



Works approval number W6796/2023/1

Applicant Australian Nickel Investments Pty Ltd

ACN 111 599 323

Registered business address

DWER file number DER2023/000166

Duration 13/09/2023 to 12/09/2026

Date of issue 13/09/2023

Premises details

Cosmos Nickel Operations- Power Station
Goldfields Highway
SIR SAMUEL WA 6437

Legal description -
Part of Mining tenement M36/371
As defined by the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production capacity
Category 52: Electrical power generation: premises (other than premises within Category 53 or an emergency or standby power generating plant) on which electrical power is generated using a fuel.	24.5 MW per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 13 September 2023, by:

A/Manager, Process Industries

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

Interpretation

In this works approval:

- (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 works approval:
 - (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 works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with.

Construction phase

Infrastructure and equipment

1. The works approval holder must:
 - (a) construct and/or install the infrastructure and/or equipment;
 - (b) in accordance with the corresponding design and construction / installation requirements; and
 - (c) at the corresponding infrastructure location, as set out in Table 1.

Table 1: Design and construction requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Six (6) 2MW continuous diesel fuel engine generators being Cummins QSK78	<ul style="list-style-type: none"> Generators must be installed in accordance with the manufacturer's specifications. Generators must be installed within the new powerhouse building. Each generator must have an exhaust stack with a minimum height of 9 metres above ground level Each generator exhaust stacks must be installed with a sampling port in accordance with AS4323.1. 	G13-G18 in Figure 2 of Schedule 1.
2.	New powerhouse	<ul style="list-style-type: none"> Building must constructed from fabricated steel. Building must be constructed with a bunded concrete floor with a minimum elevation of 100 mm above ground level. Bunded concrete floor must be graded to drain to a collection/services trench. Must be constructed with a concrete services trench graded to drain to the Power Station A collection/services trench. 	Power Station B Generator Hall in Figure 2 of Schedule 1. Trench details in Figure 3 of Schedule 1

Compliance reporting

2. The works approval holder must within 30 calendar days of the infrastructure or equipment required by condition 1 being constructed and/or 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 a qualified professional engineer that the items of infrastructure or component(s) thereof, 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.

Environmental commissioning phase

Environmental commissioning requirements

- 4. The works approval holder may only commence environmental commissioning of the infrastructure listed in Table 1 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 2 of this works approval.
- 5. The works approval holder must ensure that environmental commissioning lasts not more than 180 calendar days.

Authorised emission points to air

- 6. During environmental commissioning, the works approval holder must ensure that the emission(s) specified in Table 2, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Table 2: Authorised discharge points during environmental commissioning and time limited operations

Emission	Discharge point	Minimum stack height (m AGL)	Discharge point location
Combustion gases from diesel NO _x , SO ₂ , CO, PM ₁₀ PM _{2.5} , VOCs	A13 to A18	9	As shown in Figure 2 of Schedule 1

Infrastructure and equipment

- 7. During environmental commissioning, the works approval holder must ensure the premises infrastructure specified in Table 3 is maintained and operated in accordance with the corresponding operational requirements set out in Table 3.

Table 3: Infrastructure requirements during environmental commissioning and time limited operations

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Six (6) 2MW continuous diesel fuel engine generators being Cummins QSK78	<ul style="list-style-type: none"> • No more than 14 generators to be operating at any one time. • Must be maintained in accordance with manufacturer's specifications and schedule. 	G13-G18 in Figure 2 of Schedule 1.

Monitoring

8. During environmental commissioning, the works approval holder must undertake the process monitoring in Table 4 according with the requirements specified in that table and record the results of all such monitoring.

Table 4: Process monitoring – diesel generators

Emission point reference	Parameter	Units	Frequency	Averaging Period
A13 – A18 (as depicted in Schedule 1 Figure 2: Premises layout map)	Generator run time (dates and hours operated)	Hours	Continuous	Hourly
	Fuel flow rate	Litres/hour		
	Electricity generated	MWh		
	Percentage load	%		

9. The works approval holder must monitor emissions during environmental commissioning in accordance with the requirements specified in Table 5 and record the results of all such monitoring.

Table 5: Emissions monitoring during environmental commissioning and time limited operations

Emission point reference	Parameter	Units ¹	Averaging period	Frequency ²	Sampling and analysis method
A13 -A18 exhaust stacks from diesel generator sets	NOx	mg/m ³ and g/s	>30 minute	Once, within 20 weeks of commencing environmental commissioning and Once, within 10 weeks of commencing time limited operations	USEPA Method 7E

Note 1: All units are referenced to STP dry and 15% O₂.

Note 2: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production

10. The works approval holder must ensure all sampling and analysis undertaken pursuant to condition 9 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

Environmental commissioning report

11. The works approval holder must submit to the CEO an Environmental Commissioning Report within 30 calendar days of the completion date of environmental commissioning for the infrastructure specified in Table 3.
12. The works approval holder must ensure the Environmental Commissioning Report required by condition 11 of this works approval includes the following:
- a summary of the environmental commissioning activities undertaken, including timeframes and MWe of electricity produced;
 - a summary of the environmental performance of all items of infrastructure as constructed or installed;

- (c) the results of monitoring conducted in accordance with condition 8 and condition 9;
- (d) a review of the works approval holder's performance and compliance against the conditions of this works approval; and
- (e) where conditions of this works approval have not been met, the measures that are proposed to meet them and the timeframes required to implement those measures.

Time limited operations phase

Commencement and duration

- 13. The works approval holder may only commence time limited operations for the infrastructure listed in Table 1 where the Environmental Commissioning Report as required by condition 11 has been submitted by the works approval holder for the infrastructure
- 14. The works approval holder may conduct time limited operations for the infrastructure specified in Table 1 (as applicable):
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 13 for that item of infrastructure; or
 - (b) until such time as a licence for that infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 14(a).

Authorised emission points

- 15. During time limited operations, the works approval holder must ensure that the emission(s) specified in Table 2, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Infrastructure and equipment

- 16. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 3 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 3.

Monitoring

- 17. During time limited operations, the works approval holder must undertake the process monitoring in Table 4 according with the requirements specified in that table and record the results of all such monitoring.
- 18. The works approval holder must monitor emissions during time limited operations in accordance with the requirements specified in Table 5 and record the results of all such monitoring.

Time limited operations report

- 19. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 30 calendar days before the expiration date of the works approval, whichever is the sooner.
- 20. The works approval holder must ensure the report required by condition 19 includes the following:

- (a) a summary of the time limited operations, including timeframes and Mwe of electricity produced;
- (b) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable);
- (c) the results of monitoring conducted in accordance with condition 17 and condition 18;
- (d) a review of performance and compliance against the conditions of this works approval; and
- (e) where conditions of this works approval have not been met, the measures that are proposed to meet them and the timeframes required to implement those measures.

Records and reporting (general)

- 21.** The works approval holder must record the following information in relation to complaints received by the works approval 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 works approval holder to investigate or respond to any complaint.
- 22.** The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
- (a) the works conducted in accordance with condition 1;
 - (b) any maintenance of infrastructure that is performed in the course of complying with condition 1;
 - (c) monitoring programmes undertaken in accordance with conditions 8, 9, 17 and 18; and
 - (d) complaints received under condition 21.
- 23.** The books specified under condition 22 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 works approval holder for the duration of the works approval; and
 - (d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 6 have the meanings defined.

Table 6: Definitions

Term	Definition
AS4323.1	Australian Standard AS4323.1 1995 Stationary Source Emissions - Selection of Sampling Positions
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
NATA	means National Association of Testing Authorities
normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring.
premises	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 works approval.
Qualified	means a person who holds a tertiary academic qualification in

Term	Definition
professional engineer	engineering and a minimum of three years experience working in the area of civil/construction engineering.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
USEPA	United States (of America) Environmental Protection Agency
USEPA Method 7E	means USEPA Method 7E Determination of Nitrogen Oxides Emissions From Stationary Sources (Instrumental Analyzer Procedure)
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises Map

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

Figure 1: Map of the boundary of the prescribed premise





Figure 2: Layout of existing (Power Station A) and proposed (Power Station B) power station and discharge points

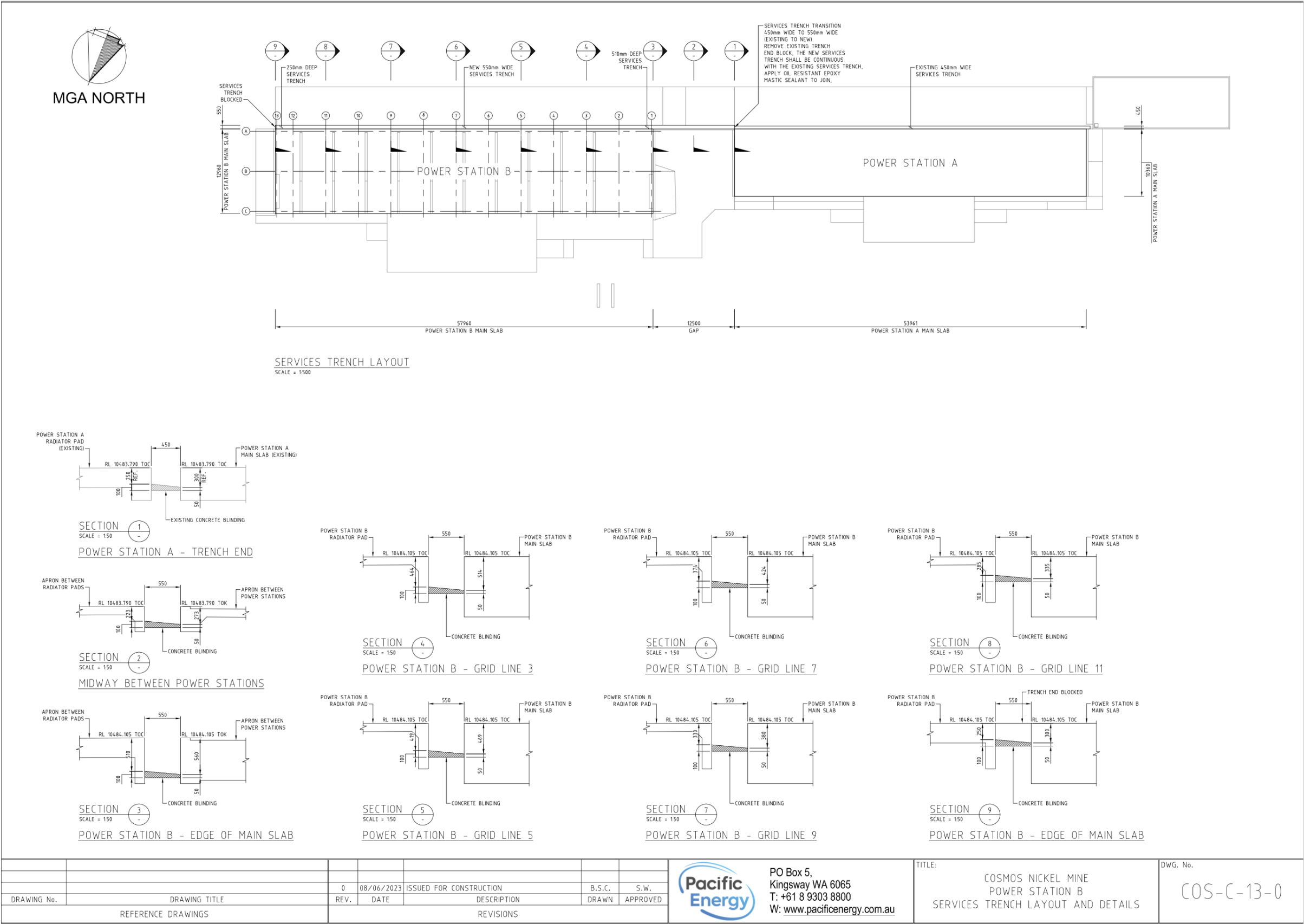


Figure 3: Powerhouse trench

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 7.

Table 7: Premises boundary coordinates (GDA2020)

	Easting	Northing	Zone
1.	260356	6944986	51
2.	260157	6944945	51
3.	260078	6944887	51
4.	260030	6944727	51
5.	260463	6944777	51