



OAX: NOM

Q3 2018 Presentation
Oslo, 8 November 2018



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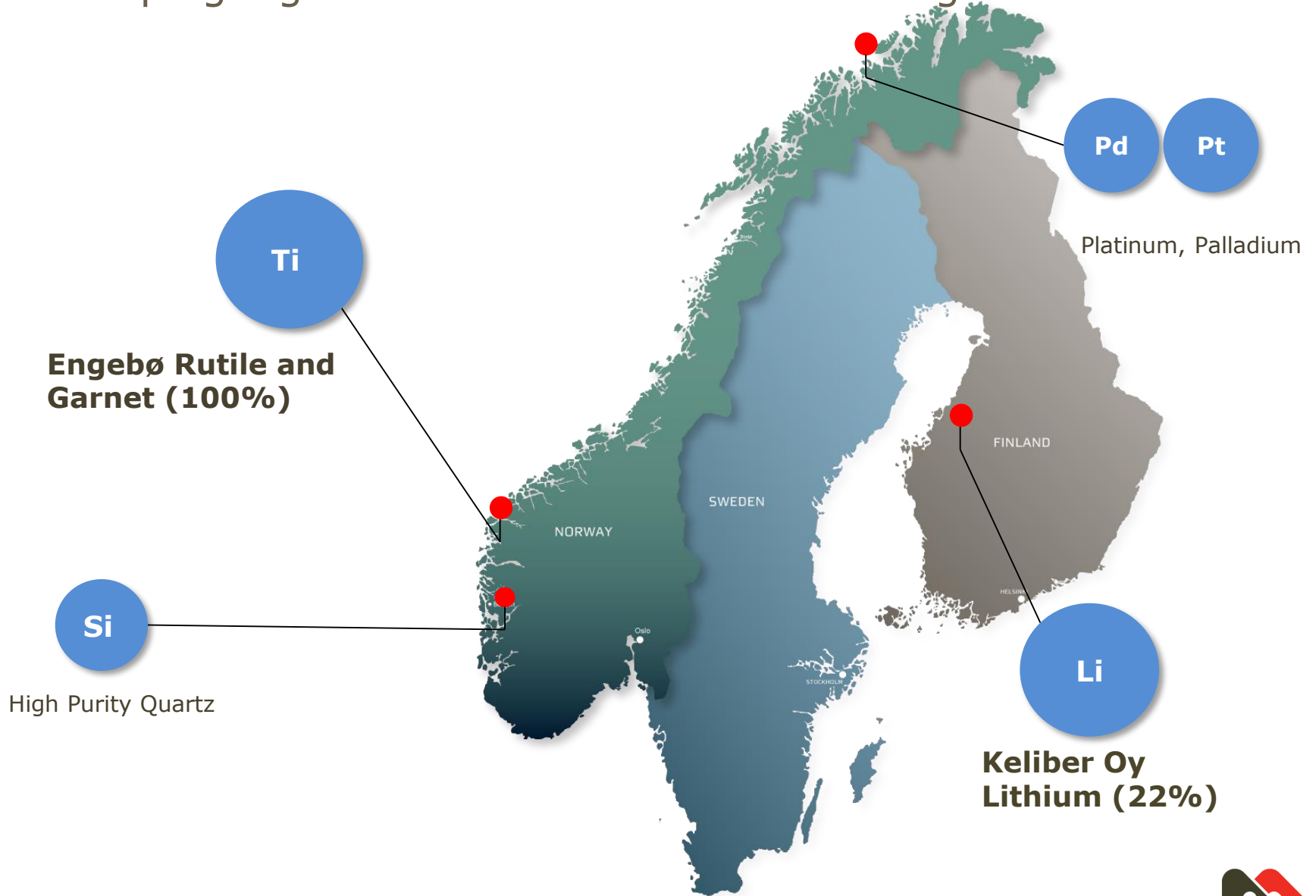
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1. Introduction
2. Financial status
3. Update on projects
 - Engebø, rutile and garnet
 - Keliber, lithium
4. Q & A



Developing high-value assets in the Nordic Region



Valuable markets for Nordic Mining's minerals



Rutile

Global market:

~0.8 million tonnes
 Nordic Mining: ~33 thousand tonnes (~4%)
\$ ~850 USDm ²⁾

Applications

Pigment Titanium Welding rods

Key fundamental drivers

- Increased environmental focus
- World GDP growth
- Development of new technology
- Significant supply deficit lifting prices upwards
- Aerospace industry production



Garnet

~1.4 million tonnes
 Nordic Mining: ~175 thousand tonnes (~11%)
\$ ~350 USDm ¹⁾

Applications

Waterjet cutting Sandblasting Abrasives

Key fundamental drivers

- Strong growth in waterjet cutting markets
- Consumption risen five-fold last 20 years



Lithium

~0.36 million tonnes
 Nordic Mining: ~11 thousand tonnes (~3%)
\$ ~3 900 USDm ³⁾

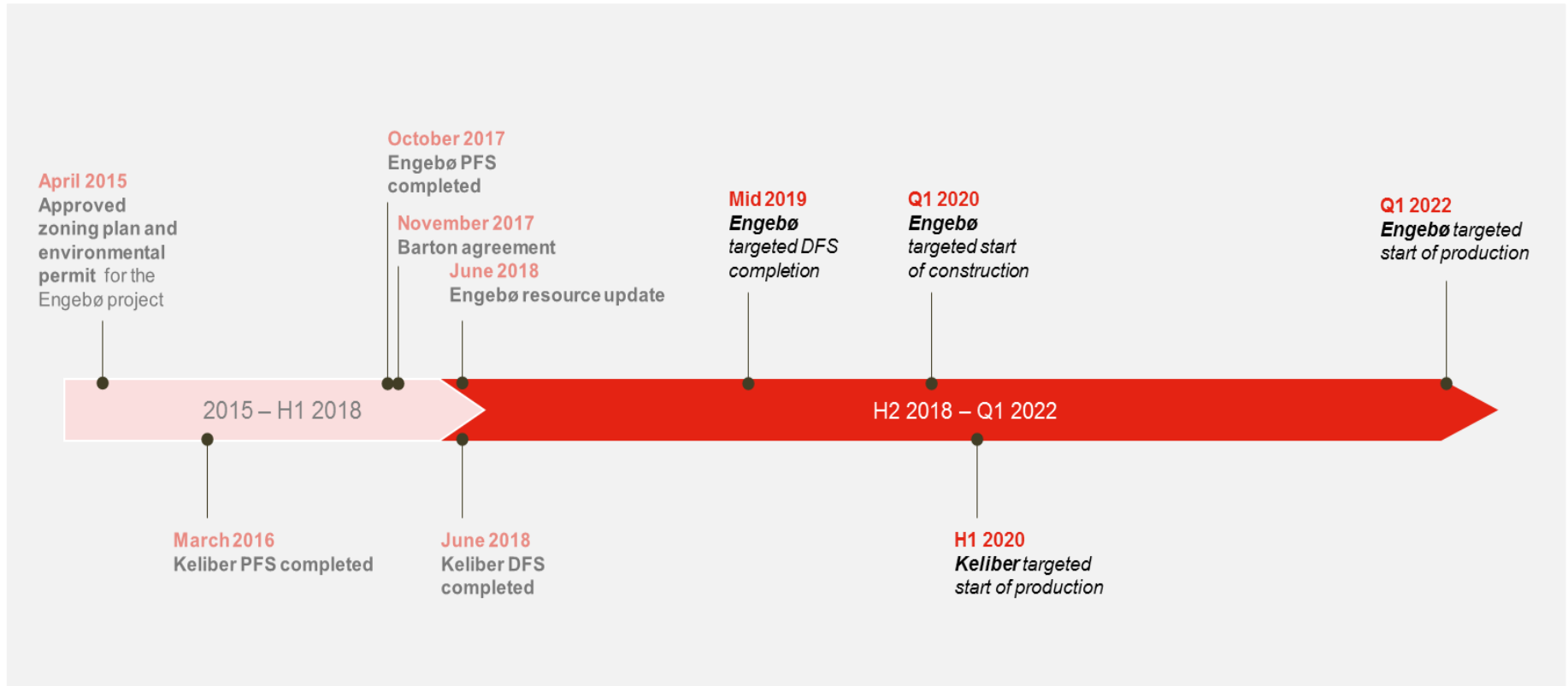
Applications

Glass Lubricating greases Frits & enamels Batteries Other and more...

Key fundamental drivers

- Shift towards renewable energy sources; higher demand for battery applications
- Development of new technology

Two valuable assets in pipeline towards construction



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Consolidated Income Statements

Q3-2018	Q3-2017		Acc. 2018	Acc. 2017	2017
Unaudited	Unaudited	Amounts in NOK million	Unaudited	Unaudited	Audited
-	-	Sales	-	-	-
(3.1)	(1.8)	Payroll and related costs	(7.7)	(8.1)	(10.9)
-	-	Depreciation and amortisation	(0.1)	(0.1)	(0.2)
(14.3)	(6.7)	Other operating expenses	(35.4)	(18.8)	(25.2)
(17.5)	(8.6)	Operating loss	(43.3)	(27.1)	(36.2)
(1.7)	(1.8)	Share of result of an associate	(5.5)	2.4	0.5
0.0	0.2	Financial items	-	0.1	0.1
(19.2)	(10.2)	Profit/(loss) before tax	(48.7)	(24.6)	(35.6)
-	-	Income tax	-	-	-
(19.2)	(10.2)	Profit/(loss) for the period	(48.7)	(24.6)	(35.6)



Consolidated Statements of Financial Position

Amounts in NOK million	30.09.2018 Unaudited	31.12.2017 Audited
ASSETS		
Evaluation and exploration assets	27.9	21.6
Property, plant and equipment	0.3	0.2
Investment in an associate	22.8	29.3
<i>Total non-current assets</i>	<i>50.9</i>	<i>51.1</i>
Cash	29.8	21.5
Other current assets	4.1	4.5
<i>Total current assets</i>	<i>33.9</i>	<i>26.1</i>
Total assets	84.9	77.1
SHAREHOLDERS' EQUITY AND LIABILITIES		
<i>Total equity</i>	<i>75.8</i>	<i>70.2</i>
Non-current liabilities	0.4	0.6
Current liabilities	8.6	6.4
<i>Total liabilities</i>	<i>9.0</i>	<i>7.0</i>
Total equity and liabilities	84.9	77.1



Rights Issue

- On 1 November, an EGM of the Company resolved a rights issue as follows:
 - Proceeds up to NOK 40m (~17.4 million shares)
 - Subscription price of NOK 2.30
 - Tradable subscription rights trading 6-16 November
 - Subscription period for shares 6-20 November
 - Approx. NOK 11m pre-committed
- The main purpose of the Rights Issue is to continue the development of the Engebø rutile and garnet project towards completion of the DFS and for general corporate purposes
- The total funding requirement to complete the DFS is estimated to around NOK 50m including overhead cost until mid-2019 and contingency of NOK 10m
- Total cost to complete the FEED is estimated to NOK 40m including overhead cost
- The Company will continue the efforts to attract additional funding for its operations going forward, including for construction capex



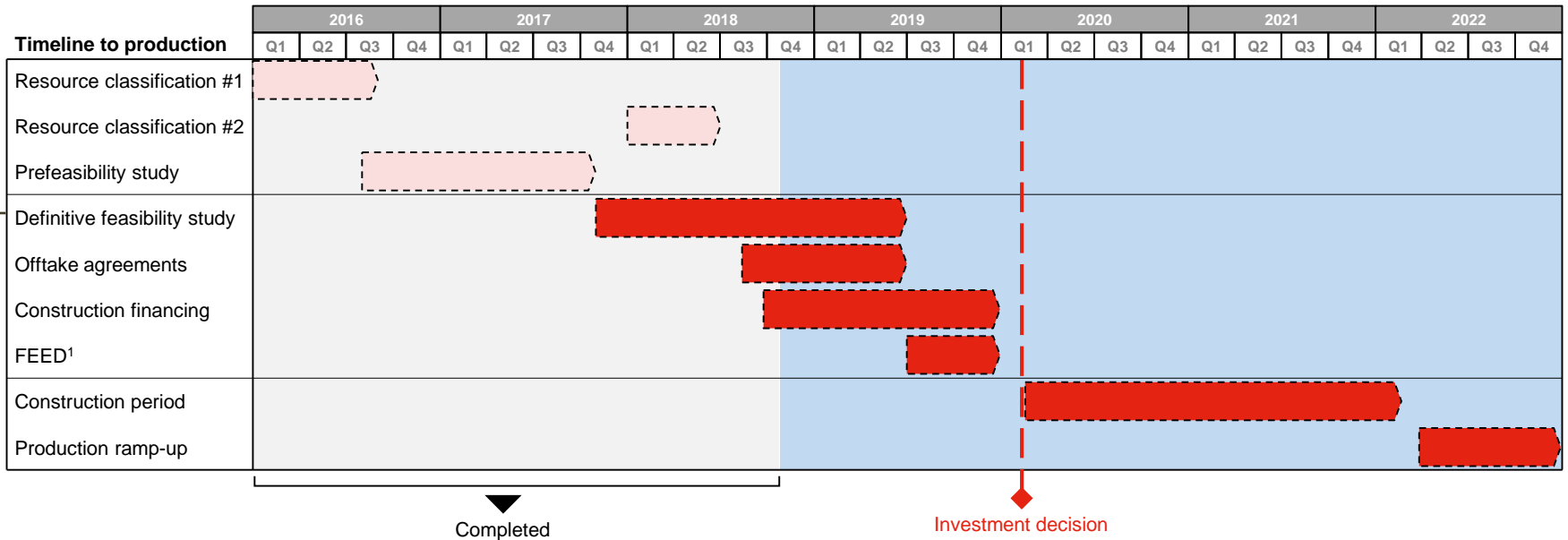
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Engebø Rutile and Garnet

Engerbø timeline towards construction



Definitive Feasibility Study (DFS) status

Scope of work for the Definitive Feasibility Study (DFS)

- █ Mining trade-off studies, mine design and schedule
- █ Development of Project Execution Plan (PEP) and Construction Schedule
- █ Mineral processing testwork, ore variability and flowsheet optimisation
- █ Quantitative risk analysis (QRA)
- █ Modularisation and logistical studies
- █ Building «Owners team» including local project team
- █ Procurement strategy and procurement operating plan
- █ Cooperation and anchoring with local society
- █ Multi-disciplinary design and engineering work

█ Progress

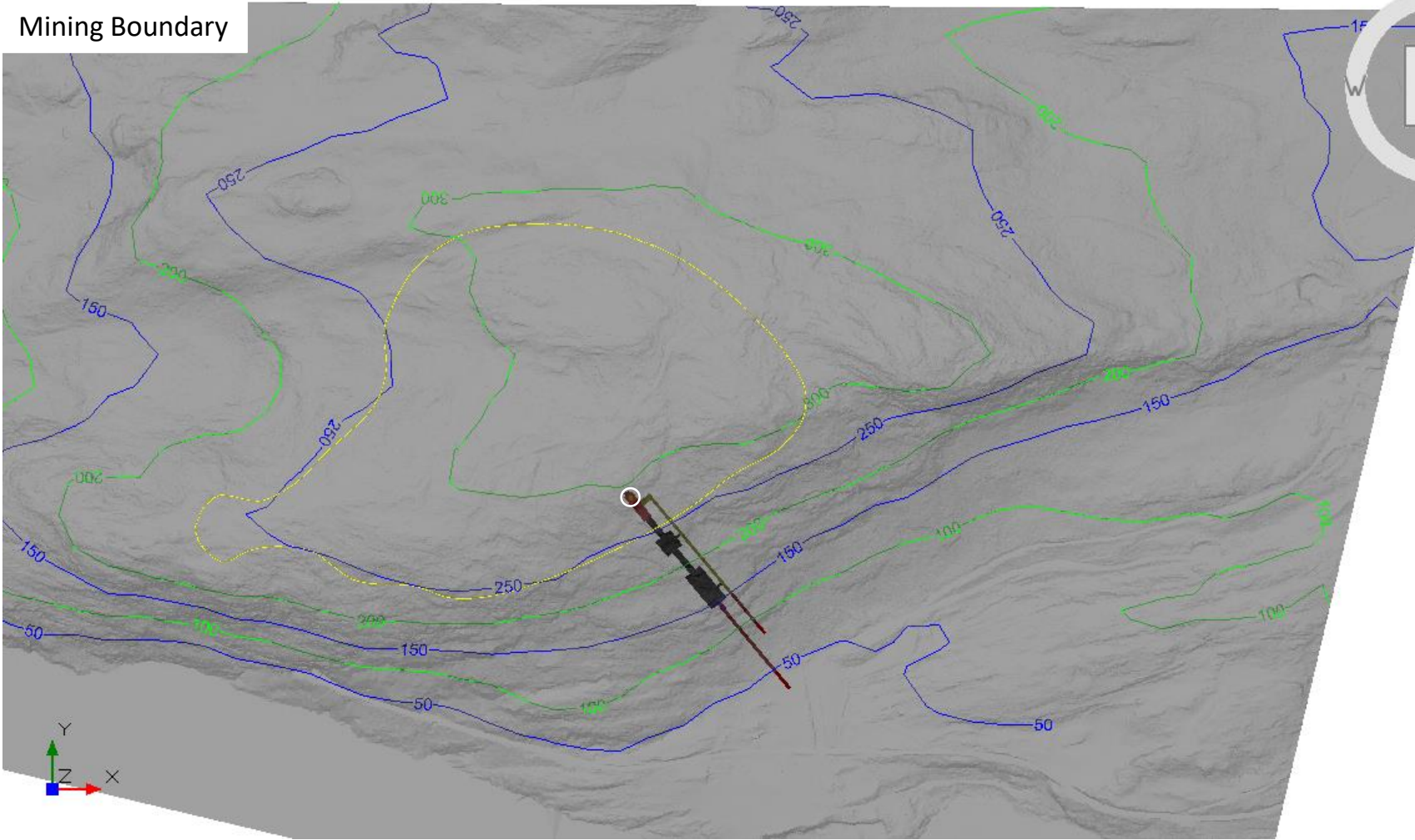
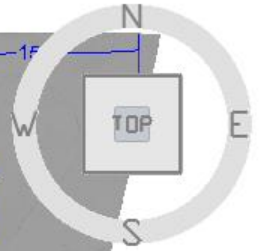
Definitive Feasibility Study – comprehensive test work

- Process test work; repeatability and variability tests and optimization studies are ongoing
- Certain aspects of the mineralogy and texture of the Engebø deposit is complex. Therefore, the ongoing process test work is comprehensive
- Additional test work will impact the DFS timeline
- Current timeline for DFS is mid-year 2019



Mining schedules open pit

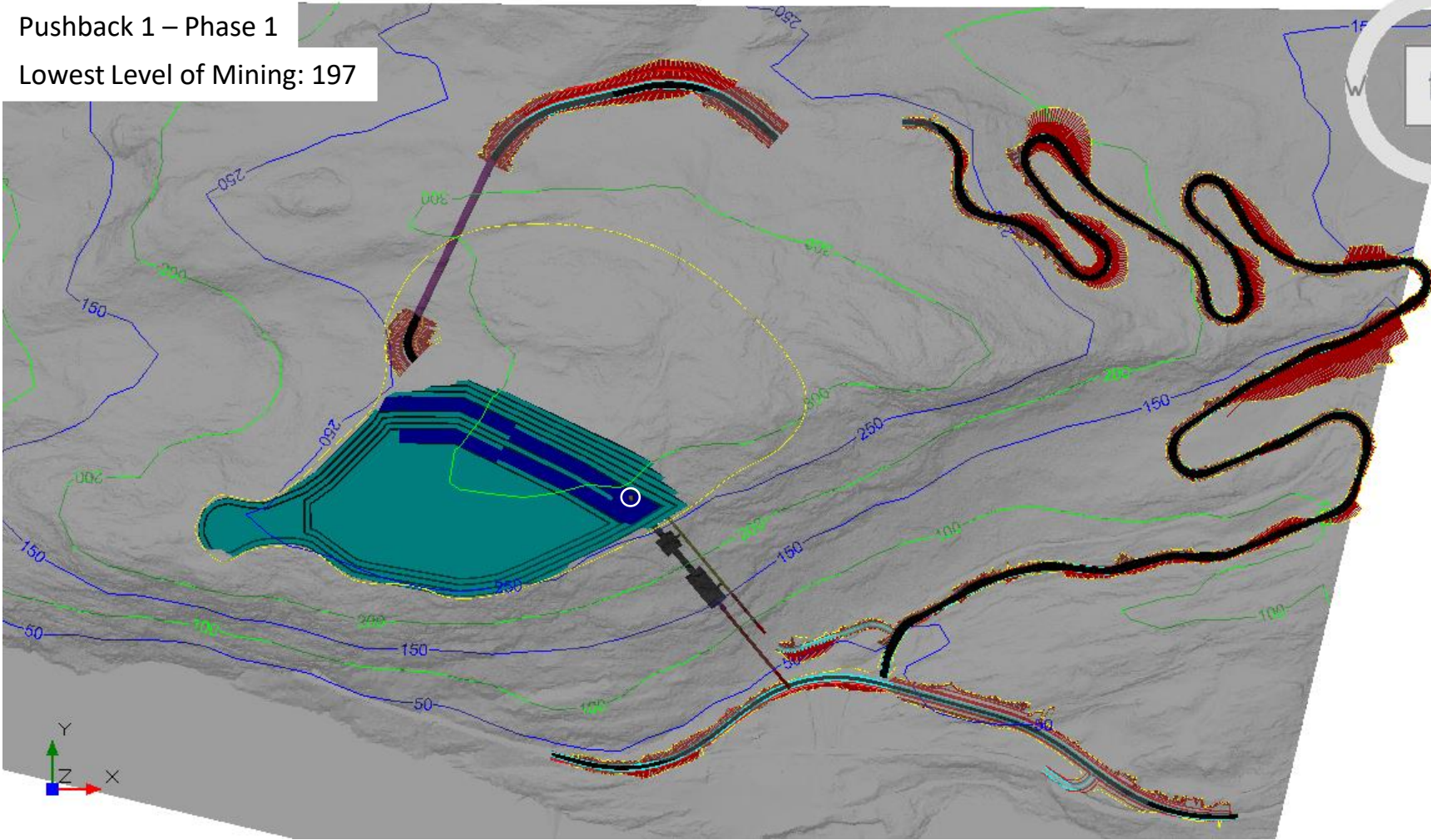
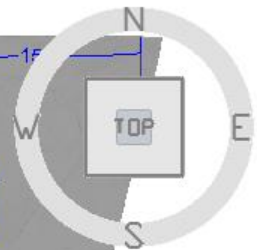
Mining Boundary



Mining schedules open pit

Pushback 1 – Phase 1

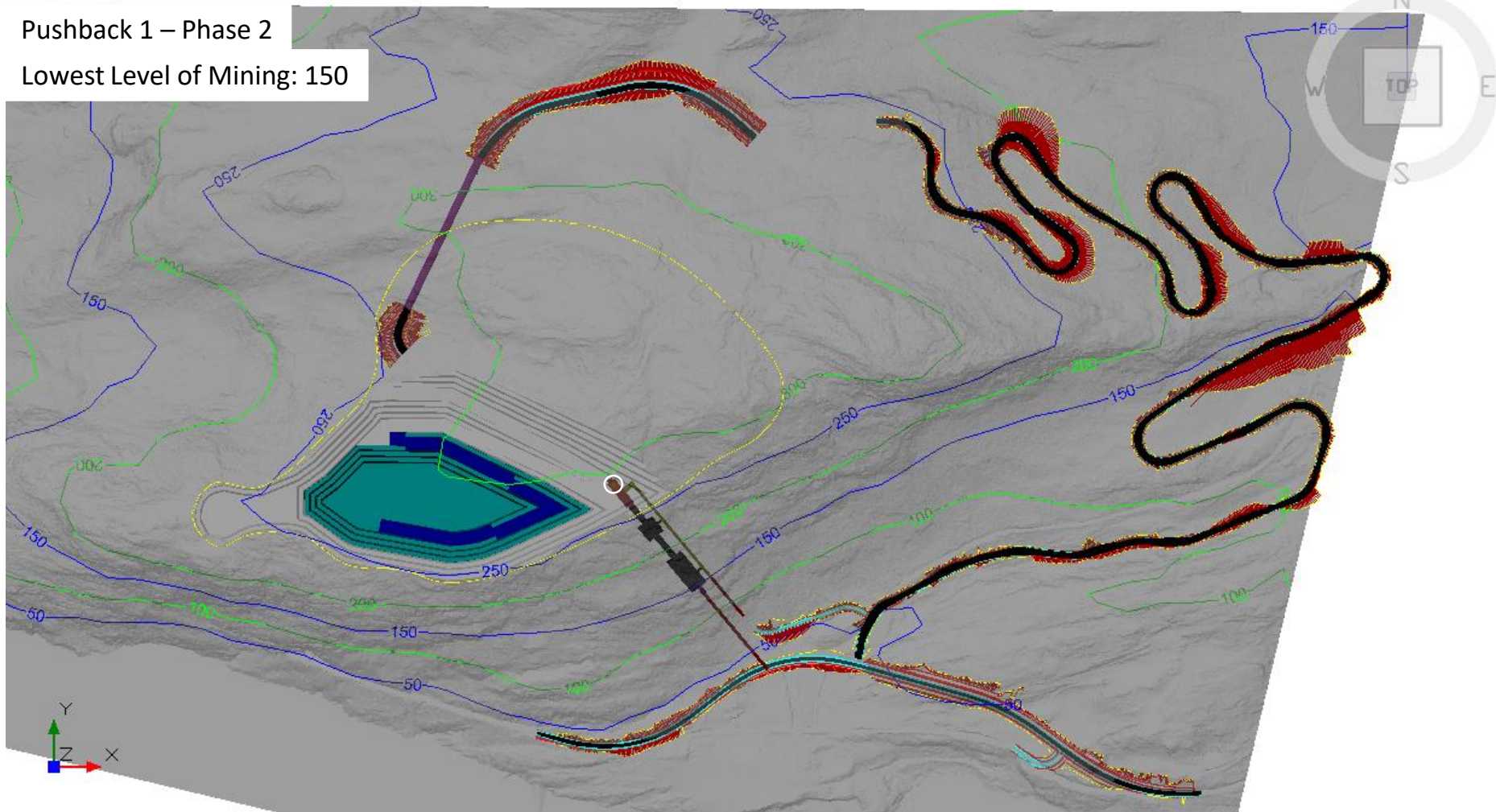
Lowest Level of Mining: 197



Mining schedules open pit

Pushback 1 – Phase 2

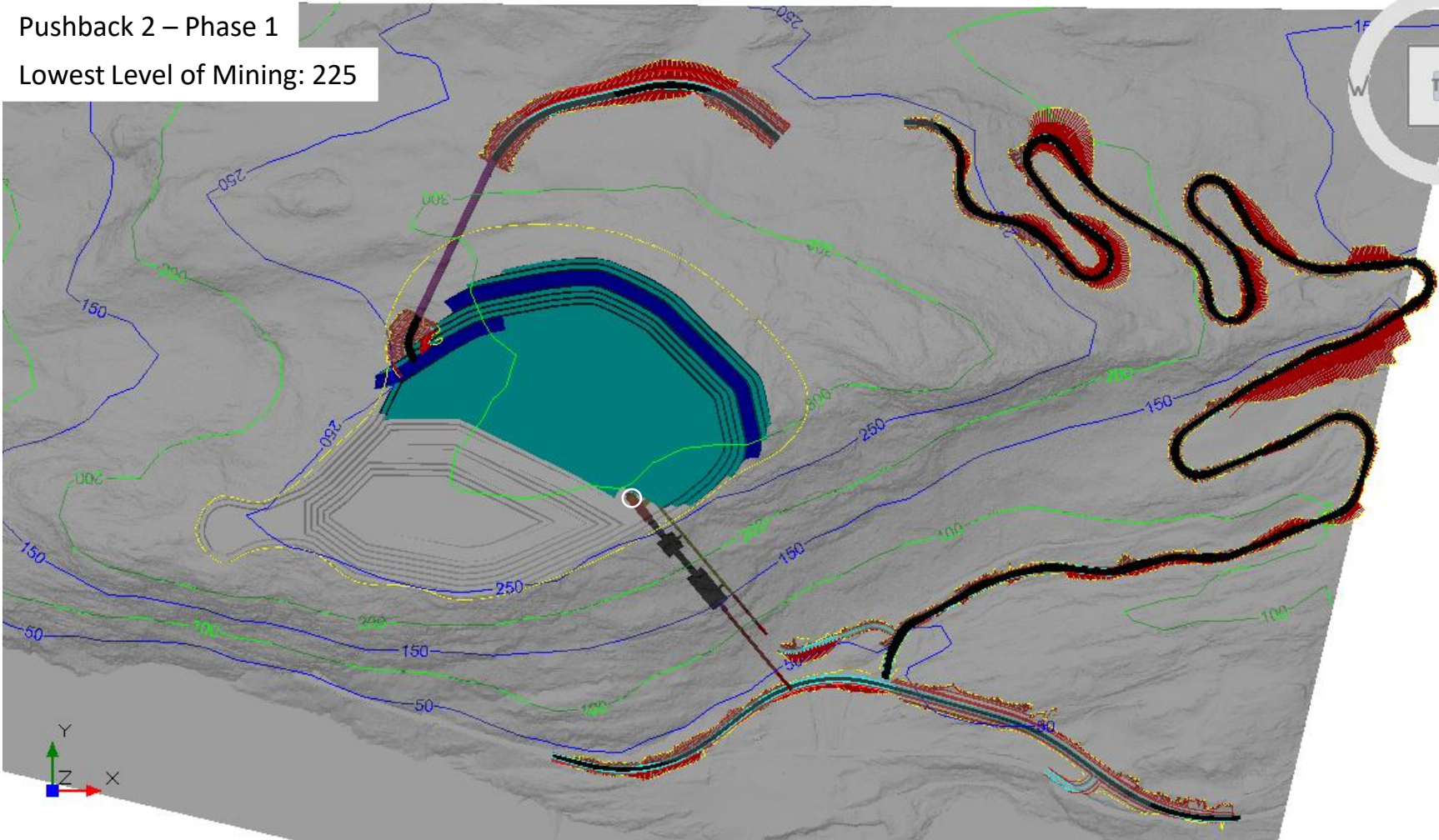
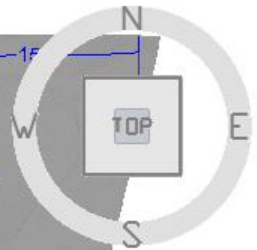
Lowest Level of Mining: 150



Mining schedules open pit

Pushback 2 – Phase 1

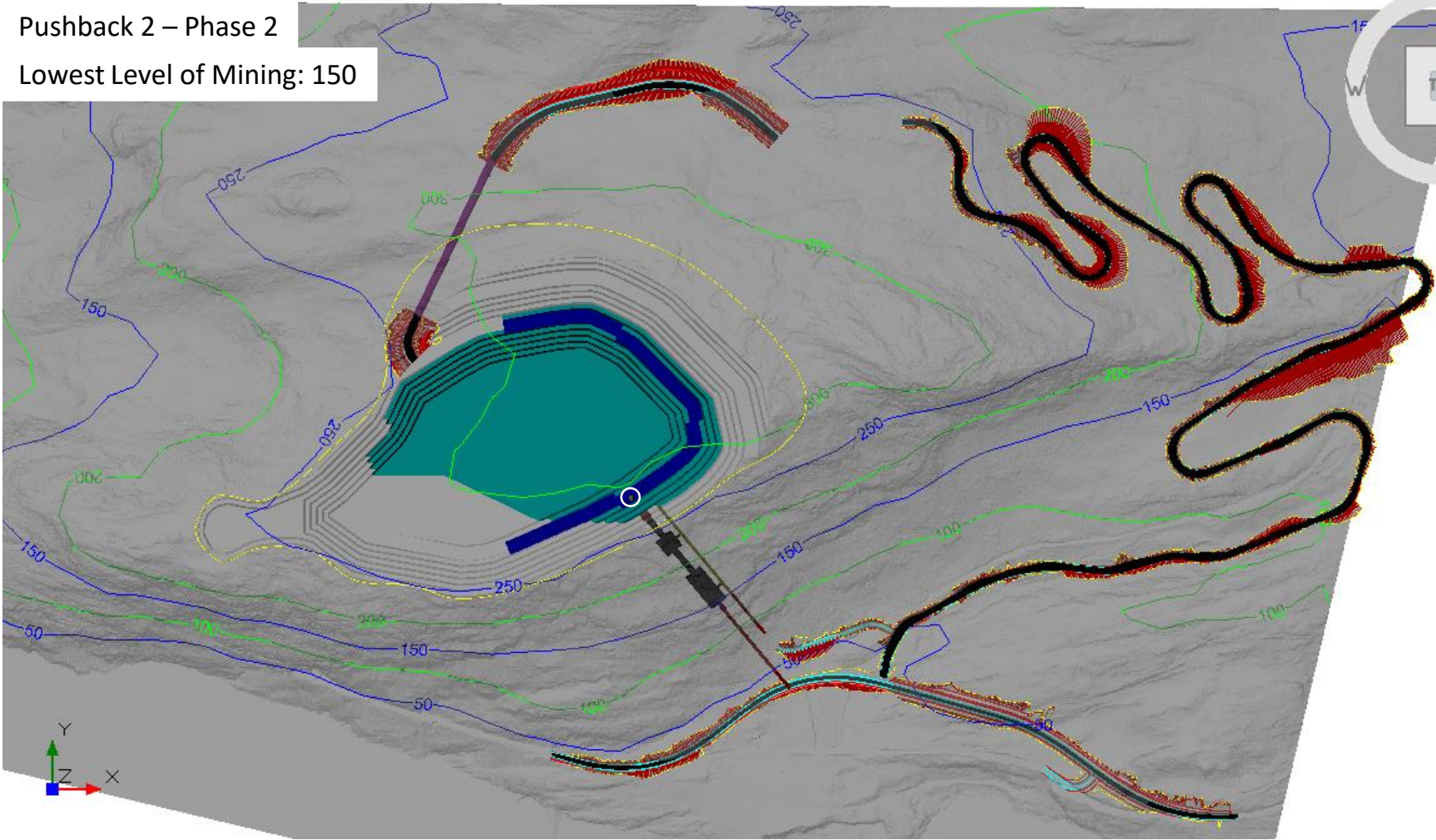
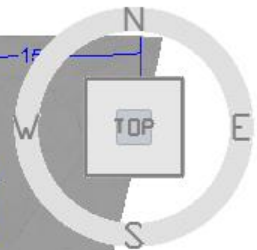
Lowest Level of Mining: 225



Mining schedules open pit

Pushback 2 – Phase 2

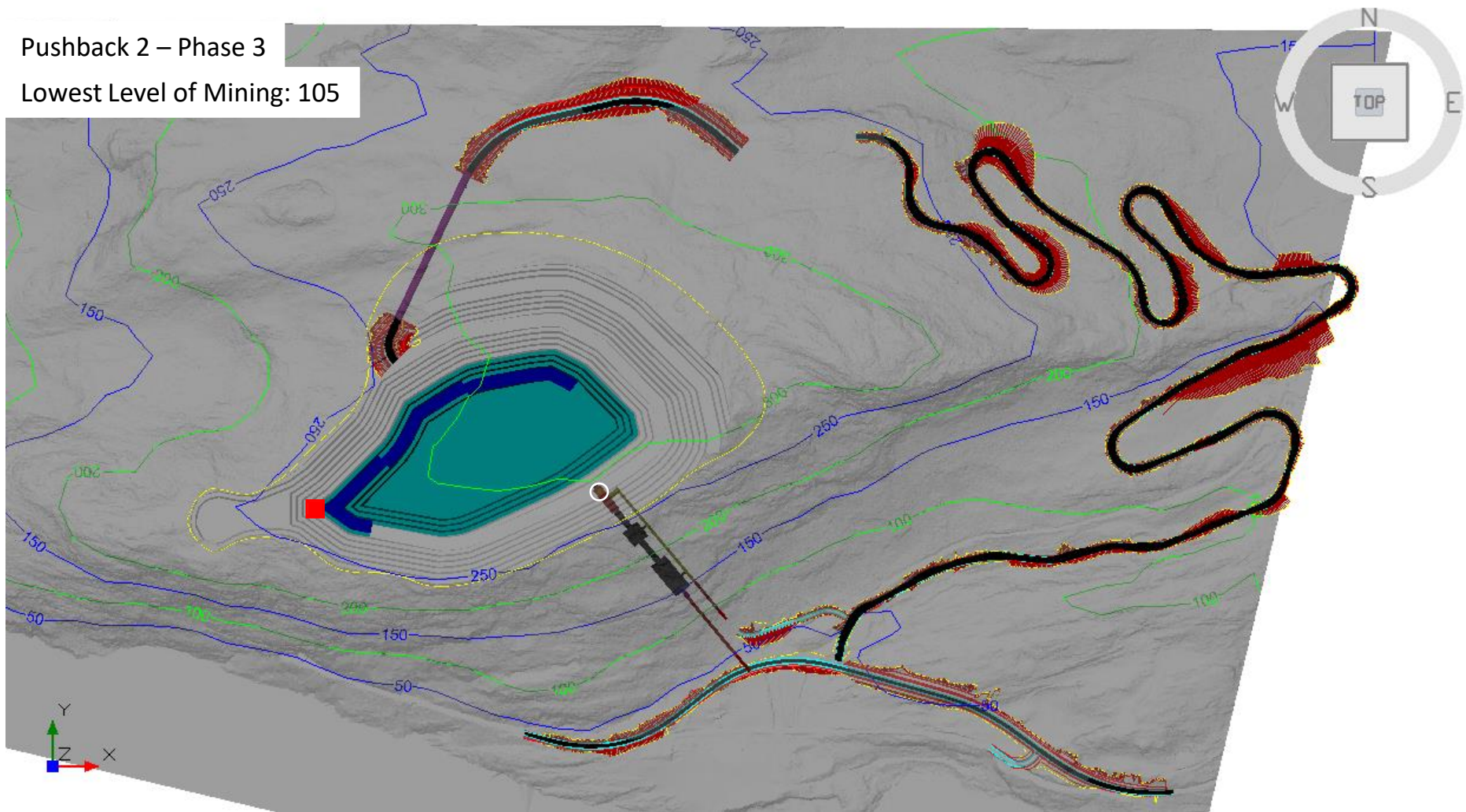
Lowest Level of Mining: 150



Mining schedules open pit

Pushback 2 – Phase 3

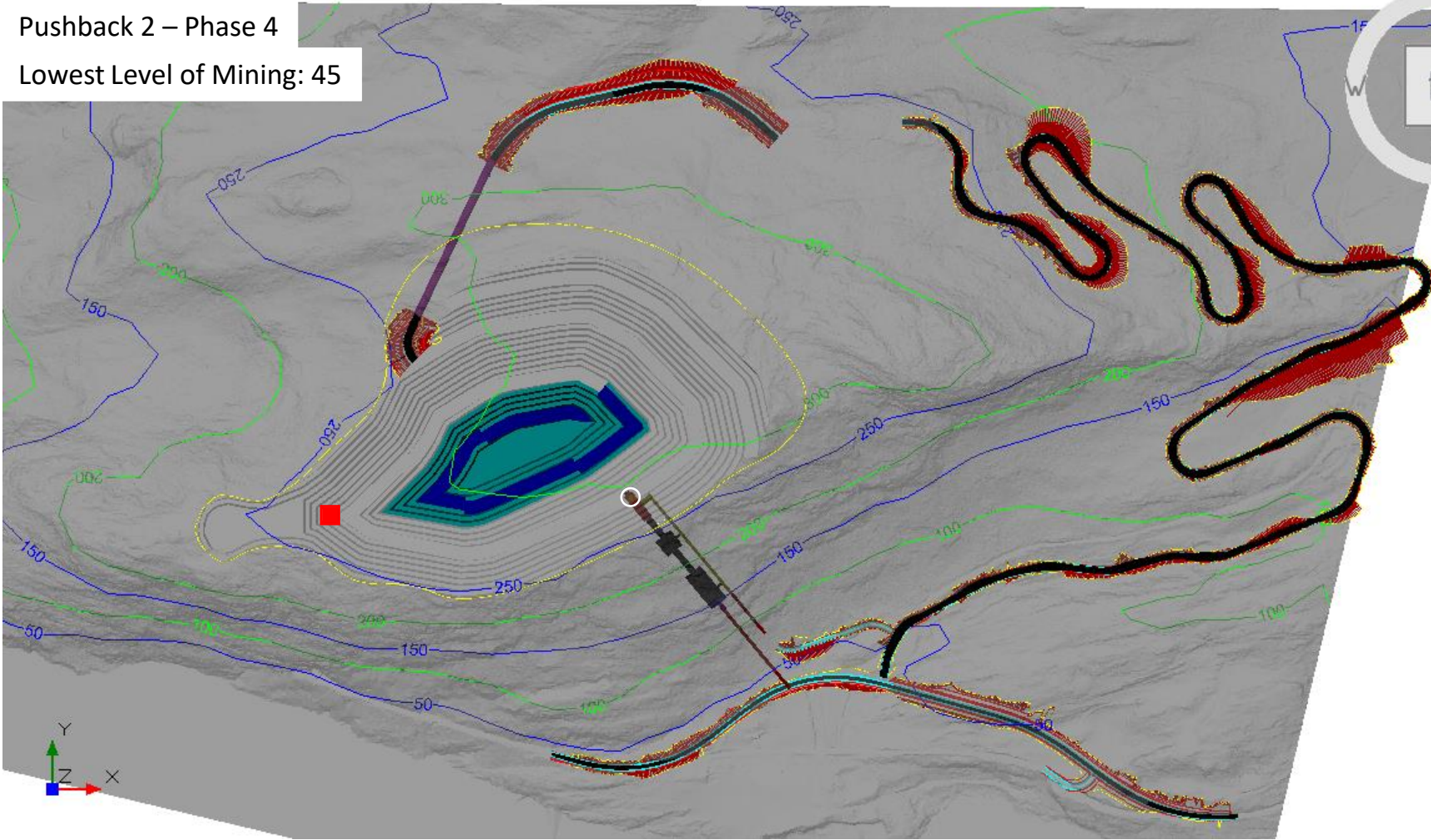
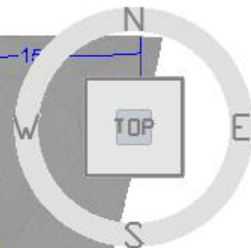
Lowest Level of Mining: 105



Mining schedules open pit

Pushback 2 – Phase 4

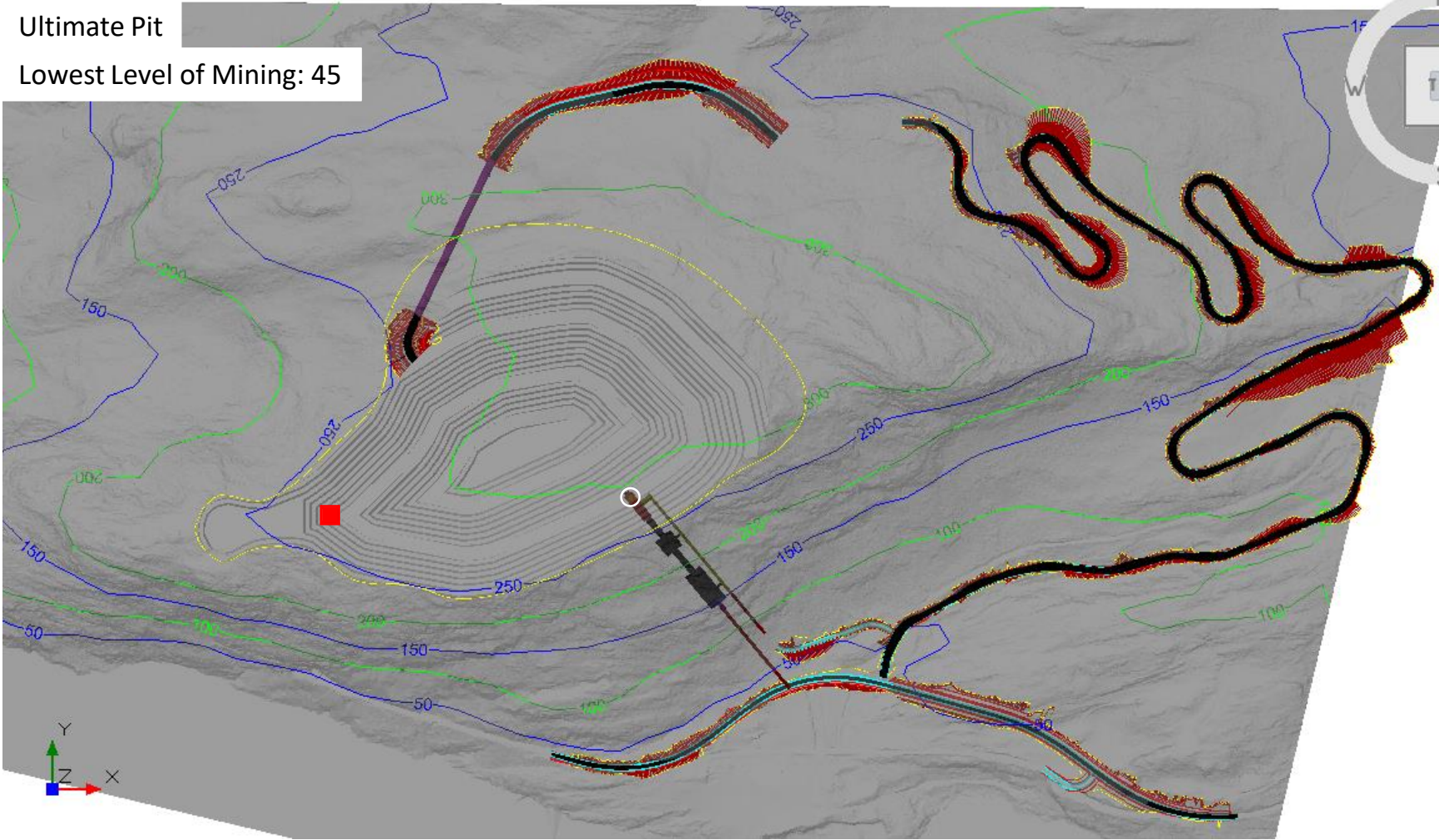
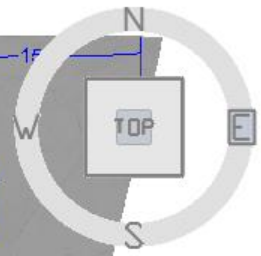
Lowest Level of Mining: 45



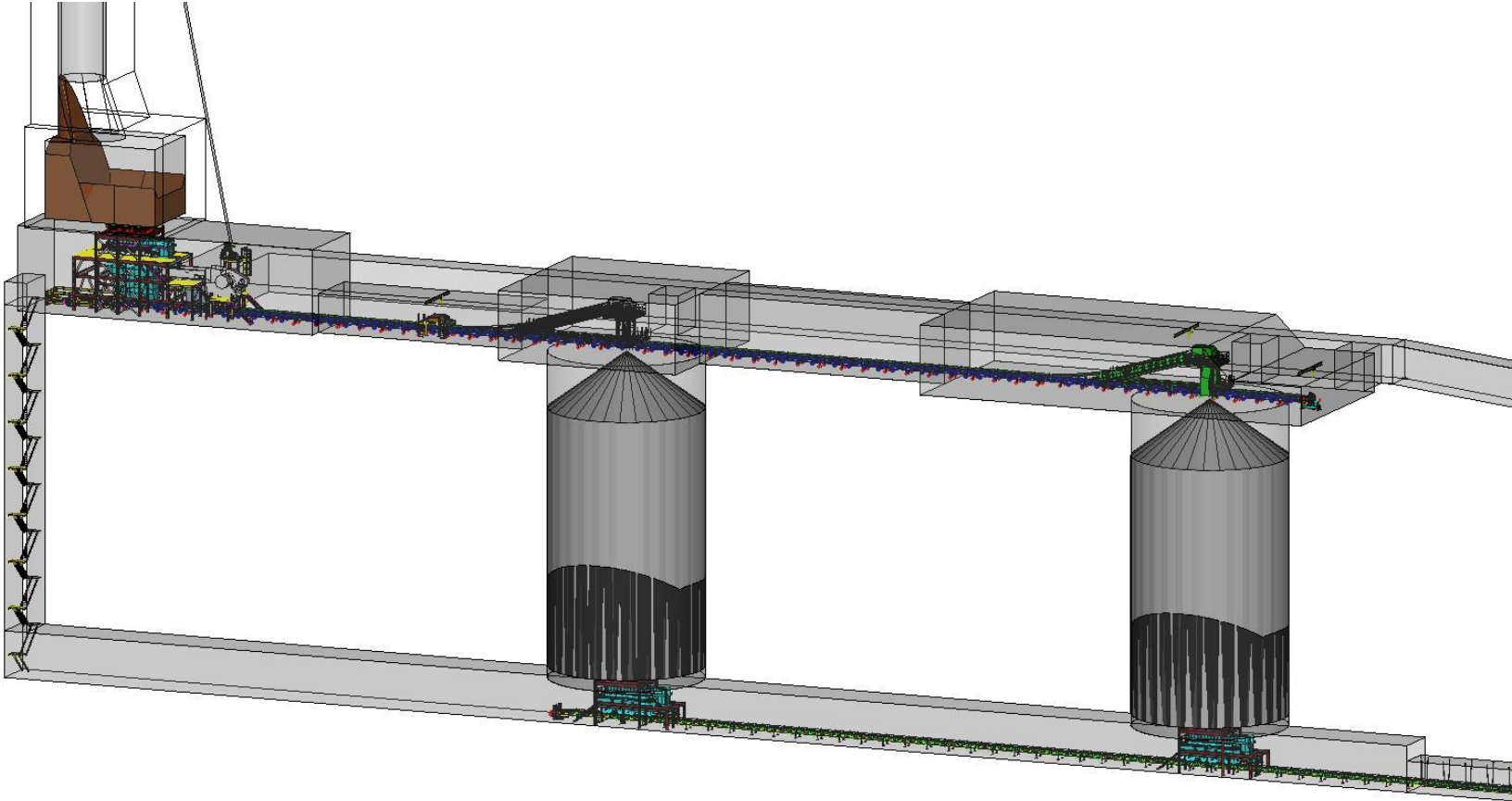
Mining schedules open pit

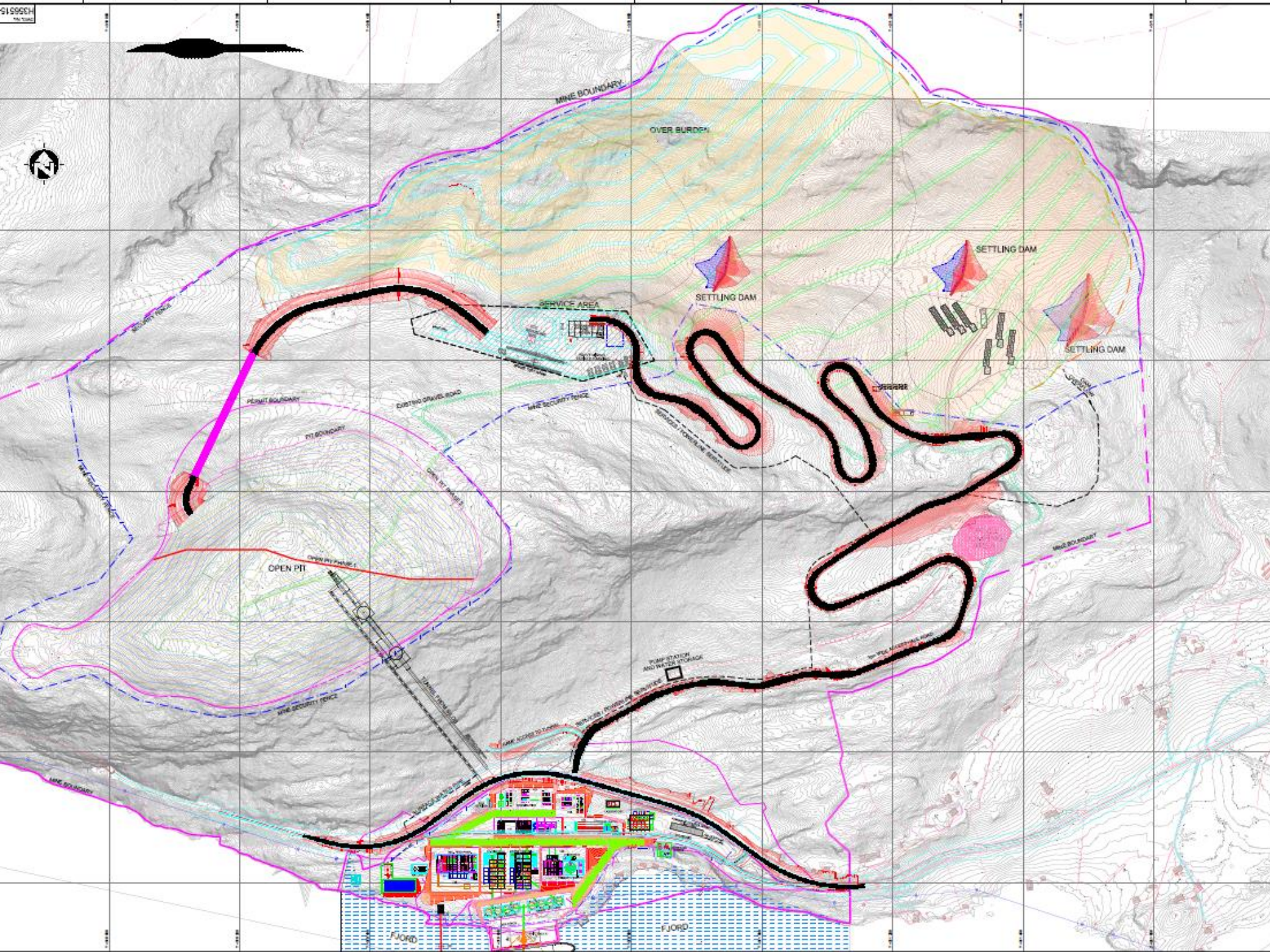
Ultimate Pit

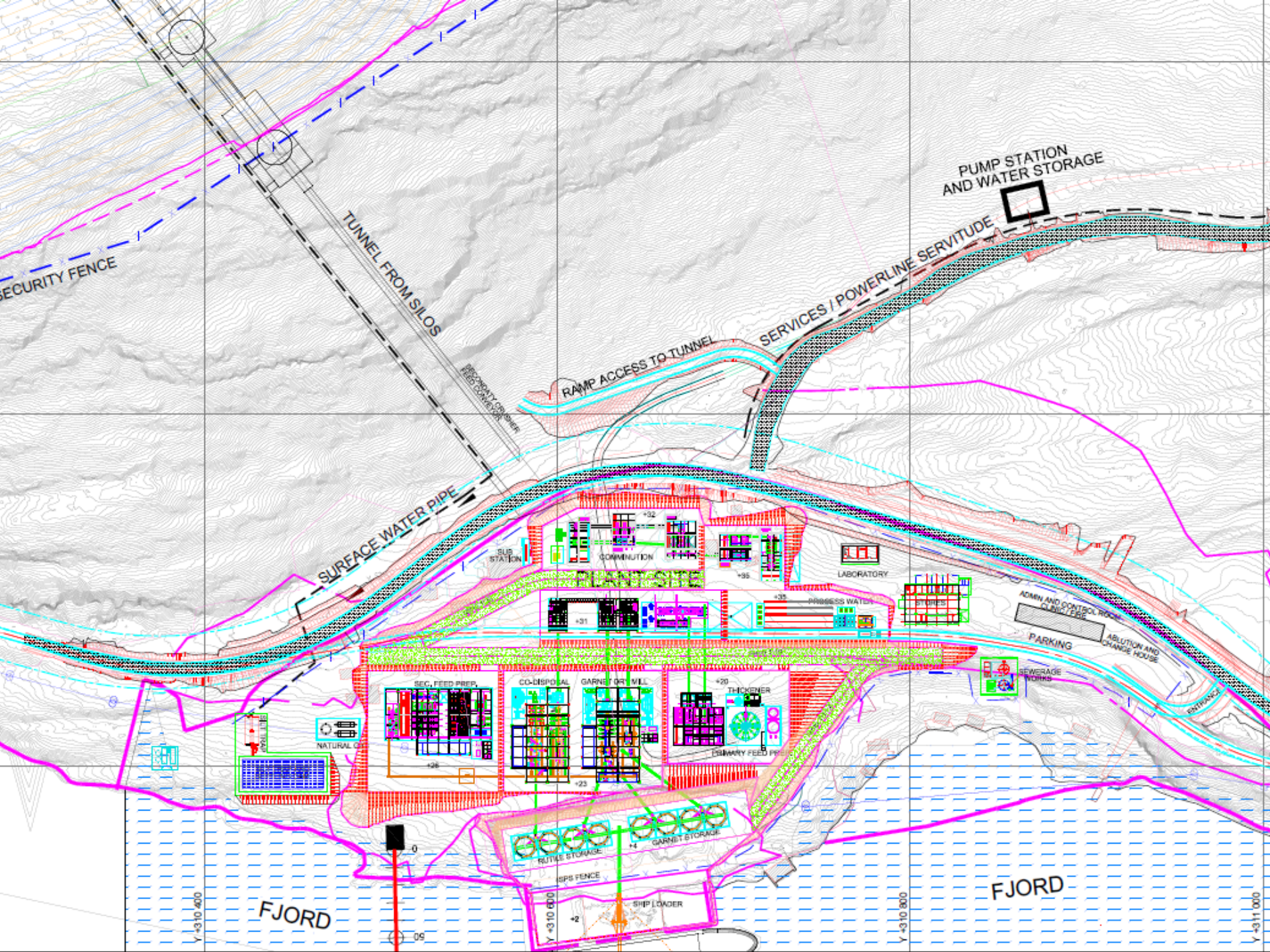
Lowest Level of Mining: 45



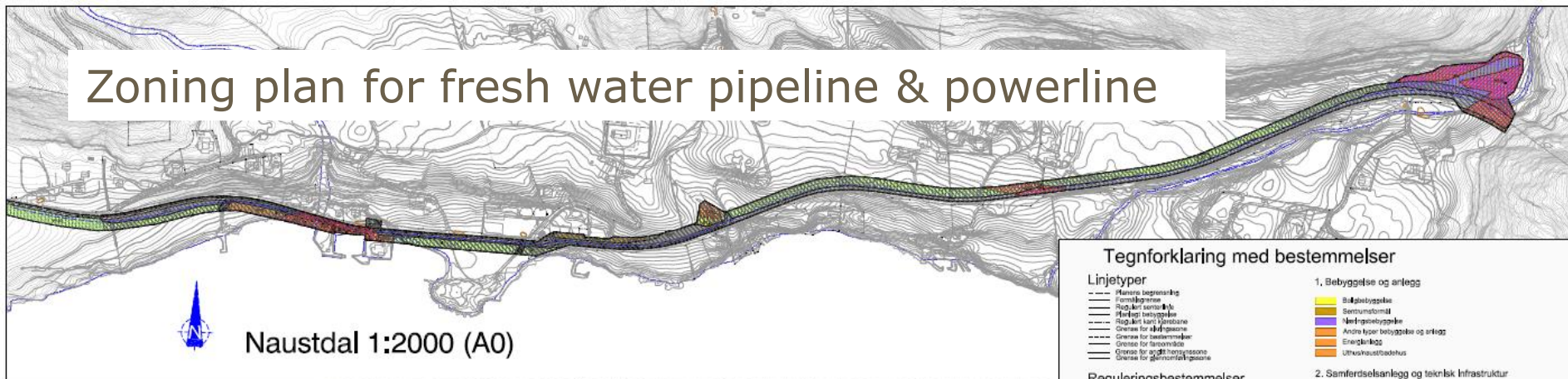
Underground facilities for crushing, ore storage and conveying





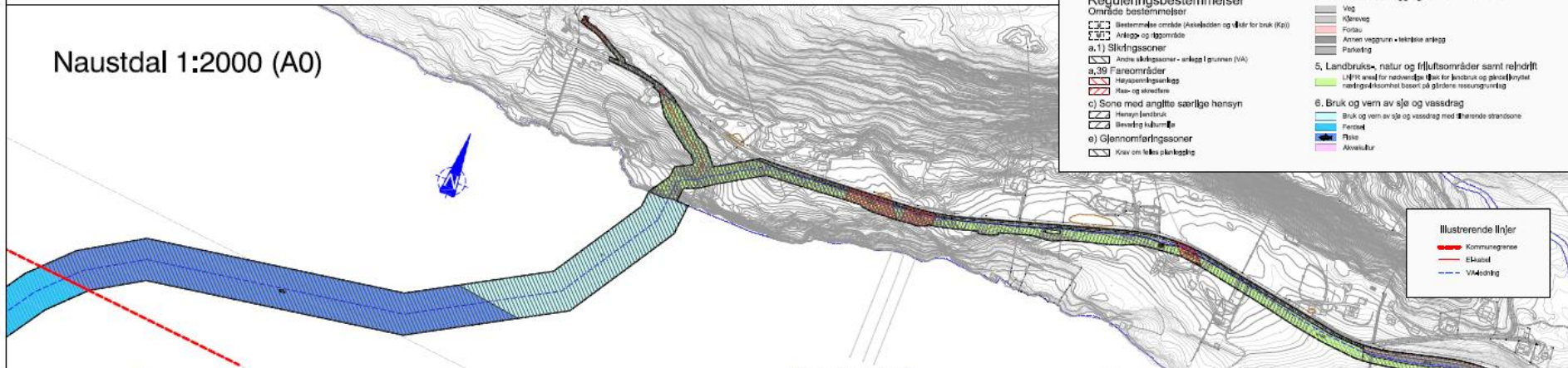


Zoning plan for fresh water pipeline & powerline



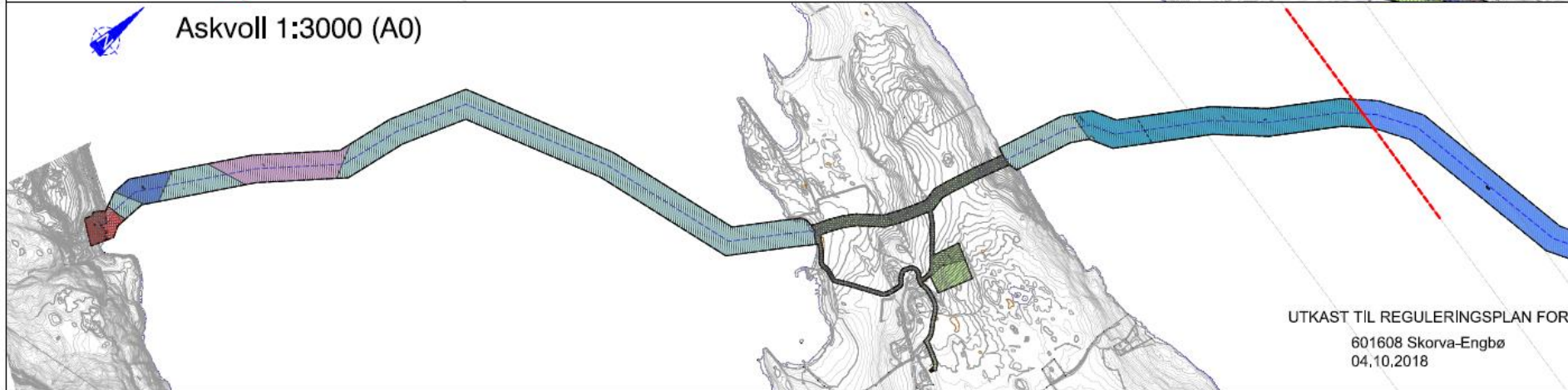
Tegnforklaring med bestemmelser

<p>Linjetyper</p> <ul style="list-style-type: none"> --- Havnens begrensning --- Formlig grense --- Riggjer som regel --- Havnlig betygnelse --- Havnlig kort grense --- Grense for skiltegrense --- Grense for bestemmelser --- Grense for forsoning --- Grense for østlig betyngning --- Grense for gjennomføringsgrense 	<p>1. Bebyggelse og anlegg</p> <ul style="list-style-type: none"> Blågulbetongplass Betongformid Malingsbetongplass Andre typer betongplass og anlegg Energibygg Ultrahøyttrykksanlegg
<p>Reguleringsbestemmelser</p> <p>Område bestemmelser</p> <ul style="list-style-type: none"> Bestemmelse område (Akkresiden og vider for bruk (Kp)) Indre- og tegnerområde <p>a.1) Stikksoner</p> <ul style="list-style-type: none"> Andre skiltegrenser - anlegg i grunnen (VA) <p>a.39 Fareområder</p> <ul style="list-style-type: none"> Maraspartikler Waa- og skredfare <p>c) Sone med angitte særlige hensyn</p> <ul style="list-style-type: none"> Havnlig landbruk Bevaring kulturmiljø <p>e) Gjennomføringssoner</p> <ul style="list-style-type: none"> Korv om fullt planleggje 	<p>2. Samferdselsanlegg og teknisk infrastruktur</p> <ul style="list-style-type: none"> Veg Veiveg Forus Andre veggure + tekniske anlegg Planlegg <p>5. Landbruks-, natur og friluftsområder samt reindrift</p> <ul style="list-style-type: none"> Ufruktbar jord for jordbruk og pleietyper Landbrukskontroll basert på gjeldende ressurspunkt <p>6. Bruk og vern av sjø og vassdrag</p> <ul style="list-style-type: none"> Bruk og vern av sjø og vassdrag med tilhørende strandone Ferskvann Fiske Avvask

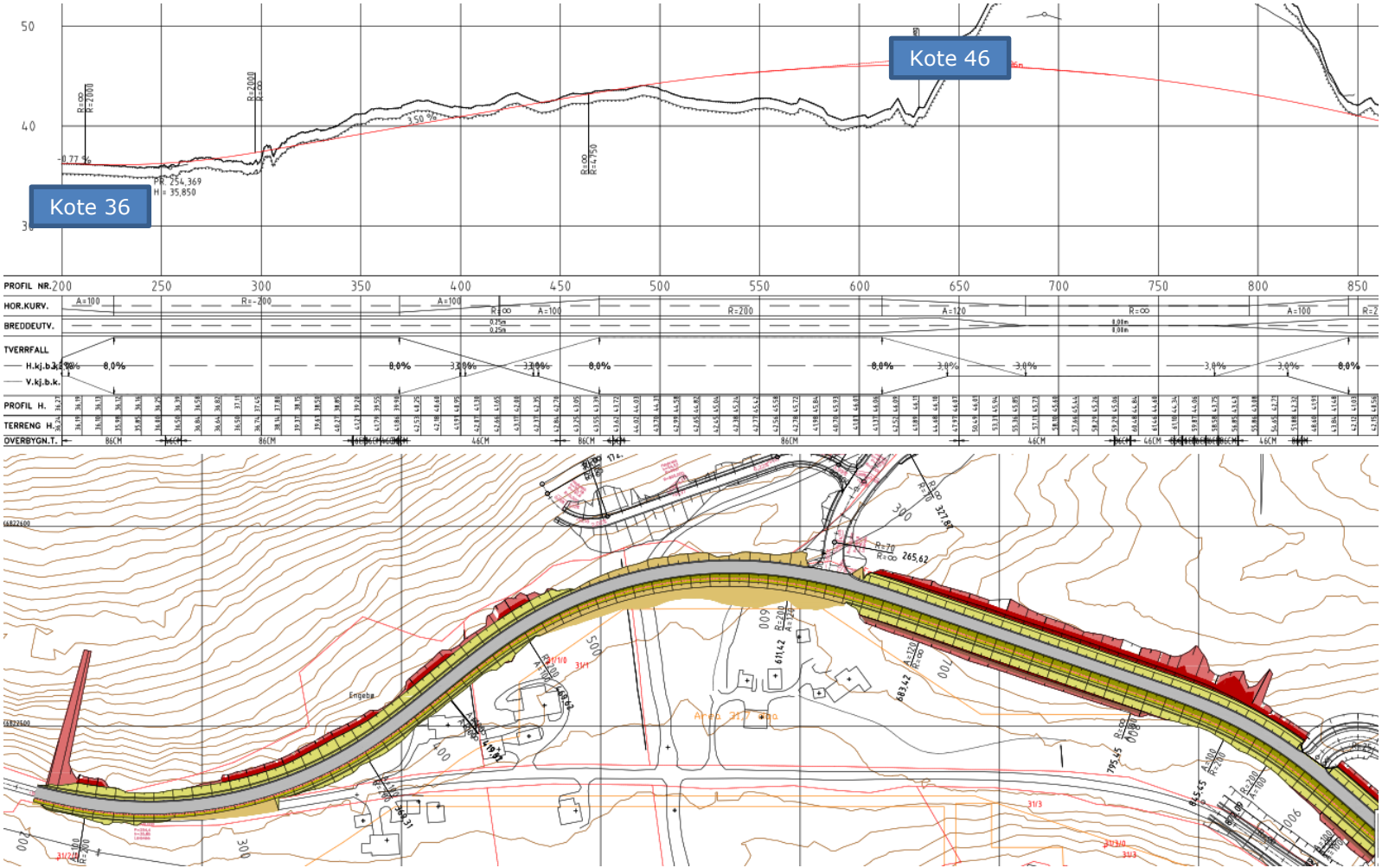


Illustrerende linjer

- Kommunegrense
- Etasid
- Vikering



Engineering, county road 611



Archeological investigations completed

All areas clarified for construction



Infrastructure and operational readiness

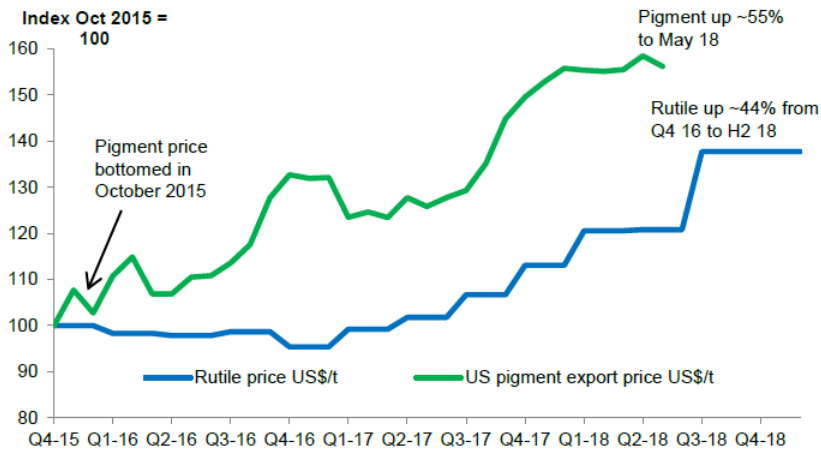
Activity	Completion	
• Detailed regulation of process and mining area	May	2019
• Regulation of pipeline for water supply	March	2019
• Review of infrastructure for power supply	Dec	2018
• Redirection of county road Fv 611	✓	
• Archeological investigations	✓	
• Environmental monitoring	January	2019
• Review of tailings disposal system	Dec	2018
• Procurement strategy	May	2019



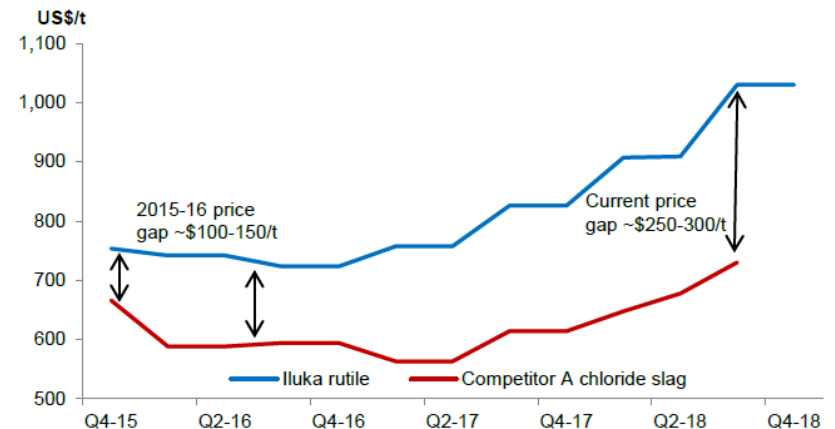
Rutile is on an upward cycle

Supply issues and increasing demand tighten the feedstock markets

Rutile prices increasing, historical lag to pigment prices



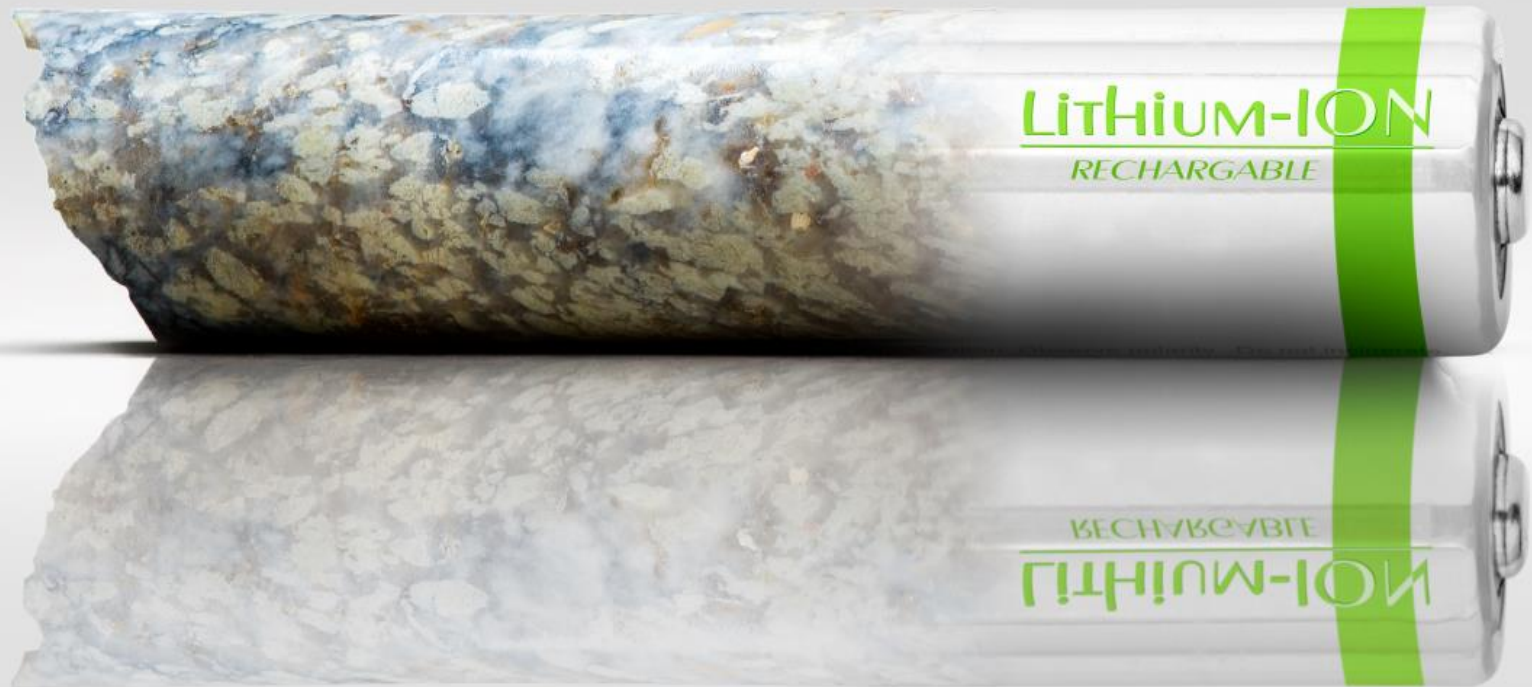
Rutile premium



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Keliber – Lithium from Europe for future energy solutions



 **KELIBER**

Finland well positioned for battery production growth

Raw materials

Li

Ni

Co

Graphite

From mines to chemicals

- **Keliber**

Norilsk Nickel worlds largest Ni producer (30 % of production refined in Finland)

Freeport Cobalt worlds largest producer of Co chemicals

Terrafame investing MUSD 200 in Ni and Co battery chemicals

BASF announced intention to invest MEUR 400 to battery cathode material production

Strong political support

May 2018: The Finnish government announced **significant support for the Finnish battery industry** by establishing a joint company ***Finnish Minerals Group*** to centralize its ownership and accelerate growth in the industry.



Concentrator plant in Kalavesi



Designed for ore throughput
of 600 000 tpa (nominal value)



Chemical plant in Kokkola Industrial Park



Nameplate capacity of 11,000 tons
Area reservation for possible expansions



Keliber adopts to market changes in the battery manufacturing

November 6th:



Pilot plant test program to produce battery grade lithium hydroxide



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Safety – Environment - Innovation



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