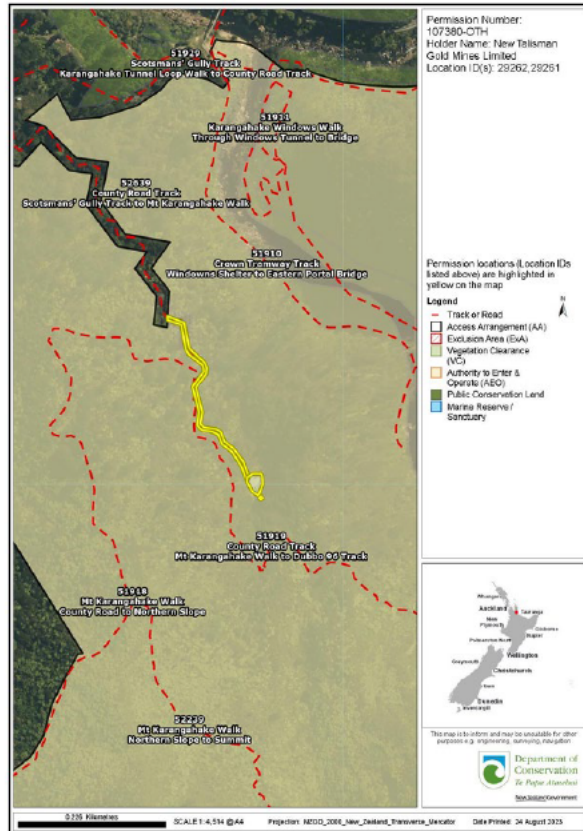




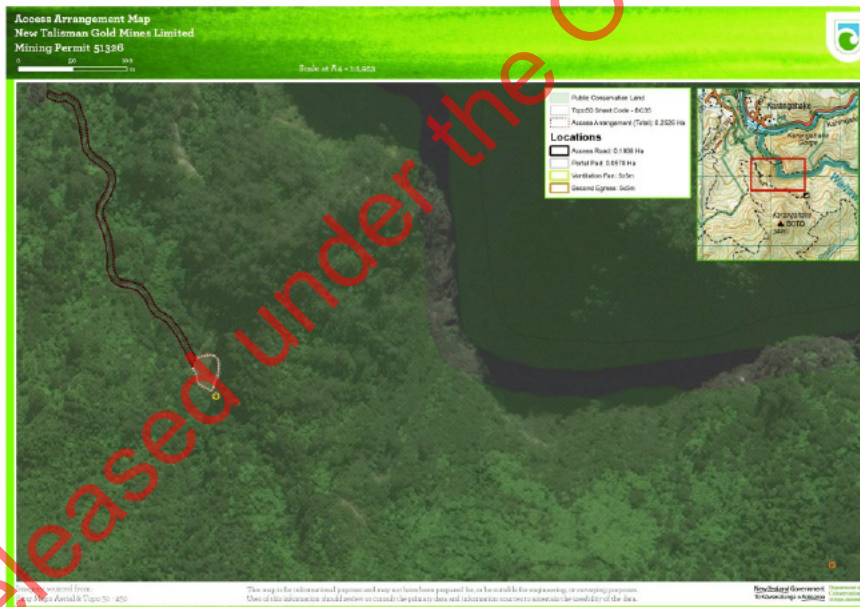
File Ref:		Permission No:	107380-OTH
Inspection Date:	16/11/2023		
Persons Present:	Department of Conservation Rangers, Nataalia Lunson Community, and Warren Geraghty Heritage and Visitor.		
	Lincoln Smith Terra Firma Mining Limited Managing Director Terra Firma Mining New Zealand.		

SECTION 1: DESCRIPTION OF OCCUPATION

Name of Permit Holder:	New Talisman Gold Mines Limited
Permit Status:	Active Term: 3 months from approval commencing on 4 September 2023
Expiry Date:	December 4 th 2023
Land Status:	Kaimai Mamaku Conservation Park, Part SEC 33 BLK I Aroha SD, DP 316844 Lot 2 (ParcelID 6604994), Part of SEC 105 BLK I Aroha SD, Part of DP 316844 Lot 4 (ParcelID 6604996),
Location:	Location 1: 29262 - No8 Level Access Road (Old County road) GIS area (ha): 0.1586 Map Reference: X: 1840761.4545 Y: 5854201.9490
GPS Coordinates:	Location 2: 29261 - No.8 Level Portal Pad GIS area (ha): 0.0578 Map Reference: X: 1840854.2137 Y: 5854010.4575
Map Reference:	



DOC GIS Map shows the licensed location outlined in yellow.



Map supplied by Talisman Gold Mines Limited

No.8 Level Access Road (Old County Road) outlined in black.

No.8 Level Portal Pad outlined in red and yellow.



SECTION 2: DESCRIPTION OF THE AREA

No8 Level Access Road (Old County Road)

Landform:	Road increases in altitude from the public car park. (See photos.) The road is comprised of placed loose rock and gravel over the top of the hard natural substrate of soil and earth. The current condition of the road appears unkept with weeds and potholes. Driving on the road would be more secure in a 4WD, common car is less stable and more likely to drift and be damaged by the uneven surface. The road is a natural cut into the bank on the right side and to the left side is the natural landscape descending. Space for two vehicles is narrow and strategy coordination is required like a one-way road.
Vegetation:	Native forest vegetation is above and below the road. Pest plants are sporadic along the edges of the road.
Waterways:	Drainage management is not evident. Perhaps there is an assumption the landscape self-manages rainfall.
Fauna:	Native birds are heard and seen in the area.
Historic / Cultural Sites:	Heritage mining is a visitor feature of the area. This road is used by public as a walking track for the Karangahake walk.

Location 2: 29261 - No.8 Level Portal Pad

Landform:	The portal pad is a highly modified flat landscaped site within a natural mountain landscape. (see photos) The area is comparable to describing a large carpark with a substrate of earth and fine rock sediment.
Vegetation:	Native bush outlines the boundaries of the portal pad. Pest plants/ exotic plants are noted within the portal pad and on the boundaries where there are disturbances of the natural habitat such as fencing, poles, culverts etc.
Waterways:	Waterfalls are in the gully behind and above the portal. Streams are on both sides of the portal door and a culvert pipe mitigates maintaining a dry area to access into the portal door.
Fauna:	Native birds are heard. Rodent pest control is placed around the temporary structures.



Historic / Cultural Sites: Talisman mine is part of the heritage mine industry of the area.

SECTION 3: COMPLIANCE WITH CONDITIONS OF PERMIT

Concession Activity: One-off for vehicle usage to inspect underground mine at Kaimai Mamaku Conservation Park. Term: 3 months from approval - and as more specifically set out in Schedule 3.

In consideration of a 3-month term one off concession there was not a lot of evidence that efforts had been made for road maintenance. However I did not a before photo to compare. The portal pad was adequately presentable. No layout map has been provided and it appears that structures were an oversight and should be include in this easement concession.

Structures on the site include (but not limited to) a two-person surface control room office pod, kitchen pod, safety equipment shed, general storage.

There is no ablution block, there is a port-a-loo with sanitation via hand-sanitiser. A derelict Portaloo and a caravan is yet to be removed off the site. A water holding tank is on site. See photos.

Weeds and nonnative grasses are established to confirm presence precedes the concession. Both Warren and I pointed out the *African Clubmoss* which has a high risk of prolific spread especially in areas of high disturbances associated with mining. We saw no evidence of a pest plant/flora control plan.

Old county road and the portal pad have natural water courses, kauri is present in the area however no kauri mitigation plan is in place other than wash stations for shoes at the Scotsman gully walking track. It would be opportune to have a deliberate conversation on kauri mitigation for the road with consideration that a large kauri stand is at the first entrance into the county road.


Safety was the core reasoning for this active concession, the following section of operational matters and photos will address this.



No.8 Portal environment observations.

Observation focus	Y	N	N/A	Observation notes/or photo evidence
Has soil & vegetation been stockpiled/saved?	Y			s6(d), 9(2)(b)(ii) [Redacted] s6(d), 9(2)(b)(ii) [Redacted]
Are tailings/waste rock stacks stable?	Y			s6(d), 9(2)(b)(ii) [Redacted]
Are water takes appropriate?				Water take is through a 63ml pipe. This requires technical advice regarding appropriation.
Are water courses open?	Y			Water courses are present in the natural landscape.





					
Are buffer zones from waterways in place?	Y			In some places this appears adequate in other areas it is not. This open stream is next to the mine entrance. Access to the stream is protected by a fence. A culvert runs underneath the path. The amount of water in the area is more significantly noticeable once entering the mine.	




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Are adequate settling ponds in place & working?		NA	 <p>This requires technical advice. Settling ponds are below in the gully behind the fenced area. We did not enter this area during this visit.</p>
Are adequate sediment controls in place?		NA	This requires technical advice and assessment. Efforts are evident towards mitigating surface flooding.
Is water discharge of an acceptable standard?		NA	This requires technical advice and assessment. Water testing has not been included in this visit.
Are access tracks/batter slopes stable & free from erosion?		NA	<p>I did not see purposeful mitigation against erosion risks. An open structure was visible and accessible. It appears to be used as a convenient storage cave.</p> 
Are buildings on site approved?		NA	The buildings are temporary/portable structures. Some have been on site for several years.



					
Are fire precautions in place?	Y			Many fire extinguishers are on site, but some were passed their expiry dates. New fire extinguishers are secured on the container doors to be easily available when doors are opened during work hours. Previously they were hung outside but were recently being interfered with people breaking through the security fenced site.	
Is waste material (e.g. drums, grease cartridges) being removed?		N		We were informed that the site is still being cleared and re-established as fit for purpose.	
Is the site free of rubbish?		N			
Is fuel storage & refuelling adequate?				This is to be audited by work safe	
Are the special conditions in the AA being adequately met?			N/A	This is not an AA inspection	

2.0 Commentary from Warren Geraghty

Lincoln indicated that New Talisman had not operated at the site for 4 years and were just returning to restart a certain amount of work. Hence site and buildings were a little scruffy, however a general clean-up has begun.

The greater area of the site has been machined to remove flood debris and weeds; this is stored on site with no intentions of removal off site.

A few small regen pine trees on the peripheral of the occupation site exist and will be removed before getting any larger. Other general local weeds exist within the site such as pampas grass and African clubmoss and will be controlled within future maintenance.

Two diesel engines on site driving a generator and an underground ventilation blower. Requested that the exhausts be turned to exit inward to the earth floor site away from the steep scrub covered site peripheral. Also suggest that a nighttime spark arrestor observation be carried out at a time when/if the operation is in full swing.

Safety and emergency procedures explained in very good detail, underground work monitoring systems, and back up measures for underground emergencies thoroughly covered in step-by-step explanation.



Emergency equipment storage shed in quite a mess with clutter of newly arrived boxes of supplies, clear access being restricted but likely well in order now in light of your well worded observational comments; 'tripping over the clutter while dealing with an emergency'

A group of about 5 people have recently been fossicking without authority within the stream below and have created an amount of damage with digging and rubbish. Some have also been caught on security camera breaking into the site, police have been informed and visited, the fossicking activity reported to the mineral/mining authority. Requested incident form be forwarded as activity is also contravening acts under DOC, can be managed through My CLE.

Permissions concern:

I have had liaison with NTL at this site over the years with previous site checks etc, as well the many previous years of dealing with other companies at varying levels; my first visit within No8 Level adits being in 1977 with an old well-respected miner working the reef at the time.

The mine adits on Karangahake are 'hard rock' mineral mining, a type of mining not prone to gas explosion. Slumping can occur internally however Terra Firma is a company who specializes in the engineering and operation of mines to a very high level of safety, Terra Firma is the company carrying out the re-entry access work within Pike River mine. Having previously been into the No8 Level works with key Terra Firma staff during which the stability work in the way of timbering, shot concreting and rock-bolting was explained there is certainly considerable engineering involved to achieve such standard. A very large and revolutionary ventilation system was put in place, much of the innovation for this designed by Terra Firma staff; the air reaches well the extremity of the work site within. I have seen the internal communication system working giving contact to the site office person monitoring the workers underground, this from the spaced internal phone stations.

A second escape egress from the mine tunnel has been investigated and planned by the engineers, Terra Firma will prioritise the placement of the necessary work for the implementation of the egress if the NTL temporary access is extended. Currently, under the mining regulations a 2nd egress is not required for tunnel access unless stopping work is to be carried out.

New Talisman have blocked (by concrete) all access locations where previously public underground mine explorers gained access into the NTL working level, removing a significant public safety issue for the workings.

At the initial NTL authority, I informed that a safety concern existed in the localized gully a distance above the No8 entry. Many mullock dump sites exist within the small stream, at times during cyclonic events mullock would break away due to flooding and land in a pile at the No8 adit entrance; a possibility existed that a large mullock movement could block the then portal of the tunnel. NTL ameliorated the potential hazard by placing well reinforced steel containers at the portal, thus extending the entry into the tunnel to beyond the potential mullock hazard; a very good remedy put in place.

A visit down the mine with guided explanation by the engineer shows well the very extensive stability work achieved by NTL, this work is inspected by the mining authority (NZP&M) for the relevant approvals required to operate, Worksafe also carry out approvals for NTL to operate. On the face of things, this is a very well-run operation which is totally satisfying the mining authorities, the mine engineering is significant; with a little understanding of the mining undertakings and regulations of responsibility my thought is that the risk to the department is at the very low end of the scale.

Complementary photos from our monitoring visit:



This is the entrance/start of No.8 Level Access Rd. This is where public park to start their walk up the road onto Karangahake. The carpark is beneath a Kauri grove.



No.8 level access Rd is a public walkway. These are two teachers scoping for a school trip event. Behind them is a basic kauri wash station for shoes.



No.8 level access road has several track signs describing Karangahake walking tracks and history.



These three individuals have been identified as illegally mining beneath the No.8 Portal Pad. Strange behaviours of individuals are a common occurrence. The area is still attractive to gold mining hopefuls.



Security gate entrance into the No.8 Level pod. Note the change in the state of the road.



The blue ute is parked facing the gate entrance. During our visit the two teachers I meet on the way up, walked in casually looking for the walking track. Two green Portaloo's, but only one is useable.



	<p>s6(d), 9(2)(b)(i)</p> 
<p>Our site induction included a description of designation areas identified by the road cones i.e. soil piling, fencing, structures, and natural boundaries.</p>	<p>s6(d), 9(2)(b)(ii)</p> 
<p>s6(d), 9(2)(b)(i)</p> 	
<p>s6(d), 9(2)(b)(ii)</p> 	<p>Native vegetation and the odd pine trees are outside of the fenced area.</p>
	<p>s6(d), 9(2)(b)(ii)</p> 
<p>This pod contains storage of PPE</p>	<p>s6(d), 9(2)(b)(ii)</p> 



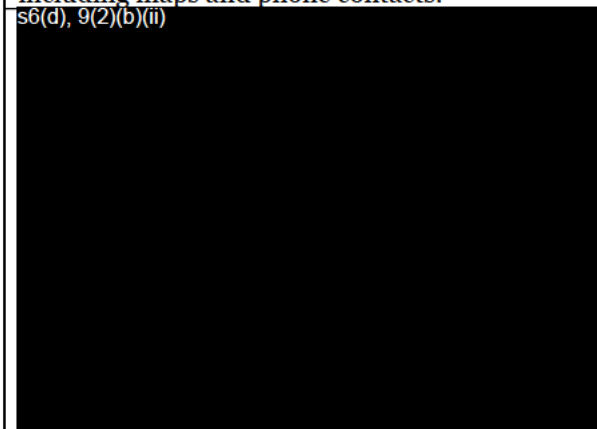
This pod is for the surface controller. On the desk are all the safety plan protocols, including maps and phone contacts.

s6(d), 9(2)(b)(ii)

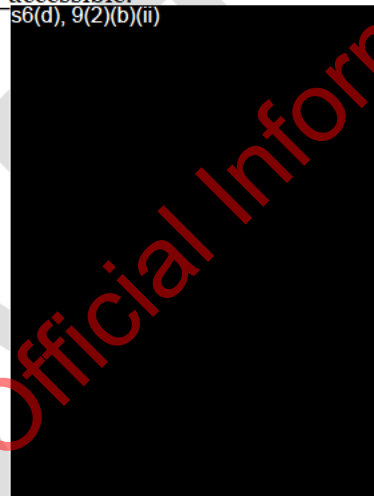


This phone is directly connected to the under-ground mine. Emergency contacts and PPE are instantly accessible.

s6(d), 9(2)(b)(ii)



s6(d), 9(2)(b)(ii)



s6(d), 9(2)(b)(ii)



Before visitors can enter the mine, a safety induction is required which includes self-safety checks, medical disclosure of risks, a safety video on how to use the emergency breathing apparatus and PPE. A questionnaire on the induction must also be correctly answered



On top of the mine entrance sits the fan. Behind in the distance a waterfall can be heard.



	
Inside the entrance is the fan vent.	The cables not only provide necessary connection but are used as a guide to find the way out if helmet lights fail. Cables right hand to find the exit.
	
Closed sections are concrete sprayed.	Areas lacking structural integrity are reinforced.
	
Sections of the mine are named and allocated with safety equipment to be readily available.	Specific sections of the mine require calling in to the surface controller who is monitoring estimated times under ground and whereabouts.



	
The amount of water coming into the mine varies in sections. Drains and gentle inclines manage the water flow.	Inside this tunnel is the Maria and Mystery vein. https://www.newtalismangoldmines.co.nz/projects/talisman-project/
	
This is the location at the end of the tunnel where the concessionaires and their investors are wanting to commence operations	

3.0 Related documentation

Documentation	Person responsible	LINKS
WorkSafe report request and legal advice	Permissions	DOC-7492166
108636-AA – Access Arrangement	Permissions	DOC-7389551
Application to explore further mining		TA: DOC-7389553
Internal Correspondence Memo to the Regional Director summarising background context.	Kris Theiss	DOC-7513882
Concessions Contract 107380-OTH	Tauranga Ops Manager	DOC-7452620



SECTION 4: CONCLUSIONS AND RECOMMENDATIONS

This one-off monitoring visit has enabled an opportunity to ground truth the site and hear the intentions of why vehicle access has been granted to this site while the 108636-AA application is pending approval. We were informed on our visit that WorkSafe intended to assess the site in the following week. Confirmation of that inspection and a copy of the report from the concessionaire is advised. This one-off concession has accommodated the requests of the applicate.

A repeated one-off easement for this activity is not eligible. I recommend assessing the legal implications of structures on the site. The site is being prepared by the concessionaire to go into action prior to any approval. I recommend any progress in activity should require more than basic amenities such as a port-a-loo. I did not note any running water for drinking or showering.

The road is not maintained pest plant free as required in the special conditions of the contract. However, a one-off concession of 3-mths does not hold a high expectation of impact on vegetation maintenance expectations. Accommodating public use of the road as a walking track and the lower carpark requires thoughtful and strategic considered.

The valuable resource of the mine does pose a security risk if the area is not managed. As seen on our visit individuals are keen to continue illegal mining. This statement does not encourage legal mining is a better option. The mine has been targeted in the past by protestors throwing rocks at the workers from the walking tracks above the portal pad.

In conclusion the one-off concession has met the requirements of the concessionaire to make the area accessible for safety checks.



Monitoring Officer (MO)
Nataalia Lunson
Date: 30 / 11 / 2023

Senior Supervisor Ranger:

Date: / /