Licence number L9356/2022/1

Licence holder Lunnon Metals Limited

**ACN** 82 600 008 848

Registered business address 10/33 Richardson Street

WEST PERTH WA 6005

**DWER file number** DER2022/000509

**Duration** 16/02/2023 to 15/02/2026

**Date of issue** 15/02/2023

Premises details Kambalda Nickel Foster/Warren Project

M15/1568 (Part), M15/1570 (Part), M15/1572 (Part), M15/1571 (Whole), M15/1573 (Part), M15/1575 (Whole), M15/1549 (Part), M15/1569 (Part), M15/1574 (Part), M15/1670 (Part), M15/1669 (Part), M15/1668 (Part) As defined by the coordinates in Schedule 2 of the

licence.

Prescribed premises category description (Schedule 1, Environmental Protection Regulations 1987)	Assessed design capacity	
Category 6: Mine Dewatering	1,700,000 tonnes per year	

This licence is granted to the licence holder, subject to the attached conditions, on 15 February 2023, by:

#### Alana Kidd

#### Manager, Resource Industries

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

# **Licence history**

Date	Reference number	Summary of changes
15/03/2023	L9356/2022/1	Licence granted.

# Interpretation

#### In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

### **Licence conditions**

The licence holder must ensure that the following conditions are complied with:

### Infrastructure and equipment

#### **Construction phase**

- **1.** The licence holder must install the infrastructure and equipment listed in Table 1, in accordance with;
  - (a) the corresponding installation requirement; and
  - (b) at the corresponding infrastructure location; and
  - (c) within the corresponding timeframe,

as set out in Table 1.

**Table 1: Installation requirements** 

Infrastructure and equipment	Installation requirement	Infrastructure location	Timeframe	
Dewatering pipeline	6.5 km of 315 mm HDPE pipeline installed from Foster and or Warren mine shafts in the existing cleared corridors and contained in v-drains;	Schedule 1, Figure 2	Prior to commencement of dewatering.	
	Pipelines to be fitted with leak detection, telemetry control with automatic shutdown capability and flow meters; and			
	<ul> <li>Install 100 m from the shoreline a discharge manifold to reduce discharge velocity at discharge location.</li> </ul>			
Gensets	3 x 800 kVA or up to a total of 2400 kVA;	Schedule 1, Figure 2,		
	With an electric submersible bore pump;			
	<ul> <li>Fuel tank capacity of 110%, self- bunded or double wall bunded tanks; and</li> </ul>			
	Spill kits proximal.			
Sediment Settling Containers	6 x 75 kL sea containers or equivalent with capacity for 5 hours retention of dewater;	Schedule 1, Figure 3	Prior to commencement of stage 2 dewatering	
	Bunded;		(unless	
	<ul> <li>Float switch to control pump(s); and</li> </ul>		sampling indicates TSS complies with	
	Isolation valve on each tank.		Table 4).	

#### **Compliance reporting**

- 2. The licence holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being installed:
  - (a) undertake an audit of their compliance with the requirements of condition 1; and
  - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- **3.** The Environmental Compliance Report required by condition 2, must include as a minimum the following:
  - (a) certification by an engineer that the dewatering pipelines as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
  - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
  - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

#### **Operational Phase**

4. The licence holder must ensure that the site infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Dewatering pipeline from Foster and or Warren mine shafts and manifold	Daily monitoring for visual integrity and leak detection.	Schedule 1, Figure 2
Gensets	Daily monitoring for visual integrity.  Fuel will be stored in day tanks.	Schedule 1, Figure 2
Sediment Settling Containers	Daily monitoring for visual integrity.  Dewater to pass though in stage 1 and stage 2 dewatering.	Schedule 1, Figure 3

## **Emissions and discharges**

#### **General**

- 5. The works approval holder shall immediately recover, or remove and dispose of, spills of environmentally hazardous materials including fuel, oil, or other hydrocarbons, whether inside or outside an engineered containment system.
- **6.** The works approval holder shall ensure that all material used for the recovery, removal, and/or disposal of environmentally hazardous materials is stored in an impermeable container prior to disposal at an appropriately authorised facility.

#### Discharges to surface water

7. The licence holder must ensure that the emissions specified in Table 3, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 3: Authorised discharges and discharge points

Emission	Discharge Point	Discharge Point location
Hypersaline dewater from Foster and Warren mine shafts	Lake Lefroy	Schedule 1, Figure 2

**8.** The licence holder must ensure that emissions from the discharge point listed in Table 3 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 12.

Table 4: Emission and discharge limits

Discharge point	Parameter	Limit (including units)
Lake Lefroy	рН	Between 6.0 and 8.0
	Total Suspended Solids	<75 mg/L

**9.** The Licence Holder must record and investigate the exceedance of limits specified in condition 8.

### **Monitoring**

#### **General Monitoring**

- 10. The licence holder must ensure that all non-continuous sampling and analysis undertaken pursuant to condition 12 is undertaken by a holder of a current accreditation from the National Association of Testing Authorities (NATA) for the methods of sampling and analysis relevant to the corresponding relevant parameter.
- **11.** The licence holder must ensure that:
  - (a) monitoring is undertaken in each monthly period such that there are at least 15 days in between the days on which samples are taken in successive months;
     and
  - (b) monitoring is undertaken in each annual period such that there are at least 9 months in between the days on which samples are taken in successive years.

#### Discharge quality monitoring to surface water

**12.** The licence holder must monitor emissions in accordance with the requirements specified in Table 5 and record the results of all such monitoring.

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Table 5: Emissions and discharge monitoring

Monitoring location	Parameter <sup>1</sup>	Unit	Frequency	Averaging period	Sampling Method
					Analysis
Dewater discharge pipeline	Cumulative discharge volume	kL	Continuous	Monthly	N/A
Stage 1: Foster/	рН	pH units	Monthly	Spot sample	Field analysis <sup>2</sup> -
Warren declines	Electrical conductivity	μS/cm			AS/NZS 5667.1;
Stage 2:	Total suspended solids	mg/L			AS/NZS 5667.4; and AS/NZS 5667.9
Final sediment settlement container	Total dissolved solids				
	рН	pH units	Monthly for the first 6	Spot sample	Laboratory analysis - AS/NZS 5667.1.
	Electrical conductivity	μS/cm	months of dewatering	g ally	
	Total suspended solids	mg/L	and annually thereafter		3007.1.
	Total dissolved solids				
	Total Alkalinity as CaCO₃	mg CaCO <sub>3</sub> /L			
	Heavy metals – Aluminium, Arsenic, Boron, Cadmium, Chromium, Cobalt, Copper, WAD Cyanide, Iron, Lead, Mercury, Manganese, Nickel, Selenium, Vanadium, Zinc.	mg/L			

Note 1: Level of detection is required to be sufficient to enable a comparison with the Australian and New Zealand Guidelines for Fresh & Marine Water Quality (ANZ 2020).

Note 2: In-field non-NATA accredited analysis permitted.

13. The licence holder must undertake lake sediments monitoring in accordance with the requirements specified in Table 6 and record the results of all such monitoring.

**Table 6: Sediment monitoring requirements** 

Monitoring location <sup>1</sup>	Parameter <sup>2</sup>	Unit	Frequency	Averaging period	Sampling Method	
					Analysis	
Lake Lefroy W14	рН	pH units	Annually in the same	Spot sample	Field	
VV 14	Electrical conductivity	μS/cm	month	- Cap.G	analysis - AS/NZS	
	Total suspended solids	mg/L				5667.12
	Total dissolved solids					
	Total Alkalinity as CaCO <sub>3</sub> /L	mg CaCO <sub>3</sub> /L				
	Aluminium, Ammonia, Arsenic, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Mercury, Manganese, Nickel, Nitrate, Selenium, Vanadium, Zinc.	mg/L				

Note 1: A minimum of one sample taken from each sediment sampling location each annual monitoring period.

Note 2: Level of detection is required to be sufficient to enable a comparison with the Australian and New Zealand Guidelines for Fresh & Marine Water Quality (ANZ 2020) – Recommended default guideline values for toxicants in sediment.

#### **Records and reporting**

- 14. The licence holder must, within 7 days of becoming aware of any non-compliance with conditions 1 to 0 of this licence, notify the CEO in writing of that non-compliance and include in that notification the following information:
  - (a) which condition was not complied with;
  - (b) the time and date when the non-compliance occurred;
  - (c) if any environmental impact occurred as a result of the non-compliance and if so, what that impact is and where the impact occurred;
  - (d) the details and result of any investigation undertaken into the cause of the non-compliance;
  - (e) what action has been taken and the date on which it was taken to prevent the non-compliance occurring again; and
  - (f) what action will be taken and the date by which it will be taken to prevent the non-compliance occurring again.
- 15. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
  - (a) the name and contact details of the complainant, (if provided);
  - (b) the time and date of the complaint;
  - (c) the complete details of the complaint and any other concerns or other issues raised; and
  - (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

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- **16.** The licence holder must:
  - (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
  - (b) prepare and submit to the CEO by no later than 30 days after the end of that annual period an Annual Audit Compliance Report in the approved form.
- **17.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
  - (a) the calculation of fees payable in respect of this licence;
  - (b) the works conducted in accordance with condition 1 of this licence;
  - (c) any maintenance of infrastructure that is performed in the course of complying with condition 4 of this licence:
  - (d) monitoring programme undertaken in accordance with condition 12 of this licence; and
  - (e) complaints received under condition 15 of this licence.
- **18.** The books specified under condition 17 must:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
  - (c) be retained by the licence holder for the duration of the licence; and
  - (d) be available to be produced to an inspector or the CEO as required.
- **19.** The licence holder shall submit the information in Table 7 to the CEO according to the specifications in that table.

#### **Table 7 Non-annual reporting**

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form
In addition to annual monitoring required in Condition13	Sediment monitoring requirements	One off sample	Within 60 days after ceasing dewatering discharge	None specified

# **Definitions**

In this licence, the terms in Table 8 have the meanings defined.

**Table 8: Definitions** 

Term	Definition
ACN	Australian Company Number
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12-month period commencing from [day month] until [day month] of the immediately following year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.
AS/NZS 5667.4	means the Australian Standard AS/NZS 5667.4 Water Quality – Sampling – Guidance on sampling from lakes, natural and manmade.
AS/NZS 5667.9	means the Australian Standard AS/NZS 5667.9 Water quality - Sampling - Guidance on sampling from marine waters.
AS/NZS 5667.12	means the Australian Standard AS/NZS 5667.12 Water quality - Sampling - Guidance on sampling of bottom sediments.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department.
	"submit to / notify the CEO" (or similar), means either:
	Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919
	or:
	info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)

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Term	Definition
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
monthly period	means a one-month period commencing from day X of a month until day (X-1) of the immediately following month.
	e.g., "means a one-month period commencing from the seventh day of a month until the sixth day of the immediately following month."
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
waste	has the same meaning given to that term under the EP Act.

### **END OF CONDITIONS**

# **Schedule 1: Maps**

## **Premises map**

The boundary of the prescribed premises is shown in the map below (Figure 1).

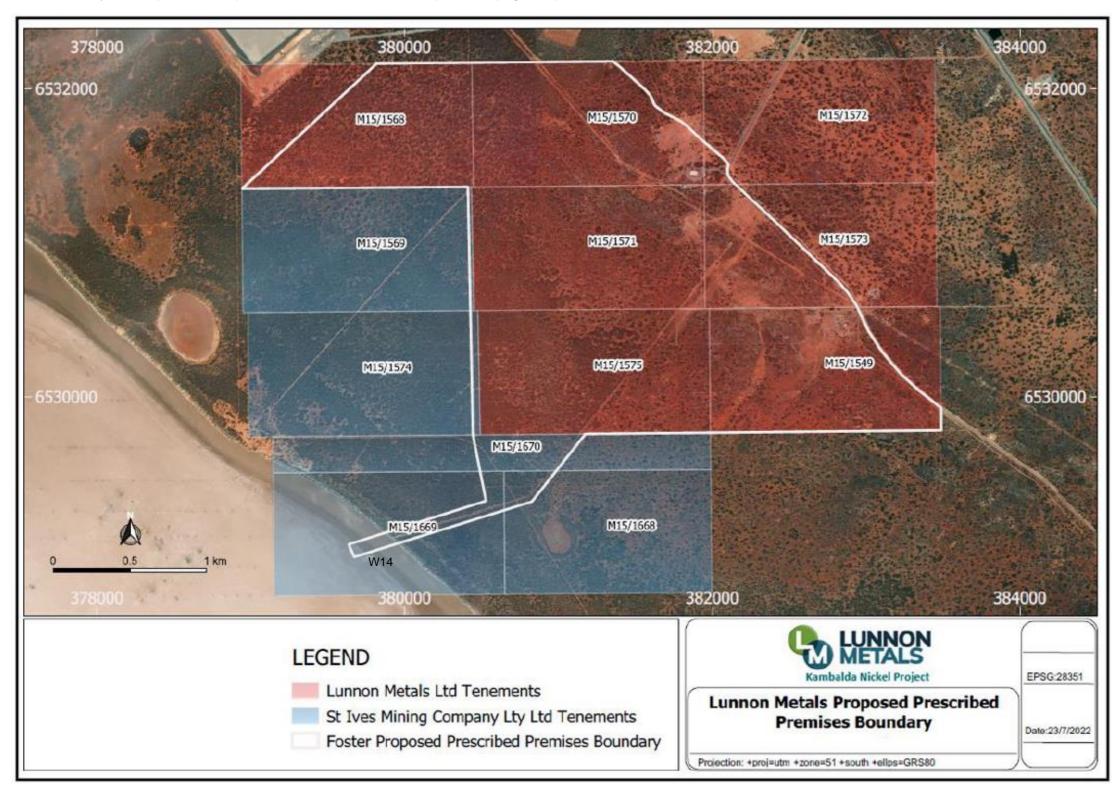


Figure 1: Map of the boundary of the prescribed premises

## **Infrastructure layout maps**

The proposed pipeline dewatering route is shown in the map below (Figure 2).

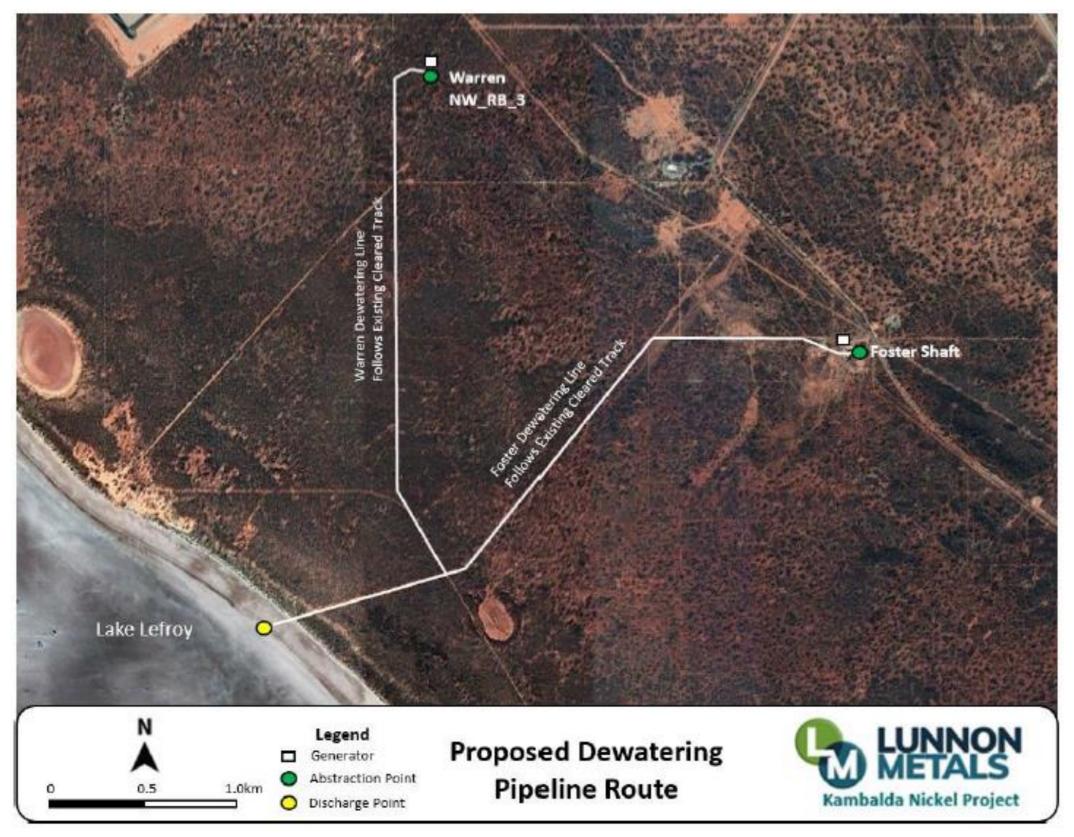


Figure 2: Map of the proposed pipeline dewatering route.

Schematic of the sediment settling containers is shown in the map below (Figure 3)

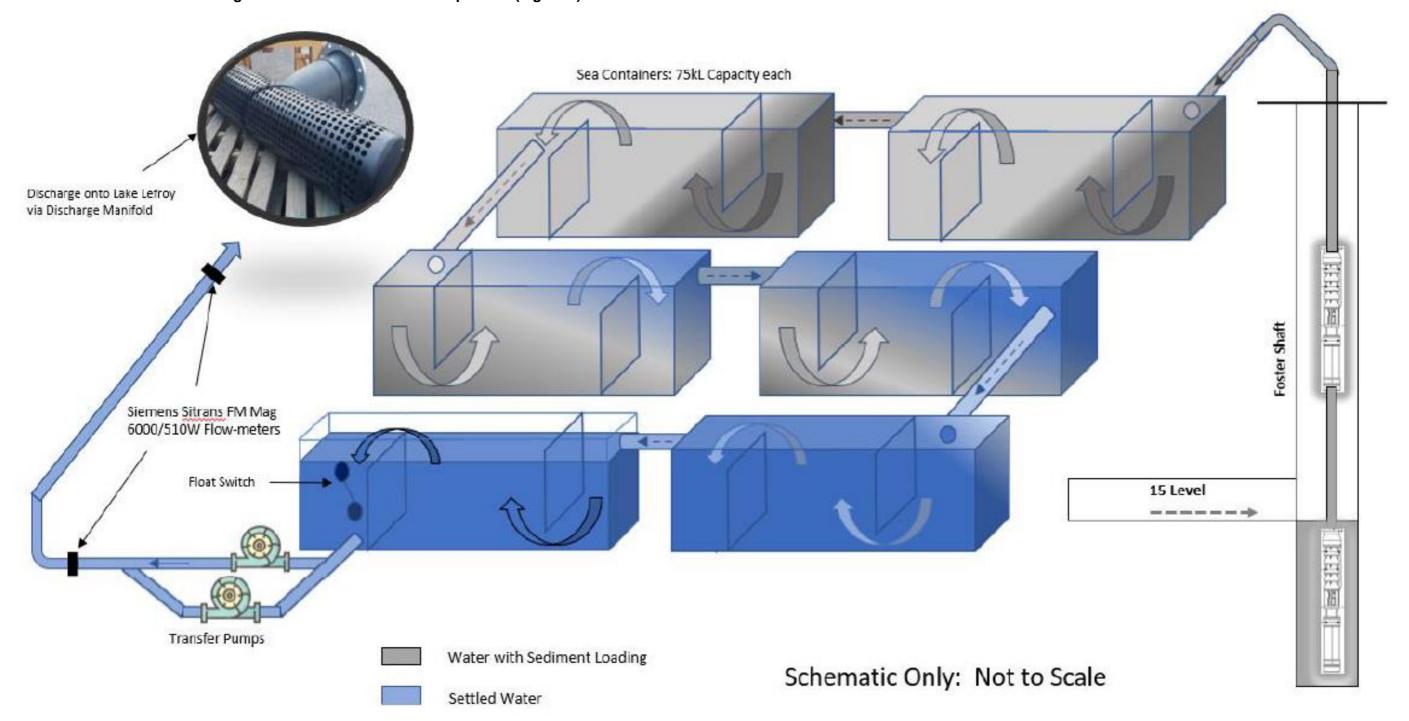


Figure 3: Schematic of the sediment settling containers

# **Schedule 2: Premises boundary**

The corners of the premises boundary are the coordinates listed in Table 9.

Table 9: Premises boundary coordinates (GDA2020)

	Easting	Northing	Zone
1.	381,354.121	6,532,175.904	51
2.	381,593.745	6,531,959.487	
3.	381,608.340	6,531,933.649	
4.	381,619.428	6,531,901.748	
5.	381,628.653	6,531,888.714	
6.	381,648.805	6,531,872.381	
7.	381,659.869	6,531,864.252	
8.	381,694.124	6,531,839.247	
9.	381,723.767	6,531,823.450	
10.	381,755.654	6,531,808.549	
11.	381,797.653	6,531,786.776	
12.	381,827.845	6,531,762.416	
13.	381,858.018	6,531,734.675	
14.	381,898.445	6,531,697.255	
15.	381,938.643	6,531,660.144	
16.	381,972.169	6,531,632.545	
17.	382,004.168	6,531,603.678	
18.	382,064.919	6,531,553.071	
19.	382,087.039	6,531,532.116	
20.	382,098.559	6,531,475.539	
21.	382,100.636	6,531,442.937	
22.	382,105.046	6,531,507.101	
23.	382,111.995	6,531,421.504	

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24.	382,135.701	6,531,392.266
25.	382,158.473	6,531,370.111
26.	382,208.172	6,531,322.606
27.	382,370.081	6,531,173.252
28.	382,674.608	6,530,881.977
29.	382,727.010	6,530,833.393
30.	382,824.204	6,530,739.122
31.	382,880.912	6,530,675.199
32.	382,938.637	6,530,589.383
33.	382,975.253	6,530,509.776
34.	383,015.068	6,530,425.665
35.	383,092.477	6,530,307.155
36.	383,169.563	6,530,210.978
37.	383,230.710	6,530,142.132
38.	383,344.001	6,530,038.246
39.	383,487.491	6,529,924.769
40.	383,488.903	6,529,779.016
41.	381,175.372	6,529,756.408
42.	380,827.790	6,529,317.204
43.	379,671.606	6,528,956.877
44.	379,636.032	6,529,039.177
45.	380,528.945	6,529,321.687
46.	380,443.761	6,529,749.667
47.	380,411.189	6,531,361.395
48.	378,942.056	6,531,348.656
49.	379,817.780	6,532,162.064