

Project Martha Community Meeting

Thursday 27 February 2020

The following is a record of the Project Martha community meeting held at 3.10pm on 27 February 2020. Where possible, we have tried to capture individual contributions at the meeting but these do not purport to be verbatim notes.

Welcome

Tim introduced himself as the independent facilitator and Louise Fielden as the independent minute-taker and explained that the purpose of the meeting is provide information about the Martha project and an opportunity for people to ask questions, which will be answered either during the meeting or followed up afterwards.

Project Martha

Purpose of meeting

Under Condition 99 of the Project Martha consents we are required to hold community meetings quarterly during the first year of mining activities provided for under this consent, and six-monthly thereafter.

- a) Present information from the preceding six months on the following:
 - i. A description of the mining activities provided for under this consent that have been undertaken;
 - ii. A summary of relevant environmental results;
 - iii. Progress with the IRP property purchase programme;
 - iv. Progress on any matters raised at the preceding meeting;
- b) Receive feedback from the meeting attendees on the consent holder's activities and progress on the matters listed above.

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INNOVATION PERFORMANCE GROWTH

OCEANA GOLD

Tim asked the Oceana Gold team and the other attendees of the meeting to introduce themselves. (*We have included Kim's self-introduction below as the new addition to the Oceana Gold team – other attendances are listed in the table at the end of these minutes*).

Kim said: I am the external affairs and social performance manager. For the purpose of today think of me as the community relations manager which is far simpler, similar to what Kit was doing. Kit is still with us, but has moved on to more of a national role, Oceana NZ communications. I've been here since November after being in Australia for about 20 years, but I'm very happy to be back in New Zealand and in Waihi and I'm looking forward to getting to know everybody. I'm originally from Scotland but I have a NZ passport, and I'm married to a New Zealander.

Tim explained that minutes will be provided and that the meeting is also being recorded, which allows for Tim and Louise to prepare accurate minutes and also for people not in attendance to listen to the meeting if they wish to. The minutes are available on a link on the Oceana Gold website and anybody who wants to receive a copy of the minutes or listen to the recording can request the minutes or a link from Oceana Gold. When Tim asked if everybody had received a copy of the minutes of the last meeting a few people said, "No".

Jeannine said: We have the minutes available online on the Oceana Gold website. But, if you would like them emailed to you let me know. I had trouble trying to decipher the email addresses from the last lot of sign-ins.

Tim said: Has everybody signed in and provided an email address?

Iris said: What if we don't have email?

Jeannine said: I now have Iris' physical address noted to deliver a paper copy to her. (Jeanine collected other names and addresses for provision of the minutes.)

Project Martha

Outline

- ▶ PREVIOUS MEETING
- ▶ PROJECT
- ▶ ENVIRONMENT
- ▶ SOCIAL/COMMUNITY

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INNOVATION PERFORMANCE GROWTH

OCEANA GOLD

Tim summarised the purpose of the meeting (first slide / slide 2 above) and then the broad agenda (slide 3).

Kim said: Before Bernie provides a project update, there's a brief slide about site visits which we just wanted to update, so that was our point from the previous meeting. That's pretty quick, it's just to say that we've had some interest and we're following up.

Items from last meeting

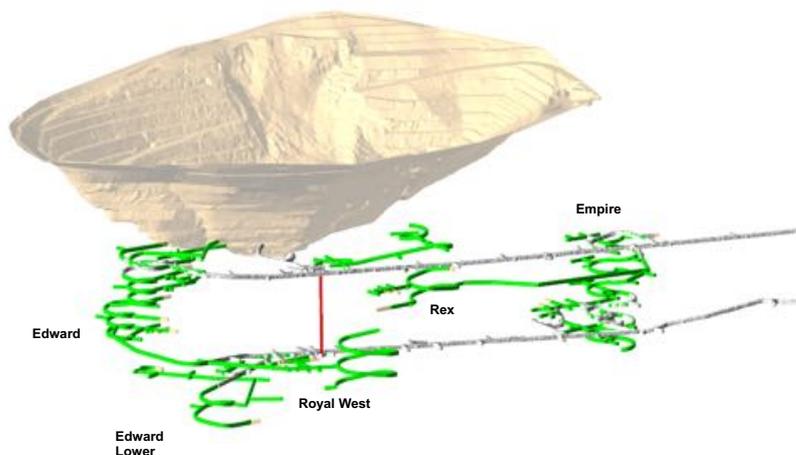
- **Underground mine tours** – The two residents that were interested in going underground have been contacted to arrange a date later in the year with a larger group.

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PERFORMANCE GROWTH

Tim said: Thanks Kim. Bernie, are you going to give us an update of the project?

Project Martha at the end of 2020



INNOVATION PERFORMANCE GROWTH

OCEANA GOLD

Project update

Bernie said: Thank you Tim. We kicked off the Martha Project in about July last year, you might recall, so we've been going about eight months now. What this plan represents (Project Martha plan slide immediately above) is the Martha pit in the background and what we've named here are the four or five main veins that we are targeting for mining. Most of you have been around Waihi for quite a period and you know that the old-timers mined the Martha underground mine between the 1890's and the 1950's and there were about 5 million ounces of gold pulled out over that 70-year period.

We've identified, with our drilling, over 75 veins, which are discrete and mostly veins named by the old-timers, where the gold occurs and they are quartz veins. From our point of view what they've left behind is what we've been targeting with our drilling programme. But also, because the gold price was quite low over that period compared to what it is today, and if you're up with the news today you might see that the gold price is reaching record highs in New Zealand dollar terms. So, they took the high-grade stuff, the really valuable stuff and they left material behind in those quartz veins so we are also targeting some of that. A lot of these names you will recognise, these are the more famous veins that we're targeting including the Empire, the Edward and the Royal veins. The Rex vein is basically a newly discovered vein and that's underneath the houses between Gilmour Street, Mueller Street and the rugby club and the rest of the veins are generally underneath the open pit as it exists. So, just out the door here most of the veins that we are targeting are underneath. What we see here on this diagram (the PowerPoint slide above) is where we're heading. The grey colour is where we got to at the end of last year. As I said, we kicked off in July and we started with our tunnelling programme. The aim by the end of this year is to connect up these two main drives in the grey and by "drive" I mean tunnel. The tunnels are roughly 5m x 5m in size, so that's the dimensions of them, they are quite large, about the width of this room and the same in terms of height. We can fit our equipment down there, our drills, our loaders and our trucks. We connect them up by way of these linking spiral declines and we are also targeting by the end of the year to break through into the pit. We need air for ventilation, we need air in and air coming out. Are you familiar with the ventilation shaft on Union Hill? That exhausts the air out of the mine, so that will still be there, we'll still use that, but because we're a lot further away from Union Hill we're also looking to break through into the pit. That will hopefully be some time in the next two or three months and that will get us more air into the mine. Some of you might recall, if you went to one of the Correnso meetings last year, we'd already broken through into the pit, so that's right there (*Bernie pointed to the slide above and indicated the lowest point of the Martha pit where the drive meets the pit – almost immediately above Royal West as marked on the slide*). So, by breaking through into the pit here we can take air in and then we put an exhaust fan in this one, so the air gets basically sucked in through the new breakthrough, it goes down around the spiral decline and then back up the shaft that we've put in and then exhausts out through the fans and back out into the pit again. So, that creates a circuit, a flow-through of air which we have to provide for our workforce and after blasting we need that as well. So, that's one of the aims for this year.

Also, we are targeting to have enough ore mined to be able to start processing the gold out of that ore by sometime around the middle of next year. So, there's a lot of tunnelling work to do from now until the end of the year. In 2020 we are targeting about 9km of tunnelling. This year is mainly in the Martha underground about tunnelling, we're not going to be doing any stoping this year in Martha underground other than maybe a tiny little bit towards the end of the year. The stoping is not going to really start in earnest until about the second quarter of next year.

Bill said: What is stoping?

Bernie said: That's a good question, I'm assuming that some of you know about stoping and that some of you don't. Stoping is basically where you open up bigger areas of those veins. The way our mining works is we generally have a tunnel at the top and a tunnel at the bottom separated about 15m apart. Then we drill holes between those two tunnels from the top down, they are called down-holes. We fill them full of explosives and then we blast that out and load that out with a low-profile loader, load the trucks and that's the gold. The stoping method gives us the gold to be able to take it out in those trucks. Stoping is just another term for mining out the big areas between the tunnels. Then the next step is we backfill with our barren rock, that goes back into the void created by the stope.

Liz said: Will there be any gold in any of the workings when you're tunnelling?

Bernie said: Yes, there will be a little bit, that's a good question. There'd be little veins that we're probably not sure about, that we haven't identified in the drilling. Some of you will know that our drilling is spaced apart with our diamond drill-holes, and Fabian (*present at the meeting*) works for the drilling company so he knows this really well. They could be 30m to 40m apart so we can't intercept and identify all of those veins but

there'll be some surprises there, some good ones we hope. It won't generate a lot of gold but there will be some there.

Ross has just made a very good suggestion that at the next meeting we can put a schematic of our mining method in there for those of you who are interested, just to show what stoping is all about and what I just talked about, the tunnel at the top, a tunnel at the bottom, join them up with blast holes, that becomes our stope and then we backfill the empty space. We can show that in a bit more detail at the next meeting Tim. I think that would be very useful for people.

(On the slide above) the green bits are what we're going to do this year, the grey (drives) are what we did last year in the six months that we were working. We did about 2.2km of tunnelling last year, this year we'll do about 9km. Most of that blasting will be development blasting which is pretty low blast vibration.

Brian said: Bernie, can you point out where the pumphouse is? And the rugby grounds and Gilmour?

Bernie said: If you see where the Rex label is (slide above), the Pumphouse is basically in this area (above Rex) and the rugby ground's out that way (over to the right).

Ross said: The gold you find when you're doing the tunnels, your plant's not running so you stockpile that? And once you get going you'll poke it all through?

Bernie said: Yes, we will stockpile it till then. Just to go over it again, the aim really with these tunnels is two-fold. It's to give us access with all our equipment to where we want to go, where the gold is, so we can do that stoping. But it also, as I said, enables that ventilation and airflow to go through. You wouldn't want to be cooped up with no airflow underground. The bigger the working areas and the more people and machinery you have working, you need a bit more air flow.

Liz said: Bernie, going back to that previous one, the tunnels, the grey bits, is that 300m down? Is that how far you can go down?

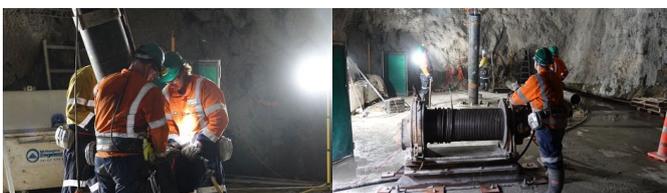
Bernie said: That's another good question. We don't have a scale on this plan. We work in RL's or reduced levels. The RL here in Waihi is around 1,100. So, we add 1,000 to the real RL, Waihi is roughly 100m above sea level. That top grey one is 920 and the bottom one is 800. So, the bottom one's around 300m below the surface, and the top one is probably around 180m below the surface.

Liz said: How far do the tunnels go out and where do they start?

Bernie said: They connect up to the existing Correnso line over here, they connect through to the same portal opening that we go down now for Correnso and that will stay there to provide access in and out. The two breakthroughs into the pit, we can't do much more with them other than airflow at the moment.

Project Martha – Dewatering stations

- We have designed two dewatering stations, each with 200 metre-deep steel-cased bores drilled from the 800 level down into the historic workings.
- Each station will have two bores into which we will lower submersible pumps.
- Each pump will draw up to 38 litres of water a second out of the mine; lowering the water table in advance of our decline mining (unlike Correnso, where we pumped water from the decline faces and dewatered as we went).



Bernie said: There's a few other things we've been doing and what I'm going to talk about now is how we are getting water out of the mine. We've got in process at the moment four dewatering bore-holes that have

been drilled. We've actually drilled three of them and we're just about to finish the fourth dewatering bore-hole. So, they don't start at the surface. If you go back to the previous slide Tim, they are from this level. They are drilled from underground and they go from this 800m level, and they go down nearly 200m deep and what they do when we put bore-hole pumps in them is allow us to do advanced dewatering of the mine so that when we go deeper with our tunnels in the future we're not mucked about by and slowed down by that water.

Bill said: Is it hot or cold?

Bernie said: It's generally around 20 degrees. In pockets some of it might be hydro-thermal. We have struck some water underground at around 35 to 40 degrees. I think you'd know better than me Russell, it's usually around 20-odd degrees isn't it?

Russell said: Yes.

Bernie said: So, there's four of those bore-holes, they are down 200m deep. We drill the hole, put a steel liner in it and drop a submersible bore-hole pump down. They are about 300mm diameter, so they are quite big. They're quite hefty pumps and they will pump about 38L/second each which is quite a lot of water. We have an existing underground pumpstation so we pump to that pumpstation and then use that to stage-pump the water out of the mine up to the surface. Then all of that water gets recycled and used again in the underground for drilling water, dust suppression and those sorts of things.

Tim said: And Bernie, how do you know that's not going to affect the surface water level?

Bernie said: There's two aquifers. There's a shallow aquifer which is unaffected, and we've got consent conditions in place to ensure that that is unaffected, and then what I'm talking about is the deeper groundwater aquifer that will be temporarily dewatered by our bore pumps and then when we eventually fill the pit up as a lake and pump from the river the water table will get rewatered again and filled back up again. That's in the future obviously when we've finished.

Tim said: Sure, and so there's some talk about an andesite layer. Is that a type of rock?

Bernie said: Yes, there's a technical term called an aquiclude which occludes or stops. It's a barrier basically, the andesite layer is an almost impermeable barrier.

Bill said: And the way you're going, how long would it take? Ten years, 20 years? Can you see the future?

Bernie said: Yes, we've done some modelling of how long it might take to dewater in advance of ourselves and that's why we've ended up with four bore pumps that pump at that rate. So, that's been designed so that we keep on top of and advance the lowering of that groundwater before we get to it with our tunnels. That will satisfy us for however long the mine keeps going for.

Bill said: I'm just wondering how long you think the mines will be doing this?

Bernie said: It's a work in progress at the moment because we're still defining that. But we hope that it will be longer than 10 years. We've still got four diamond drill rigs working underground trying to define where the gold is and we have more work on that. But, at the moment we think we've got at least 10 years of mine life.

Bill said: And I think last time you said there was a billion dollars still left in the pit so presumably after 10 years they go back to that as well?

Bernie said: We're sort of looking at that at the moment, what we want to do with the pit. Last year, as part of Project Martha, we got a consent to peel back the North Wall. We've got gold underneath, there's about 75,000 ounces of gold there at the bottom of the mine buried by the slip.

Bill said, So the future is assured.

Bernie said: Yes, it's looking pretty rosy at the moment given where the gold price is. I hope it stays there.

Shirley said: Can you show us on that map where our houses are in Kenny Street?

Bernie said: It is better to look at this (*vibration slide – see below*). Kenny Street is way out to the right, and Kenny Street bends around the corner too.

Russell said: So, you've got Kenny Street coming along the rugby ground here, the church is here.

Bernie said: This is a very good slide because what I was showing before is a bit of a sectional view. This is a plan view and you can figure out, as I said, most of the tunnels are underneath the pit and this sort of shows it. But some of them are in that Rex area, the rugby ground area between Gilmour and Mueller Streets.

Tim said: The two grey lines (*on the slide above*) are the yellow lines heading west on this (*vibration slide*)?

Bernie said: Yes exactly, good point.

Tim said: Are there any other questions about the plan at the moment that people would like to ask? Where Oceana is going; what they're doing; the timing? That was all clear and helpful?

Heather said: I wondered, you are only going up to Kenny Street, is that right?

Bernie said: That's correct, yes. We've got a consent that has a boundary along Kenny Street and Mueller Street for the Martha underground mine.

Tim said: So, that means you're obliged to stop there?

Bernie said: That's right. Leigh, are you nodding your head there? Does the (*Hauraki District*) Council agree?

Leigh said: Yes, I am just having a look at the consent.

Heather said: Yes, thank you very much.

Liz said: When you say Kenny Street, is that just the northern side, the mine side, of Kenny Street? Because Kenny Street has got houses on the other side too. Is it only the northern side of Kenny Street not the other?

Bernie said: Yes, you are right, the northern side, the pit side. Leigh's got the plan there if you want to have a look at it. I don't know if it's got that much detail.

Leigh said: It's only a small one but we can provide it with the minutes (*please see copy of consented area attached*).

Bernie said: Yes, that's probably a follow-up for next meeting, to make sure we've got the boundary on some of these plans.

Russell said: I'll add a boundary to the next lot of photos.

Glenis said: Talking about the consent, I noticed recently in the council agenda there was a reference to several non-notified consents being granted for Project Martha recently, after the initial consent was granted. What are the consents that have been granted since the original Project Martha consent was granted? Is there likely to be more consents granted like that, that are non-notified?

Bernie said: Leigh can help me with that.

Leigh said: Yes, sure. I think in September last year the company applied for what's called a variation to the consent, just to align it with some of the other conditions. I think for Project Martha there were some errors made in the consent. One of them was around the SIMP, Social Impact Management Plan, where the wrong word was used. It said "bi-annual" which means it was supposed to be done twice a year and it should have been "biennial", so it was just to fix up those sorts of things. It was administrative in nature, very low level and so it was done on a non-notified basis. It was basically a fix-up of some errors and some inconsistencies and that was signed off.

Tim said: Okay, thanks Leigh. So, part two was, will there be more of those?

Leigh said: It's over to the company but I don't think that there would be, nothing really stands out as needing to be fixed at the moment.

Bernie said: I don't think we've got anything planned at the moment, but you never say never. We might find some more inconsistencies that might have to be clarified and fixed up.

Tim said: Right, but these aren't changes to the consent?

Bernie said: No, they aren't significant. If there were significant issues that needed to be consented then that's generally a notified process where people have an opportunity to make submissions.

Leigh said: Can I just add to that? Just to put peoples' minds at ease, we actually have an independent planner look at the application and he makes a report about notification, non-notification and also whether or not the consent, in his opinion, should be granted. That then goes to an independent commissioner for these types of things. It's done very professionally.

Tim said: So, it's not just the mining company talking to Hauraki District Council and it all being signed off?

Leigh said: No, it's not like that at all.

Tim said: Okay, does that answer your question Glenis?

Glenis said: Yes.

Vibration

Project Martha

Six-months to date performance

- Development blasting (305 events)
 - Highest average 0.52 mm/s (consent limit 2 mm/s)
 - 95 percentile 0.75 mm/s (consent limit 5 mm/s)
 - Monitors have been triggered 5 times to date in relation to Martha blasts (max vibration: 0.97mm/s)
- Safety/Maintenance blasting (3 events)
 - No monitors triggered to date (consent limit 1 mm/s)
- No Production blasting to date



INNOVATION PERFORMANCE GROWTH

OCEANA GOLD

Vibration

Russell said: So, we've been busy. There's been 305 blast events in the last six months. The interesting thing is that only five of them so far have actually triggered the monitors. So, these are small blasts that are basically driving these tunnels forward. Each blast when you're driving a tunnel forward is 3m long, so it goes forward 3m, 5m x 5m. In our mining terms that's actually a relatively small volume of rock and as we said before it's at least 180m below people. By and large, people aren't feeling it but we are now noticing that people are hearing it which is another interesting phenomenon from blasting. This is what we call re-generated noise. We have a blast that puts a vibration into the ground and then particularly when you are (*hearing it from*) inside a house, it's a bit like saying your foundation is like a pin on a drum and it makes your walls vibrate slightly. And it may be just enough for you to actually hear something. It's an interesting subtle distinction, people will talk about how they heard it or felt it, and when you actually think in more detail about whether it was something I felt or something I heard, everything we're getting at the moment is people every now and then will hear a blast. And that will normally be when multiple blasts go off at the same time. When Bernie showed you before all these different tunnels underground, we have four rigs going at once, so at any one time there could be three or four drives being fired at the same time. Our requirement in the consent is we have to get the event over in a short period of time, so what we do is we fire them all at the same time. Even with that they are quite small but it's when we do multiple ones at the same time that's when people say, "I heard that" and that comes from our employees as well at the back of our core shed, that's when there's multiple blasts going off at once.

Tim said: Can I just check, so there are blast windows, timing windows? What are those?

Russell said: There's three primary blast windows. Between 7am and 8am, 7pm and 8pm and 1pm and 2pm. The windows for Project Martha have been adjusted. There was an issue with Correnso where it doesn't line

up perfectly with our lunch hour. Our working lunch hour at the mine goes from 1.30pm to 2.30pm. The Project Martha consent actually allows us to go from 1.30pm to 2.30pm, but at the moment we're constrained because we're still working in Correnso so we're trying to stay within that 1pm to 2pm window which means it clips us by half an hour.

Tim said: So that extra half an hour means that you can send the guy to the top or wherever they go for lunch and do your thing?

Russell said: Yes.

Tim said: I just wanted to check with those present, are you feeling or hearing anything?

Pam said: I'm in Gilmour Street, and it's not often but I hear the 7 o'clock one.

Russell said: That's what I've heard.

Pam said: My photo on the wall has moved about that much (*tilted by 1cm to 2 cm*) probably in about a year, but it's moved a little bit more. You said at the last meeting you wouldn't be coming down this end by Gilmour Street or this side of Kenny Street?

Russell said: Yes, we've got authority to go as far as Mueller but we're still trying to determine the ore body in that, that's right at the extent of the ore body and we're trying to figure out where the ore body limit is.

Iris said: How many days a week are these blasts?

Russell said: We don't blast Sundays, other than that it's six days a week.

Tim said: So Iris, are you feeling or hearing any of it?

Iris said: No I haven't.

Bernie said: Just to clarify what we're talking about there, the discussion about Gilmour Street and in the church area is the Rex vein. You can see that's the amount of progress that we're planning in 2020 so we are going to be tunnelling, I suppose, closer towards you in 2020. But there won't be any big blasts there this year, there will be these tunnel blasts.

Pam said: Where's Gilmour on there?

Donna said: You're across the road in Gilmour Street so the Project Martha boundary stops on the northern side of Kenny Street.

Bernie said: Are you on the south side of Kenny?

Pam said: Yes.

Bernie said: We won't be going that far.

Iris said: So, what risks are there?

Russell said: From the development blasting, I would have to say nil.

Iris said: If you're in the worst area say?

Tim said: I'm just going to make a distinction. So, you're saying development blasting is making the tunnels to get there? Production blasting is when you actually start doing the stoping and getting the gold out?

Russell said: Yes, this is when we were describing the stoping before, when we were firing between drives.

Tim said: So, when you're making tunnels, you're saying the risk is none.

Russell said: Yes.

Tim said: And Iris, your question was?

Iris said: I want to know any risks at all, especially if you're in the area. I'm next to the Baptist Church. I believe I might feel the blasts more, I don't know because we haven't had them lately.

Tim said: Can I just check, before you answer that completely, Iris what sort of risk? Are you talking about the risk of there being some damage to property?

Iris said: Damage to the house, damage to yourself, if something went wrong with what you're doing. I know some years ago there was something that happened. I want to know any risks at all. Because I know my china cabinet was rattling around so much and if the door had been opened, this was a few years ago, and if I had walked over there and had the door open the china would have hit me in the face. And this is hard for people to believe, but my cousin phoned me from England and she could hear all the rattling right through the phone. She said, "What's that noise?".

Tim said: How long ago would that have been Iris?

Iris said: Donna would know, seven years ago?

Donna said: Yes, it was when the open pit was being worked and the company went around and attached the cabinet to the wall.

Iris said: Well, we haven't had any blasts lately and they fixed the china cabinet so I can't move it anywhere else, because it's fixed against the wall.

Tim said: Russell, the question is what risks to people, what risks to the house?

Russell said: So, with development blasting, nil. So, the vibration, the general consensus is people aren't feeling them and we are blasting certainly from this area here. You will probably feel them a bit more when Rex ... the Rex access is going to come along the side here (*pointing to the slide*).

Iris said: Is that where the Baptist Church is there somewhere?

Russell said: Yes, it will come towards the Baptist Church but it will probably stop before that.

Bill said: Iris is next door to the Baptist Church.

Iris said: So, the church will feel it too.

Russell said: Yes, but it's still going to be deep, it's still going to be small blasts. It's not until we start the stopping blasts that I believe we will have to manage our blasts then.

Iris said: Do you mean there could be a risk then?

Russell said: No. We are governed by our vibration monitors. So, we have quite an intense group of vibration monitors above us here and the limits that have been set are designed to protect property and amenity value. The idea is that international science will say that property damage occurs at around 20mm to 25mm/second, and that's minor property damage. Our limits are set down at 5mm/second.

Tim said: So that's one-fifth?

Russell said: No, it's more restrictive than that because we're talking exponential so it's actually two orders of magnitude less.

Iris said: Nevertheless, if you're asleep at that time, you're going to get woken up six days a week for a few years. Is that right?

Russell said: Yes, at 7 o'clock in the morning it's possible. That's why 7 o'clock has been set. When we were blasting in Trio we had a 1 o'clock in the morning blast opportunity, but that was removed for Correnso and has stayed that way for Project Martha.

Tim said: So, Iris to start back a bit, and Russell's going to check if I'm right, but there are these monitors that sit on the surface, there are limits that they have to stay below and if they go above those limits then Oceana is in trouble in terms of having to make AEP payments. Is that right?

Russell said: We have AEP payments and we have to look at mitigation options to get that down a bit.

Tim said: Right, so they work hard to keep the level of vibration very low at that time.

Iris said: And if they didn't?

Tim said: If they don't (a) the company has to pay a vibration payment under AEP, and (b) if it was serious then the council would step in and stop them from working until they could keep the vibration below the level.

Leigh said: On the odd occasion that there are blasts that exceed 5mm/second we get in touch with the company immediately and ask for a report on the reasons for the exceedance and what's being done to mitigate that.

Iris said: The compensation is not going to stop you being woken up in the morning is it?

Russell said: Production blasts won't occur at that time in the morning.

Tim said: Oh they won't?

Ross said: From my experience with Correnso the 7 o'clock in the morning and the 7 o'clock at night ones we barely hear but the 1 o'clock one is a bit of a bang.

Iris said: Is there a guarantee that it won't go before 7 o'clock and it won't go on Sunday?

Tim said: Is that guaranteed Russell?

Russell said: That's an absolute consent requirement that we aren't allowed to production blast before 7 o'clock.

Iris said: I'd fall out of bed.

Russell said: The only exception we have to that is what's called a safety maintenance blast, but that's another order of magnitude smaller again and nobody has noticed them yet.

Tim said: Right, so Iris these are important questions because this is kind of what this meeting's about, to make sure that you're not always worried about what's going to happen.

Iris said: Well, my neighbour that was there, this was a few years ago, she said she fell out of bed with the blast even during the day because she was working nights and having to sleep during the day, she fell out of bed. Well, what then? What can you do then?

Tim said: She got a fright and fell out of bed or she was vibrated out of bed?

Iris said: She said it was the vibrations, well it was at the time the vibrations. So, what can you do? You can't do anything then?

Tim said: I'm not Oceana but I've attended lots of these meetings. I just want to ask Russell and Bernie, if Iris was having a particular problem at her house would the company be happy to have somebody come and look and measure what was going on at Iris' house, if it was a magnitude that was going to tip her our bed?

Iris said: I don't want to be relocated.

Russell said: Yes, we have a range of investigation possibilities. We can look at the house structure.

Donna said: We actually own Iris' house, but we'd come around and I'd certainly make sure you were alright Iris, you know that don't you?

Iris said: But it could happen again.

Donna said: I'll look after you Iris.

Tim said: Their job is to make sure it doesn't happen again.

Bill said: When Iris had trouble with the vibrations it was in the pit. This is going to be happening 200m to 300m below ground which apparently one does not notice nearly as much.

Iris said: Oh I see, well that's reassuring. It's all very well saying, "Be relocated", but at my age I don't want to move somewhere else.

Tim said: No, so these are much deeper is what you're saying Bill.

Bill said: Iris was noticing when they were doing it in the pit, now it's not exposed and it's way underground.

Iris said: I don't feel anything.

Bill said: So far we haven't noticed anything at all.

Tim said: Great, that's a good answer, thanks Russell for going into that detail for us. What else do you need to tell us?

Russell said: I mentioned about the safety maintenance blasts, there have been three of them so far. They can occur at any time but there are very strict requirements on them. Their trigger length is virtually just above the threshold for monitoring that I've got, so I'd be very surprised if anybody even notices them. And of course we've had no production blasting to date because, as Bernie said, we haven't been stoping.

Heather said: I live in Johnston Street, you come as far as Kenny Street, I'm further down. But, I've been talking to different ones and they tell me that the shaking will probably affect my house. Now, if anything happens to my house I'll be the first one up to see you.

Russell said: Please do.

Heather said: And the mine will cover that?

Russell said: So, there's a range of considerations we have. We've talked about the AEP. The AEP should be considered completely distinct from anything to do with the property. This AEP has to do with the person in the property and the vibration they're feeling and how they feel about it. It's like an "upset payment".

Iris said: What is AEP?

Russell said: Amenity Effect Payment. So, amenity is your life enjoyment.

Tim said: Did you get that Iris?

Iris said: No I didn't.

Tim said: So, the vibration might get in the way of your ability to enjoy the peace and quiet of your home.

Iris said: Which it might, yes.

Tim said: So, if Oceana blasts and the vibration is above the required limit that council and the company have set then there's a payment that comes to people who are living in the area.

Iris said: Well I'd rather not have the payment and not have the blast.

Russell said: That's been set to make some appeasement of peoples' enjoyment, we do impose ourselves on people and it's a little bit of compensation. Now, the next one is if there is any property damage then we can investigate and there's several options there. If it's proven to be us, we put it right.

Iris said: Hard to prove isn't it?

Russell said: We have a range of things, first of all we have structural engineers that can come and have a look. If you're not happy with that there's actually a process that we can have a dispute. But to date I don't think there's been too many complaints.

Donna said: No, there hasn't. So what would happen Heather is that you'd ring me on the 0800 number and then I'd organise for Kevin Storer, he's a licensed building practitioner who does work for the company, we

would come around and we'd have a look at the perceived damage, we'd do a report and if it is proven to be caused by us we have a, "We break, we pay" policy and that, "We break, we pay" policy states that we would fix anything that we have wrecked. To date we've never had that happen because quite often when people see cracks in the walls and things, especially in Waihi with our really damp ground in winter and then the really hot summer like this, joins in gib-board open up and you get a little crack. And of course in the past the old building regulations were such that you just had to nail your gib up, and now you have to glue, tape, nail and screw gib up. The building regulations have changed a lot. Anyway, we'll send you quite a detailed report and take photos and then if you don't agree with that report the next step would be for you to contact the council and then we can organise some kind of mediation between the company, and the council would help us with that.

Heather said: Because if you haven't had any cracks or whatever before, it's logical to think quarrying underground would be one of the reasons.

Donna said: What I'd suggest you do Heather is, if you've got a camera, just take some photos of the walls in your house, and then you've got that record of what it looked like prior to us.

Heather said. Okay, I'll take that with my new camera.

Glenis said: Yes, we do get feedback from people who say that there's very little likelihood that they can prove it because they've said that whenever they have complained about damage they've been told they have to prove it.

Donna said: No, that's not the case. We never say to someone, "You have to prove it". We go around and investigate it. I've had a situation where a gentleman, who's passed away now, John Crabtree he was an independent engineer and I've had people that we've used, independent structural engineers, to come around and people can get them to provide a report. We can get that person in and they can prepare a report on the property in question.

Tim said: So, not really a, "Prove it" situation.

Donna said: And we pay for that, it costs the person nothing.

Glenis said: It doesn't cost somebody to be able to dispute that?

Donna said: No, it doesn't. But if they didn't agree with that report they're welcome to go and get their own report done. They would pay for that but those first two reports are covered by the company.

Glenis said: Russell, can you explain what a safety maintenance blast is?

Russell said: Right, so we've described the main tunnels and I'll give a good explanation next time round of the stopes which are the main production blasts between the tunnels. When you blast forwards not every time you get a nice round tunnel to work in, sometimes there is a bit left out on a corner, so you come back and you might drill a hole, and they actually call them "pops", where you just have to break a piece of rock off the corner just to make it safer to drive around, so it's like firing one or two holes just to shape the tunnels and improve your access.

Liz said: Russell, going back to what you were talking about before, do they still do a BRANZ inspection? Is that what you're talking about?

Russell said: Hold that thought (*see discussion below*).

Iris said: If it's going on now and I'm not feeling it, it could mean at the very best that I don't feel it at all.

Tim said: Indeed.

Iris said: I'm right next to the Baptist Church, because that is an area where I thought you felt it more. I must be wrong. You used to.

Tim said: What's your answer to that Russell? Because I've got a question for you if you haven't got an answer.

Russell said: There are people over Correnso that don't notice the blasting. They say, "What's the big deal?" And there's other people that are very stressed about it.

Iris said: The ones who say, "What are the others making a fuss about?", but what if it wakes you up every day?

Russell said: A lot of it depends on how people feel about mining, how people feel about blasting. I'm not going to prescribe to anybody how they should feel about it. Also, I always find that people with lively, active lives probably notice blasting less than people who are quiet and read and sit quietly, that's entirely logical. But, at the same time I'm not prescribing to those people how they should feel about blasts. Some people use our 7 o'clock blast as a wake-up.

Tim said: So, Iris you don't want to be woken up at 7am?

Iris said: No, not particularly. If you've got children they all get woken up, every day.

Tim said: I think Russell's told us that the type of blasting they're going to do is going to change when production starts so I don't want you to worry that all of a sudden it's got worse, it's just a different type of blasting that you may well hear or feel.

Iris said: Is that underground?

Tim said: Yes. So, now they're digging the tunnels to get there. After that they're going to start scraping out the gold and they have to do production blasts to do that and they have a different effect.

Iris said: Under the ground of someone's house?

Tim said: They've got the licence to mine under.

Russell said: Leigh may actually be able to describe how much under their property people own.

Post-meeting answer: Leigh Robcke has indicated it will be easier to answer this in discussion at the next meeting.

Tim said: I wanted to ask you Russell, you said there's only been about five of the blasts that have even registered on the monitors? So that doesn't mean they've gone over, they've actually only just touched the readable level?

Russell said: Yes. So, over a trigger level of .75, the highest I've had so far has been .97.

Pam said: I'm not really worried about things moving, I'm only worried about what my chance is, out of 10, for my house dropping into a hole. And that's not likely to happen is it?

Iris said: Has it happened? Has it ever happened?

Russell said: We know pretty well where the stopes are. The old house that fell into a hole was ...

Iris said: Compensation's no good if you're dead is it?

Tim said: Team, Russell just wanted to make sure, the collapse of the ground under the Barry Road house wasn't as a result of current mining was it?

Russell said: No, it was an old void.

Tim said: And now the stopes that you make, you fill back in.

Russell said: Yes and we'll probably be filling in a lot of the old stopes as well as we go.

Iris said: But over the years have some people, even if it's one or two, been injured because of your blasts? Or are we not allowed to know?

Russell said: No. No injuries as a result of blasts.

Iris said: It just disturbs your peace of mind waking you up every day.

Tim said: And at the moment you're not hearing it, which is great news.

Iris said: No, I'm not, unless I sleep through it.

Dewatering

Newly established piezometers, currently collecting baseline data

Three more proposed for 2020



Russell said: The other thing we talked about was the dewatering. Bernie mentioned the bores, and this is how we monitor it. So, we're just putting the dewatering bores in, these are what we call piezometers. These are small holes, up to 100mm diameter but normally around 50mm diameter, that drill vertically down and we seal them off so that we can monitor the water levels at specific zones in the ground. We talked about aquicludes, different rock types, so you've got your alluvial ground layer at the surface which has its own water table. Where we're mining in the andesite down lower it has its own separate water level. We are currently working through dewatering areas that we want to work in the lower levels. These piezometers, these bore-holes, are designed to measure water levels at different levels in the ground to ensure that the upper levels stay natural. We're only playing with the stuff deep down below you. So you can see the bores, the orange ones, have already been installed and there's a line of those purple ones we're hoping to start installing next month. So, we're in Kenny Street. This is probably the good one for people to see where their houses are I suspect. Kenny Street, Gilmour, Mueller, Haszard.

Tim said: And a comment again, because we've been running these meetings for quite a long time around Correnso, but this is new for Martha. If the company measures, and the council's confident that the water level above this cap, this andesite layer, isn't being reduced, then they can also be confident that the ground level's not shifting and that there isn't movement and cracking happening. So, they keep a careful eye on the water level in that upper level to make sure it's not affecting peoples' properties whilst they're still trying to get the water out of the layer underneath so they can do the mining. Is that a fair description?

Russell said: Perfect.

Tim said: Leigh that's the measurement, the careful piece is the upper level needs to be monitored carefully?

Leigh said: Yes, in fact it's "councils" because the regional council also takes a pretty keen interest in the water table and what's happening there, as does the district council.

Russell said: So, we're collecting baseline data at the moment, so it's just the early phase of that so I can't really report on any numbers at this stage.

Donna said: In the next couple of weeks this piezometer is going to be put in at the Baptist Church carpark. So, that's Gilmour Street and that's Kenny Street, so it's going to go by those trees on the corner. So, if you see a little drilling rig there, it'll be Fabian's crew and they'll be putting a piezometer there. So, we're not going to be drilling under your house or anything like that, it just goes straight down. But I'll come and see people nearest to that before it starts. Just thought I'd mention for those driving past.

Project Martha

BRANZ SURVEYS

Project Martha Consent Condition 55

- BRANZ surveys have now been carried out on several properties outside of the Rex Project area within vicinity of the vibration monitors.
- The Rugby Club and Baptist Church were also surveyed.
- We will be visiting all properties inside the Rex Project area offering these surveys once the final mine plan is available.
- A survey will not be required if, for any reason, purchase of your property is offered by OceanaGold and accepted by you.

BRANZ surveys

Donna said: So, the BRANZ surveys were mentioned before by Liz. I have actually already started on some BRANZ surveys. So, under the consent we have to do five properties near the vibration monitors that are already there, prior to any stope blasting starting. I've done four, I've also done the rugby club and the Baptist Church because they were quite big areas to survey. Once we have a mine plan I'll be visiting all the properties inside that Rex area and offering everybody a BRANZ survey. You don't have to have it done if you don't want to but as you were saying before Heather, it's a good way of capturing a space in time, if you like, of the condition of your property. It basically means that they will come along, they'll video and photograph everything, they'll write a report on the condition of your property and any problems that your property might have which is actually a good thing for you to know if you don't already know. And that will give you a picture in time so that when we do start stope blasting if you notice a crack on the wall you can ring me up and say, "Well, that crack isn't in this report and I want you to come around and have a look". What it also does though, it does protect the company because somebody could ring up and say, "Oh there's cracks in the wall", but we can say, "Well that crack was there prior to us blasting". So, I'll be coming around soon making that offer to all those properties in the Rex area.

Heather said: That's good.

David said: Is it a good idea to identify where the Rex area is?

Donna said: Yes, so the Rex project area is that area, down here (*pointing to the slide*), the Rex area basically goes from half way across the rugby club right down to here, and then in behind here and then back up. So, you're not in the Rex area Heather unfortunately, but I'm going to come and talk to you later.

Heather said: I knew that.

Donna said: I still need one more property outside the Rex area so perhaps your one might be the one we do just to ease your mind. But I'll come and talk to you about that later. So, it's not a very big area at all. I think there's about 21 to 23 properties in that area.

Ross said: You would own quite a few of those places anyway?

Donna said: Not many of them, we own two or three.

Iris said: The only thing that I'm wondering about is it's been mentioned to me, I was asked to relocate and I didn't want to at all, and I saw all these other houses, and the rent was reasonable but I just didn't want to move. Fortunately they came back to me and said, "No, you can stay where you are, we've got to spend some money on this house" which did happen. But supposing that someone, especially in the old age group, is told it's really best to relocate then you can't put them in a place that's suitably near the shops or it might be some area where if the mines haven't got something suitable nearby you end up away from the facilities, out in the country. It sounds okay, relocate, but I don't see how that could ...

Donna said: You don't have to relocate Iris, you're alright.

Iris said: No, I mean if the blasts got really bad which they aren't at the moment.

Donna said: We would actually work something out for you if that happened. If that did happen we'd come and work something out for you.

Iris said: But could they have made me move?

Donna said: No, we don't do that.

Iris said: I can't say to you ... I mean I've got rights too. You can't just say we have to move next month. You're supposed to give three months' notice.

Donna said: That's right and we would follow a legal process. But we're not in the business of doing that Iris.

Iris said: No, I don't think you would.

Donna said: We want you to stay there. You'll be fine. Anything else?

Liz said: I want to clarify the fact that if you have this BRANZ survey done, then it's at Oceana's expense.

Donna said: Thank you Liz, I should have mentioned that. Yes, we pay for the cost of those surveys. You'll get a copy of it and you also get a video record of it as well. So, I'll visit you all in the Rex area soon.

Waihi Community Forum

Through roles given to the Forum in the Correnso resource consent, and goodwill programmes initiated by OceanaGold Waihi, the forum's purpose is to contribute towards a thriving and sustainable community for those residents and ratepayers living close to mining operations.

Recent Projects Include:

- **Community Basketball Courts:** The Forum is now looking into lights, drinking fountains and artwork at the court area. The brick wall that surrounds the grass area beside the basketball courts has now been prepped and ready for Artist Shane Walker to paint. The theme will be native birds and native plants from the Waihi area.
- A submission to the Minister of Energy and Resources – Hon Megan Woods supporting the Hauraki District Council's application to review the Crown Minerals Act 1991, regarding a local share of mining royalty payments to the regions from where the minerals are derived.
- Check out a new look website www.waihicomunityforum.co.nz



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INNOVATION PERFORMANCE GROWTH

OCEANAGOLD

Waihi Community Forum

Kim said: I thought we'd just talk through some of the other community activities that we have going on at the moment. Some of you might be familiar with the Waihi Community Forum which was set up as part of the Correnso project and has representatives from Oceana Gold, Donna and myself are on the forum, from council and community members as well. What we do is look at initiatives to use the funding that the forum has for the improvement of the local community. So, we just thought today we'd have a look through some of the recent activities that that has involved. So, we looked at the community basketball courts and how we could improve the facilities that are available there so there's just some details on the work that's being done about that. Donna, I don't think we're quite finished yet are we?

Donna said: No, we're about to paint the concrete wall.

Kim said: Yes, so that the concrete wall along the roadside looks a bit more attractive, and we've got an artist coming in to paint the wall. The community members of the forum have submitted a submission regarding royalty payments as well. That's the community forum activities.

Tim said: Who are the community forum members?

Donna said: Paul Anderson and Anne Marie from Hauraki District Council are the councillor representatives, and then we've got Kim and myself from Oceana and we have Belinda Burke who is our chairperson and we also have Bhavesh Ranchhod and Mike Hayden and Ernani de Ocampo. We also have our co-ordinator Joyce Taylor.

Donna said: Yes. It was originally set up for the Correnso project but we've kept it going because they're such an enthusiastic group and it's a good vehicle for people to go to if they've got any concerns. It's not directly to the company, if people don't feel comfortable coming to see me or the company they can go to the community forum.

Kim said: And for those of us who have access to computers there's a website for Waihi Community Forum. www.waihicommunityforum.co.nz. As Donna said, if you'd prefer to contact them you've got the option.

Pit Rim Walkway

- Works on the North Wall of the pit to establish the section of the pit rim walkway that was lost during the North Wall slip are now complete.
- There will be an official opening of this section on the 7th of March



INNOVATION PERFORMANCE GROWTH

OCEANA GOLD

Pit Rim Walkway

Kim said: Good news on the pit rim walkway for those who use it. Obviously I'm fairly new to Waihi but one of the first things I did in the first week or so I was here was try to do the pit rim walkway. I realised that I then had to divert off it and go around the main roads to get back on it, which in my case probably wasn't such a bad thing because I got a bit more exercise by doing so. The good news is that we're just in the process, just about to finish off, the reinstatement of that part of the walkway and to celebrate that we thought we'd invite everybody along to join us for a cup of coffee, a week on Saturday at 10am. Again, for the active amongst us ... probably Bernie would have run around it but unfortunately he's off running up and down Mount Maunganui. All are welcome, you don't have to be running around the pit rim walkway to join in, and please we'd love to see you there, come along and share a cup of coffee and maybe some of us will take a more relaxed amble around. I think that's a great thing for the community.

Elva said: Yes, the pit walk. We go around there quite a bit. You said it was which Saturday?

Kim said: Not this Saturday, but 7 March at 10am. And it's just up here, behind the truck up here.

Elva said: Yes, we've been very disappointed. As you can see we're oldies, to have to walk up all these streets instead of just round the pit.

Kim said: Yes, I'm with you.

Ross said: When the North Wall thing is done will that affect the new path?

Bernie said: Yes it will do a bit Ross. We don't intend to do anything on that North Wall for at least another 18 months or so. You could say it's semi-permanent and then we'll have to move it back a little bit. It's good to have it open again. I was up there earlier this afternoon, it's a really good view from up there so you won't be disappointed.

Jol said: That request for the track to be opened again came at the last meeting, so a good response.

General questions

Tim said: Are these meetings useful?

Everyone said: Yes.

Tim said: So, we have had a good update, at the moment Oceana are development drilling.

Bernie said: Tunnelling.

Tim said: When does production start?

Bernie said: It sort of starts towards the end of the year but there's not a lot towards the end of this year in terms of stopping and production. It will gradually increase next year.

Tim said: The other thing that you were saying Donna that people will notice is the drilling for the piezometer. So, don't panic it's not another mine entrance going in.

Donna said: That's right it's just a piezometer going in.

Liz said: Russell, it might be a question for you. You were talking about the bores pumping out all this water and some of it's going to be used underground again for whatever they're doing. Somebody told me that a lot of the water which is being pumped out of the workings cannot be used in the residential areas because that water is a hard water and so if that's the case, if it was put into the residential system it would fur up your pipes and kettles. Is that correct?

Russell said: Perfect. The water we pull out of the underground is high in calcium sulphate, or gypsum, and what happens is when you put it through pipes and send it round corners it changes its nature and loses the calcium sulphate that solidifies on the inside of the pipes and basically restricts your pipes. The worst thing it does is to hot water cylinders because when it heats up it goes even quicker.

Tim said: Are there other alternative uses for it?

Russell said: We can use it underground. We also treat it and discharge it to the river but we are restricted on the proportion that we are allowed to discharge. So, we have to monitor the flow of the river and we are only allowed to add a small proportion to the river at any one time.

Tim said: Good to hear you (all) say the meeting is useful. Are there other things you are hoping that the company would be able to report on in these meetings? Anything that you think is missing?

Bill said: Just being nosy, what happened in the Philippines?

Bernie said: I can answer that one Bill. We have a mine in the Philippines, it's called the Didipio Mine, it's on the main island. There's a number of islands in the Philippines and our mine is on the main island. It's not that far away from Manila and it's a gold and copper mine and it's been operating for probably six or seven years. Its operations there were halted last year because our licence basically ran out and the government had taken a bit of time to renew our licence. We're still waiting on that to be renewed, so we're quite hopeful that we'll get that shortly and we'll be able to start up again. So, that's what's happening with our Philippines operation. If you're a shareholder, I know this isn't a shareholders' meeting, that's the main reason why our share price has dropped quite significantly last year because September I think it was when we had to stop.

Glenis said: I've just got a question about Wharekirauponga and where the consent is. Is that totally within the Hauraki District or is that partly within Thames-Coromandel District and Hauraki?

Bernie said: It's wholly within Hauraki District, it's not near the Thames-Coromandel boundary.

Next meeting

Tim said: Our next meeting might be in 3 months' time. In the first year we meet quarterly.

Bernie said: Yes, three-monthly in the first year, that puts us in May.

Tim said: And at the moment we're on a Thursday afternoon/evening. Does that work for people?

There were divergent comments about whether afternoon is best or whether after work would mean that others who want to could attend.

Tim said: Alright, we will make it 5pm on a Thursday in three months' time. We will let you know a date with these minutes. Thank you very much for coming. Welcome Kim. The other thing I just want to say is that I'm sure that in the meantime if you have questions and things that come up just contact the team because we don't want to hear at the next meeting that you've had something that's been worrying you and you haven't phoned Donna or Jeannine or the 0800 number, so just do make contact and we'll look forward to seeing you again in three months' time.

Russell said: If it's a novel question it actually gives us a chance to put a slide on the presentation that other people learn from as well.

Tim said: Good point Russell. Thank you and safe travels.

The meeting closed at 4.40pm.

**Next meetings:
5pm, Thursday 28 May 2020
3pm, Thursday 27 August 2020**

Attendance register	
John Sheppard	Brian Gentil
Glenis Gentil	John Course
Vivienne Pickford	Liz Cannell
Pam Edwards	Ross MacDonald
Bill Thomson-Prosser	Iris Prosser
Fabian Harley	Leigh Robcke
Mary Neill	Shirley Robinson
Heather Ross	Elva Douglas
Lee Anderson	Bernie O'Leary
Russell Squire	Kim Calderwood
Jeannine Wiki	Donna Fisher
Kyle Welton	Jol Jardine
Phil Salmon	Tim Clarke
Louise Fielden	

Project Martha Resource Consent – Project Boundary



Date	26/11/2018
File	A4 Portrait
Source	HEC GIS
Scale	1:8000
Projection	NZGD2000/HNZM2000
Created By	HEC GIS

Plan A: Project Martha Project Area - Mining Area

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