASP	Agder	7	0	-	0.00
Z2003091345406402025XDYKK	Agder	0	0	-	0.00
Z2003161016561602025ECSXA	Rogaland	2	0	-	0.00

Z2003201318442302024TWSCD	Møre og Romsdal	7.435	0	-	0.00
Z2003201318453532024PZPGQ	Møre og Romsdal	0	0	-	0.00
Z2003201318453532024PZPGQ	Møre og Romsdal	1.298	0	-	0.00
Z2003201318453532024PZPGQ	Møre og Romsdal	0	0	-	0.00
Z2003231603527142025LQQJP	Viken	11	0	-	0.00
Z0704301335504301189XATUC	Trøndelag	0	140000	-	0.00
Z1906040826178492025CXMOT	Vestland	0	50	-	0.00
Z1906040826178492025CXMOT	Vestland	0	0	-	0.00
Z2004010852001842025NSFCB	Innlandet	2	0	-	0.00
Z2004201312444250393FTQVL	Troms og Finnmark	15.636	0	-	0.00
Z2004201327203830393QQDGB	Troms og Finnmark	9.5	0	-	0.00
Z2004201344397000393PXBCU	Troms og Finnmark	3.4	0	-	0.00
Z2004201354570440393WKXVS	Troms og Finnmark	3	0	-	0.00
Z2004201431553740393IMENZ	Troms og Finnmark	3	0	-	0.00
Z2004201431553740393IMENZ	Troms og Finnmark	3	0	-	0.00
Z2004201431553740393IMENZ	Troms og Finnmark	3	0	-	0.00
Z2004201455381560393DKCTY	Troms og Finnmark	3	0	-	0.00
Z2004201507027080393TLRUQ	Troms og Finnmark	10	0	-	0.00
Z2005291012596032025AUXPY	Trøndelag	0	0	-	0.00
Z2006021315452622024RWVYV	Rogaland	6.3	0	-	0.00
Z2006021315457292024XALTR	Rogaland	2	0	-	0.00
Z2006021315465012024RFLWA	Rogaland	2	0	-	0.00
Z2006021315465012024RFLWA	Rogaland	2	0	-	0.00
Z2006021315465012024RFLWA	Rogaland	2	0	-	0.00
Z2006021320110072024BWAYT	Rogaland	1	0	-	0.00
Z2006021320110072024BWAYT	Rogaland	1	0	-	0.00
Z2006051339156662024MZVNA	Vestland	3	0	-	0.00
Z2006051339160992024AYXUX	Vestland	3.6	0	-	0.00
Z2006051346444002024TDFAK	Vestland	3	0	-	0.00
Z2006051346444002024TDFAK	Vestland	12.4	0	-	0.00
Z2006231224318922024VAQXV	Trøndelag	0	0	-	0.00
Z2006231224318922024VAQXV	Trøndelag	0.75	0	-	0.00
Z2006231224324592024WUDYJ	Trøndelag	0	0	-	0.00
Z2006291438564872024GTJSV	Trøndelag	5.8	0	-	0.00
Z2006291438564872024GTJSV	Trøndelag	4	0	-	0.00
Z2007020910477472024CACIQ	Vestland	50	0	-	0.00
Z1410270954191193142MCGBF	Viken	12	0	-	0.00
Z2007311136368942024CPCQF	Trøndelag	15.33	0	-	0.00
Z2007311136368942024CPCQF	Trøndelag	15.33	0	-	0.00
Z2008051446177822024RVDAQ	Trøndelag	29	0	-	0.00
Z2008280743223982025SOJLM	Agder	32	0	-	0.00
Z1902071000050500127LDQPA	Innlandet	7	0	-	0.00
Z1902071000050500127LDQPA	Innlandet	7.33	0	-	0.00
Z2009011350378042024KNTJY	Møre og Romsdal	75.95	0	-	0.00
Z2009011350378042024KNTJY	Møre og Romsdal	75.95	0	-	0.00
Z2010281024358972024USOKT	Agder	3	0	-	0.00
Z2010281024363762024BYOPF	Agder	17	0	-	0.00
Z2010281024369702024TZVUQ	Agder	5.17	0	-	0.00
Z2010281024369702024TZVUQ	Agder	5.17	0	-	0.00
Z2010281024374142024BDOQL	Agder	3	0	-	0.00
Z2010281024374142024BDOQL	Agder	3	0	-	0.00
Z2011021452399172025BOOZU	Møre og Romsdal	4.5	0	-	0.00
Z2011021452399172025BOOZU	Møre og Romsdal	4.5	0	-	0.00
Z2011021452399172025BOOZU	Møre og Romsdal	4.5	0	-	0.00
Z2011021452399172025BOOZU	Møre og Romsdal	4.5	0	-	0.00
Z2011021452399172025BOOZU	Møre og Romsdal	4.5	0	-	0.00
Z2011021452399172025BOOZU	Møre og Romsdal	4.5	0	-	0.00
Z2011021452399172025BOOZU	Møre og Romsdal	4.5	0	-	0.00
Z2011021452399172025BOOZU	Møre og Romsdal	4.5	0	-	0.00
Z2011021452399172025BOOZU	Møre og Romsdal	4.5	0	-	0.00
Z2011181204546880127TROCW	Vestland	44.25	0	-	0.00
Z2011271515091192025ETNMA	Vestfold og Telemark	2.3	0	-	0.00
Z2011271515091192025ETNMA	Vestfold og Telemark	2.3	0	-	0.00
Z2011271515091192025ETNMA	Vestfold og Telemark	2.3	0	-	0.00
Z2012221140217192024RNVXZ	Innlandet	7.25	0	-	0.00
Z2012221140217192024RNVXZ	Innlandet	0	0	-	0.00
Z2012221140217192024RNVXZ	Innlandet	7.75	0	-	0.00
Z2101081515513172024VGVJA	Vestland	32	0	-	0.00
Z2101081515513172024VGVJA	Vestland	28	0	-	0.00
Z2101081521117182024EYBYO	Vestland	22	0	-	0.00
Z2101081521117182024EYBYO	Vestland	46	0	-	0.00
Z2101081533049862024UCITK	Vestland	35	0	-	0.00
Z2101081533054322024ZVJKV	Vestland	25	0	-	0.00
Z2101111018516262024IBYNM	Viken	10.217	0	-	0.00
Z2101120821595432024UUZFW	Trøndelag	4.7	0	-	0.00
Z2101120821595432024UUZFW	Trøndelag	0	0	-	0.00
Z2101120821595432024UUZFW	Trøndelag	0	0	-	0.00
Z2101151323587652024YBVYH	Vestland	35	0	-	0.00
Z2101181655509832025GNMPC	Nordland	36.6	0	-	0.00

Z2101181655512182025OVIHV	Nordland	1	0	-	0.00
Z2101181655512182025OVIHV	Nordland	27.2	0	-	0.00
Z2101181655518642025URDQN	Nordland	9.9	0	-	0.00
Z2101181655521832025MEBFW	Nordland	0.4	0	-	0.00
Z2101181821202522025NAOVF	Nordland	14.2	0	-	0.00
Z2101221442467292025SQZCJ	Troms and Finnmark	5.83	0	-	0.00
Z2101221442469532025TVFAT	Troms and Finnmark	0	0	-	0.00
Z2101221442469532025TVFAT	Troms and Finnmark	0	0	-	0.00
Z2101221442469532025TVFAT	Troms and Finnmark	3.583	0	-	0.00
Z2101221442473142025YTFIO	Troms and Finnmark	3.667	0	-	0.00
Z2101221442473142025YTFIO	Troms and Finnmark	0	0	-	0.00
Z2101221442473142025YTFIO	Troms and Finnmark	0	0	-	0.00
Z2101221442473142025YTFIO	Troms and Finnmark	0	0	-	0.00
Z2101221442478232025AEJBH	Troms and Finnmark	6	0	-	0.00
Z2101221442480112025ZQGKV	Troms and Finnmark	3	0	-	0.00
Z2101221442485102025AXUIV	Troms and Finnmark	3.813	0	-	0.00
Z2101221442487252025RJLEE	Troms and Finnmark	3.273	0	-	0.00
Z2101221442492532025NVOFX	Troms and Finnmark	3	0	-	0.00
Z2101221442494302025FIGNZ	Troms and Finnmark	3.167	0	-	0.00
Z2101221442500882025TBBSJ	Troms and Finnmark	6.75	0	-	0.00
Z2101221442508592025QKQCV	Troms and Finnmark	4.8	0	-	0.00
Z2101221442490332025NHDWI	Troms and Finnmark	4.417	0	-	0.00
Z2101221442508592025QKQCV	Troms and Finnmark	0	0	-	0.00
Z2101221442508592025QKQCV	Troms and Finnmark	3.367	0	-	0.00
Z2101221442508592025QKQCV	Troms and Finnmark	3.667	0	-	0.00
Z2101221442508592025QKQCV	Troms and Finnmark	0	0	-	0.00
Z2101221442508592025QKQCV	Troms and Finnmark	0	0	-	0.00
Z2102090845301302024IHBDN	Rogaland	0	0	-	0.00
Z2102090845301302024IHBDN	Rogaland	0	0	-	0.00
Z2102091534477812025VHNBA	Viken	1	0	-	0.00
Z2102151906535972024YBCMY	Innlandet	7	0	-	0.00
Z2102151906535972024YBCMY	Innlandet	7	0	-	0.00
Z2102151906535972024YBCMY	Innlandet	7	0	-	0.00
Z2102151906535972024YBCMY	Innlandet	7	0	-	0.00
Z2102151906541182024FBIAM	Innlandet	11	0	-	0.00
Z2102151906541182024FBIAM	Innlandet	11	0	-	0.00
Z2102151906541182024FBIAM	Innlandet	11	0	-	0.00
Z2102151906541182024FBIAM	Innlandet	11	0	-	0.00
Z2102161140433002024BCPJB	Trøndelag	0	0	-	0.00
Z2104221335133812025LDLVT	Innlandet	11	0	-	0.00
		0	0	-	0.00