

Correnso Extension Project – Community Meeting

Wednesday 12 November 2014 2.00pm

The following is a record of the Correnso Extension Project Community meeting held at 2.00pm on 12 November 2014. Where possible, we have tried to capture individual contributions at the meeting but these do not purport to be verbatim notes. Printed copies of these notes, and for those who would like to listen to the actual discussion at the meeting, a compact disc (CD), are available from the Waihi Visitor Information Centre, HDC Service Centre, and NWG admin office. An attendance list is appended to these notes.

Introduction

Tim Clarke welcomed all to the 4th set of Correnso Community Meetings. He asked if those present had received a copy of the minutes of the last meeting (13.08.14), and the report back containing answers to the questions raised at the last meeting that NWG needed to go away and get answers to. All but Fritha Tagg indicated they had received the minutes and the Q&A sheet, Tim undertook to ensure that Fritha's name is on the email list and that she receives future copies of the documents emailed to participants.

Tim explained that the meeting process would again provide for questions as they arise throughout the meeting and asked that if people have a question, that they first provide their name to remind him and Sharon (for the notes) and to ensure that any answers that need to be provided to individuals can be identified and supplied to the person who asked the question. Those in attendance were reminded to ensure that they have put their name and email address on the sign in sheet at the door.

Andrea Durie (External Affairs Manager), Kerry Watson (Environment Manager) and Charlie Gawith (Underground Manager) were introduced to the meeting.

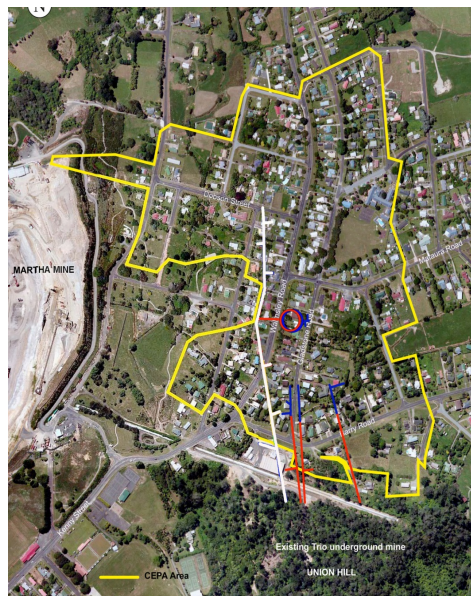
Andrea Durie: External Affairs Manager

1. Project Overview

Slide 2: Indicative Timeline (slide 1 was the introduction page)

Indicative timeline:

- To end of 2014: Correnso development continues
- January 2015: Correnso ore drives (development) begin
- Mid 2015 (approx July): Correnso production (stoping) begins
- Note: exploration drilling to continue for the remainder of 2014 & 2015 (schedule TBC)



Andrea explained that she will provide a brief update in the timeline before Charlie Gawith talks about the mining technique. This came up at the last meeting and is something people seemed quite interested in – how the mining is going to be undertaken.

Not a lot has changed, NWG have started development again so the monthly mine plans have started again – giving you an indication of where we are likely to be. Early next year we will continue development but will, as we get closer to the ore, put in the Correnso ore drives. We will start stoping, start bringing the ore out, in July 2015. The timeline has not moved much but is still indicative.

There is still exploration drilling underground happening from the various cuddies and in spots while we still need to firm up the 2015 schedule. When the consent process was underway (it was identified that there were some) small shadows off to the edge of Correnso. Those are the areas we are putting the drills into now to understand better and (find out) if it is worth going after shadows and if it is, how we should go about that.

Graeme asked: In the East Ender, down by Barry Road, the road is a light blue colour within Correnso, what does that indicate?

Andrea said: I know what you are talking about; someone contacted Kit and pointed it out. For some reason, when it was printed off, it randomly created some thicker, greyer lines in sections all over the map. (Pointing at the map on the screen) in fact there are some here, some down here etc. It doesn't mean anything, not representative of anything we are doing and not sure how occurred. We are working on it.

Eric asked: That white line that goes up as far as Dobson St, will you be actually mining that?

Andrea said: The answer at the moment is no, and as you know things can change but that is purely for access/exploration purposes to put the drills out to see how to mine most effectively. It is allowing us to drill (explore) in this direction (westerly) as well; it will help us if we decide to mine these shadows (to the left of the CEPA). But it is just a developmental access way. (For the recording Andrea explained that the shadows she is talking about are) off to the left of the main development drive and almost on the left hand boundary of the CEPA consent area.

Charlie will be talking to you about the mining method that is in place now around development and production mid 2015 when we are going to be taking the ore out. As you are aware those (production) are the larger blasts so it is important that you ask some questions of Charlie to give you some confidence in what will be happening underground. This is a great opportunity to hear from the person who is in charge of it.

Charlie Gawith: Underground Manager

2. Mining Technique

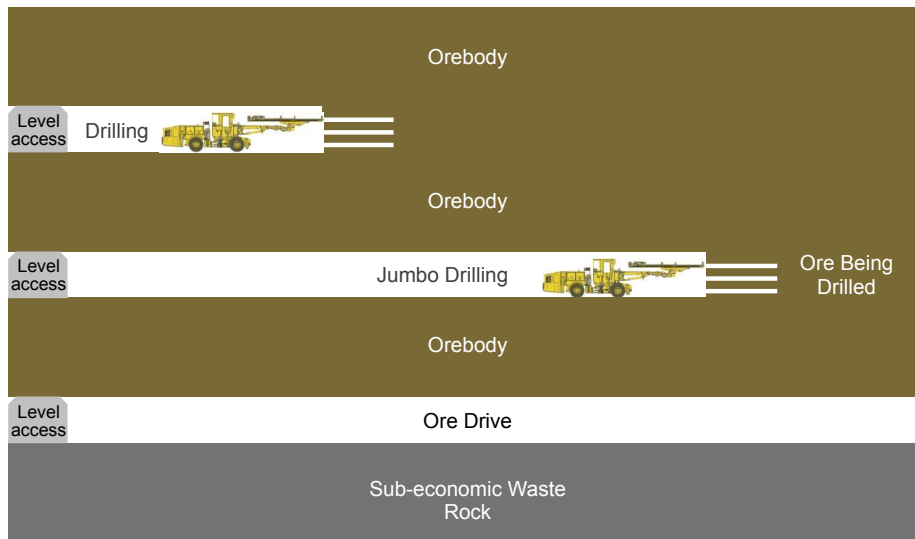
Charlie introduced himself. Started mining about 18 years ago. Worked in Africa and Australia. I am a Kiwi by birth, born and raised in the Wairarapa. I've been back in NZ about 7 years employed here at Waihi and for the last 4 years here I have been the Underground Manager. I will go through the stoping side of the mine. We have planned to start stoping in the middle of next year. Please fire away with any questions – it is important that you understand what we are doing.

This (**slide 3 below**) is a cross section of the ore body. The ore body is “sub-vertical” that is it is straight up and down. It goes from the 795 to about the 900 RL. Up to about 180m below surface.

What we do is we develop, at the moment we are using the jumbos to develop, to get us to the ore body. Once we get to the ore body we hit it along these level accesses. We mine out along the ore drive using the jumbos till we reach the extent of the ore body.

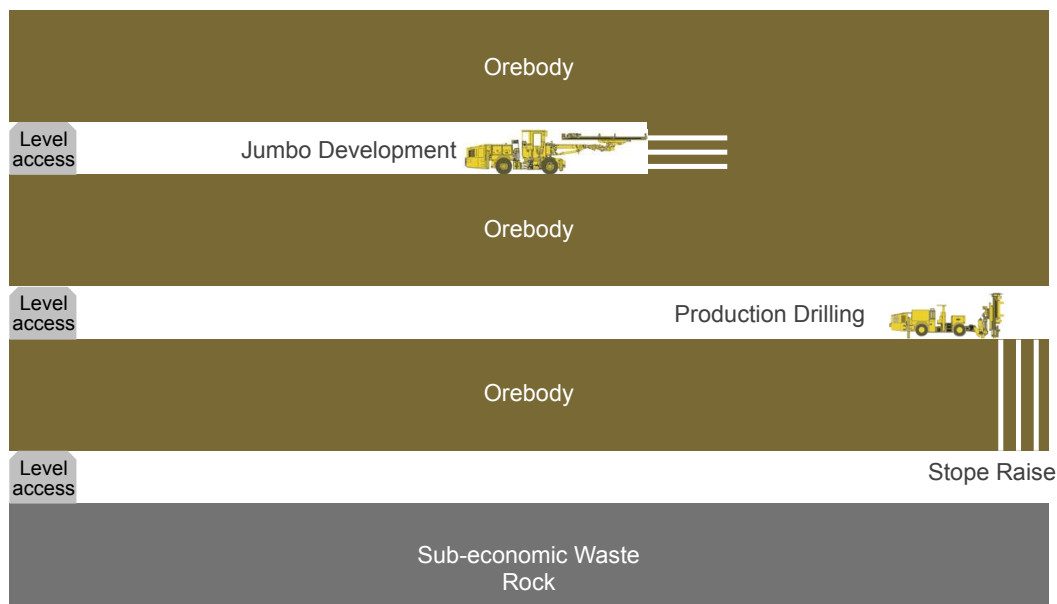
Slide 3: Mining Technique (graphic 1)

Modified Avoca Stopping – Drilling Drive Access



Slide 4: Mining Technique (graphic 2)

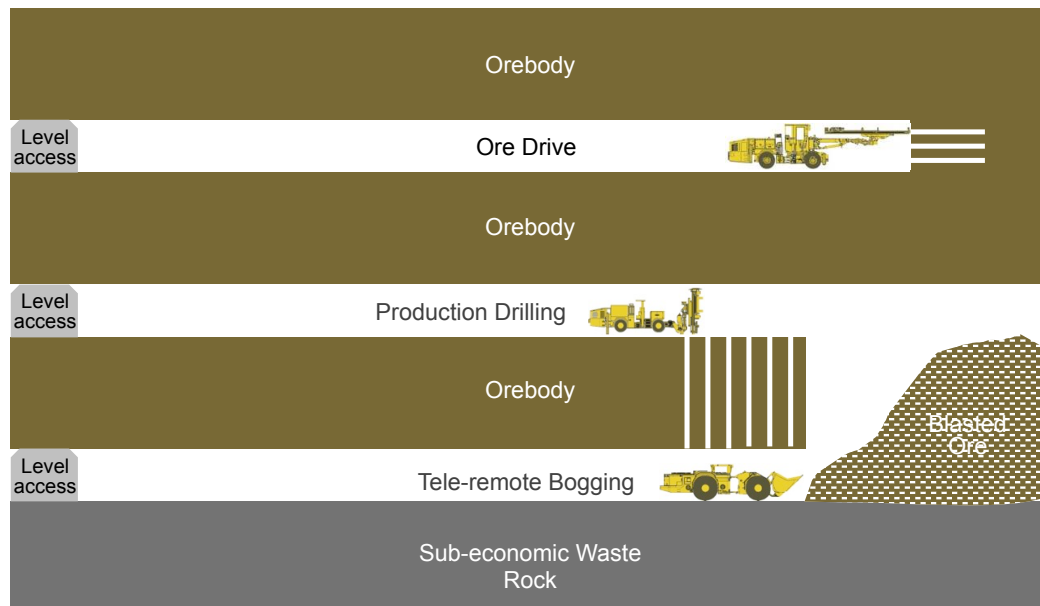
Modified Avoca Stopping – Production Drilling



From there once we reach the extent we bring in what we call a production drill and drill these holes between the levels. The sub-level spacing for Correnso is 15m so there is about 15m from floor (of one level) to the floor (of the next level). There is about a 10m rock pillar. So we drill 10m long holes (vertically) with the production drill and we blast those holes. Those are our production blasts. The difference between a production blast and a development blast is that a development blast is about 50-60 holes that are timed at about 10 seconds to fire, which develops the drive about 3m every time we fire. When we come to production we are drilling 10m long holes that are bigger in diameter and have bigger charge weights. It is a much more efficient way to break the rock, it ends up on the level below as a pile of broken rock.

Slide 5: Mining Technique (graphic 3)

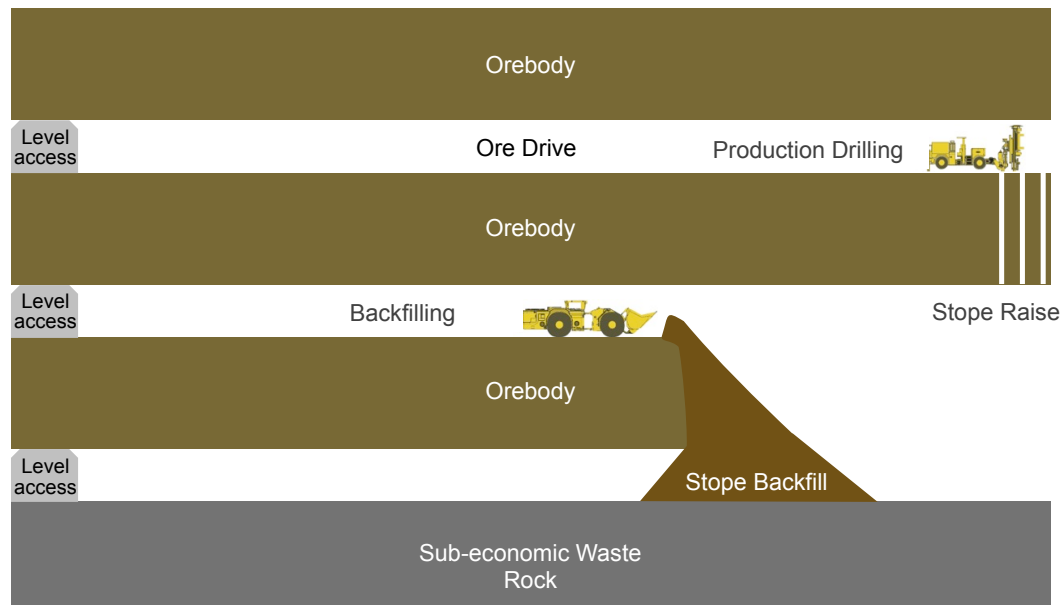
Modified Avoca Stopping – Production Drilling



We then come in with a bogger and remove the dirt off that level as broken ore. All of that gets trucked to surface. That process continues till we take out a stope.

Slide 6: Mining Technique (graphic 4)

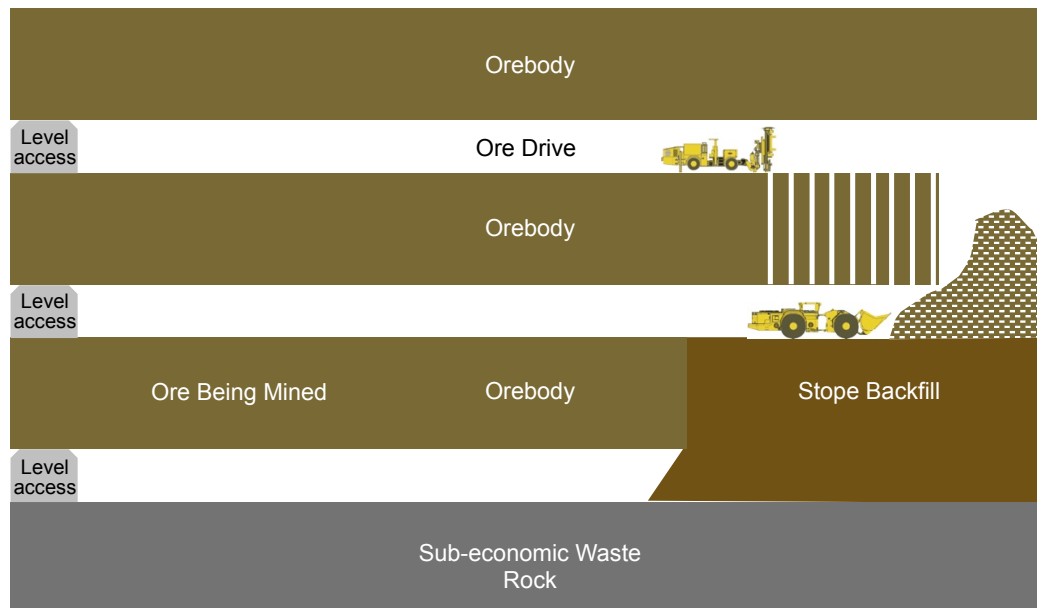
Modified Avoca Stopping – Production Drilling



When the stope is completely mined out, we generally come from the level above and this stope backfill is waste rock that we have developed getting out to the ore body in the first place. It is non gold bearing but is the same rock that we mined to get to Correnso.

Slide 7: Mining Technique (graphic 5)

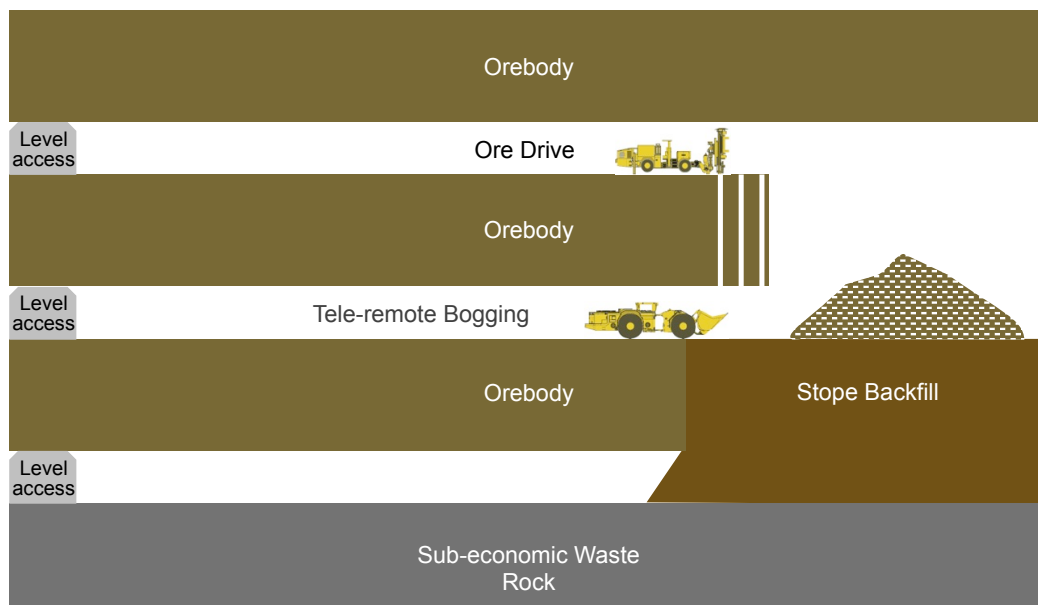
Modified Avoca Stopping – Production Drilling



We fill the stope back up with waste. Then, from that backfilled level, we take the next panel out and we retrieve that back by remote loading once that is broken.

Slide 8: Mining Technique (graphic 6)

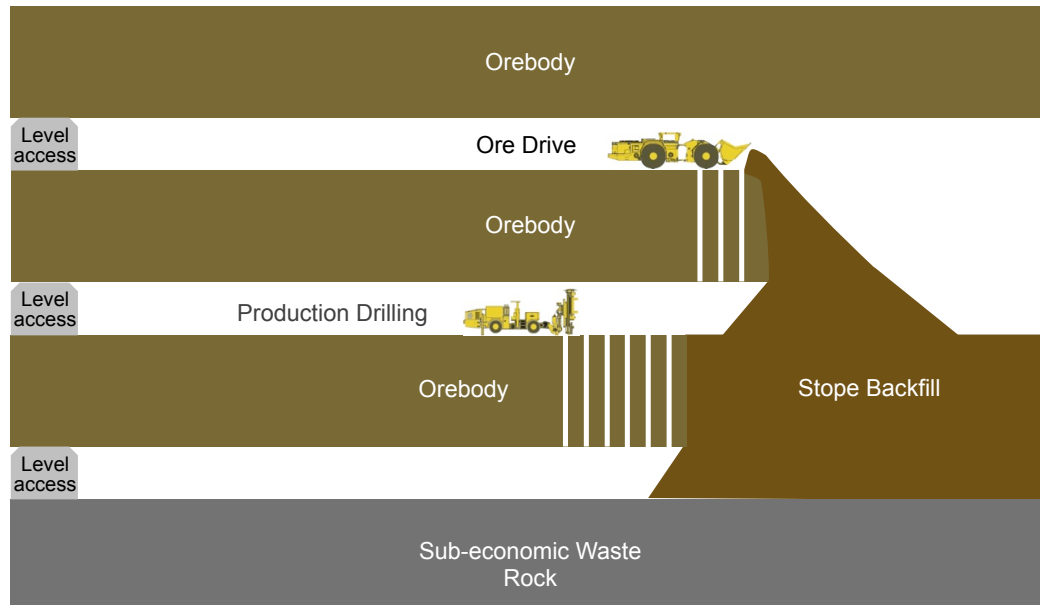
Modified Avoca Stopping – Production Drilling



Then we jump back down. So it is really just a series of steps, we start at the bottom level, jump up to the next one, we pull that back so that we are not burying the ore then we take that back.

Slide 9: Mining Technique (graphic 7)

Modified Avoca Stopping – Production Drilling



It is a very straightforward process. We have been using it here for the past 8 years very successfully. It is a process that we are very familiar with.

Tim asked a series of questions to tease out Charlie's summary of the underground mining process (from a lay perspective).

Tim asked: So the closest you get to the surface in the mining process is about 180m from the surface?

Charlie said: We come up to the 900 RL. We have added 1000m to the sea level here because surveyors don't like working in negative numbers. So, the surface above Correnso is I believe 1110m and we come up to 900m, so it's 210m. In the consent conditions there is a requirement to stay 40m below the upper andesite boundary, that is the absolute maximum we can approach. That is also 156m – 130m below surface.

Tim asked Charlie to explain the significance of the andesite layer.

Charlie said: There are a lot of rock types and I am not a geologist but my understanding is that we have upper andesite which is generally a more fractured/weathered zone, then you go to the quartz andesite which is a much more competent rock mass and we have to stay 40m below that (upper andesite – quartz andesite) interface.

Graeme asked: Charlie you are using the term RL, can you tell me what that stands for please?

Charlie said: Reduced Level. At the east end of town it is about 110m above sea level. For us, because we are so far below and surveyors don't want to work with negative numbers, the instruments we use for managing the direction of the mine don't like negative numbers, so we add 1000m to sea level so we are always working in positive numbers.

Dale asked: And the pit works off the same RL?

Charlie said: Yes, we use the same datum.

Tim asked: Looking at the slides – those dark strips (of dirt between the drives) are 10m or 15m?

Charlie said: 10m. The whole design of Correnso itself, it is actually quite a wide ore body as far as narrow vein mining is concerned. Narrow vein mining deals with ore bodies that are down to 1m to 2m wide. The ore body in Correnso is averaging about 6m or 7m so engineering wise for mining, what is driving our sub level spacing is mitigating our blast vibration. The design work that went in at the start was about minimising vibration so the sub level spacing was set at 15m for vibration reasons. If we were out in the desert somewhere and weren't under restrictions for blast vibration we could quite easily mine a similar ore body out to 25m to 30m spacings. The longer the hole the greater the blast (and blast vibration). We use other methods to reduce vibration like decking. The main drivers for blast vibration are the maximum instantaneous charge and the distance. We have a lot of variables in the ground, we have about 20 years of modelling on the vibration characteristics of our rock masses. The longer the holes, the greater the volume of explosives we put in the holes and what we do is a process called decking. If you have a 10m long hole, if you fire that column with one delay then you fire it with 40kg instantaneous – that gives you a reading of x (vibration). If we say we are going to fire two 5m high columns, then you might go down to 18kg of explosives per column because it is split in half with a bit of waste rock in the middle and that generally will halve your vibration.

Graeme asked: When you are drilling how far down do you go? Do you go right through like it shows on the screen there?

Charlie said: Yes, we break them through. We drill through to ensure the accuracy (of placement) of the hole. That is critical for blast design, fragmentation and efficiency. We can cause increased vibration by making the hole work too hard, make the hole break too much rock. So it is really important to get the holes in the right spot – it is all engineer designed. Therefore it is important to know where your holes are breaking through, we go through and survey and mark up the break-throughs on the holes. If those holes are drilled 300mm outside of design we have to re-drill those holes. Quite often we pre-drill holes (and have 40 tonne bidders running over the top of them) so we go down 2m and bag them off so they don't get blocked. To charge the holes, we pull the bags out and blow the holes out to make sure they are nice and clean and so we can see where they are. Then we design the charge, the prep crew comes through and bags the hole off, probably about half a metre (from the bottom), they put a bag down and put stemming on top. Then they charge the hole from there up.

Tim asked: The stope backfill – where does that come from?

Charlie said: At the moment we are developing through waste (rock). A lot of that gets trucked to surface. We try and store as much as we can underground in old workings and through Favona and Trio that are now finished but we are still looking at 250,000 tonnes of waste coming to surface and that is stored at the portal stockpile (80,000 tonnes) and the rest will be transported across to the polishing pond which is a fully lined area where we store ore from the open pit. We have an area there that will take up to about 1,000,000 tonnes of material and we will end up putting about 180,000 tonnes over there. For the total process we still need another 650,000 tonnes to completely backfill Correnso. We have waste stockpiled at the development site which has been mined out of the open pit, and we have costed bringing in other waste from local quarries if required. That was part of the consenting process. If we go offsite for waste then we have to do road modifications as well to make sure it is safe.

Tim asked: Will the backfill sink after a period of time?

Charlie said: Generally no we don't see that. When we backfill we are using 40 tonne machines. We design the stopes so we can actually get tight fill. That is about the angle of

the hanging walls – if they are too flat then you can't get fill packed underneath them. The stope design looks at the backfill process as well so we are not leaving voids there. We drive over the backfill a lot, this loader runs on remote when it goes out over the fill so there is no one in it and it continually runs over that fill. We do get a little bit of settlement and we continually fill it up.

Tim asked: What stops a stope working its way to the surface?

Charlie said: It is filling all our voids so that there is nowhere for the rock to move to. Once we have filled those voids then the rock can't go anywhere.

Tim asked: But it has from old mining in the past?

Charlie said: The old miners didn't refill their stopes. There are still hazard areas around town where there are unfilled voids which can propagate to surface but I wasn't there at that stage, that was a long time ago. Where I went to university in Cornwall there are stopes 300m high, unfilled, and they will gradually work their way to the surface. But not here, not in this situation, we have to backfill.

Dale asked: Did you find any old stopes when you were mining Trio?

Charlie said: No, there is a drive in the bottom of the shaft that we mined next to but the old workings we had to stay away from. We left a pillar of 14m between ourselves and the old workings. The old stopes are quite high up in Trio, they didn't really mine very deep it was a very discrete mining area. They did do some development drives down low, the old timers' development drives were about 1.5m wide by about 2m high and we have mined around one of those but their stoping was above us and we were very separate from that.

Graeme asked: With the backfill that you have to get from quarries can you use overburden or do you have a certain quality that you require for backfilling?

Charlie said: We don't have an engineered specification for it but it does have to be good quality rock. That is for operational reasons more than anything. If we put really soft clay materials in here our machines, when they have to run over the top, would sink.

Eric asked: When we get our newsletter, does it have those diagrams on it that are on the board now?

Charlie said: I don't think so but there is no reason why we couldn't.

Eric asked: When you are talking about backfilling and compacting it, I presume it would be the same as when I was farming, when you put a post in you ram all the earth back into the hole with the post in it. Would it be the same principal?

Charlie said: Yes, we have to put another 650,000 tonnes of rock into the mine over and above what we have taken out. The fill (once packed back in) doesn't really move.

Maggie asked: The rock that you take up to the surface, where does it go?

Charlie said: That is stored outside the portal because it is going back down the mine.

Maggie asked: Is that also the stuff that is coming from Talisman?

Charlie said: No, definitely not.

Maggie said: I am just wondering where they are putting theirs?

Charlie said: That is a question for someone else, I don't know at all.

Tim asked: Where is the portal?

Charlie said: We really need a map I guess. The portal is over at Baxters Road. It doesn't show on these maps – it is in the same place it has been for 8 years.

Graeme asked: All the machines you are using under there, are they rubber tyred?

Charlie said: Yes, all rubber tyred. There is a tiny drill rig that we occasionally roll out that has rubber tracks.

Fritha asked: You dig out the ore and then you backfill and then you do the next section. How do you know where you have got the ore and where you have got the rubbish?

Charlie said: That is a good question. It is actually a different colour, the waste rock is darker and the ore is lighter because it has quartz in it; and we have some very good geologists. It is all designed; when we blow a stope we know the exact tonnage and grade. We design a stope and say "that is 3000 tonnes" then we blow the stope and we count the exact number of bogger buckets we pull out. We also count the trucks that we truck to surface. It is an expensive process so we are very tight on ore control. We bog it to what we call dilution. When we get to the back of the stope, we do get a bit of interaction between the ore and waste, that is we bog a little bit extra and get a bit of waste coming in, we put that in a stockpile, our geologists come and say we have bogged enough. We also have a cavity measuring system. We put a laser out on a boom and that takes about 7 minutes. It picks up about 7000 points and makes a 3D image of that void. We survey all of the voids that we can get the CMS instrument into. We look at the volume of that void and look at whether we have taken the right amount of rock. It is really technical but it is accurate. The cost of leaving gold behind is high. We spend a lot of time reconciling our stopes from 'design' to 'actual' to 'delivered to the mill'.

Tim asked: If there is a vibration result that causes some questions then do you have the ability to re-design your blasts for the next occasion?

Charlie said: Yes, absolutely, in fact the vibration management plan sets out certain steps that we need to go through. When we get the results, and they come through within 15 or 20 minutes of the blast, we can look at the traces. The production engineers are constantly looking at how to re-design or refine to optimise the blast design. Any results that are high we adjust. We don't have delicate tools where we can adjust, the only real tool we have if we want to drop the vibration is to go decking. Then you are halving your vibration. If we are getting a level that is high then we will deck. There are complications that come with decking, they get incredibly complex, there are lots of leads and all the leads look the same. The more decks you put into a blast hole the more chance you have of human error so fundamentally you can go to 3 decks per hole but any more than 3 we start struggling to make that a repeatable process for us. We have some pretty good tools we have developed with Trio, we have what we call a 'lunchbox light' where we can measure very, very accurately the amount of explosive we are putting in each hole. Our blast results last month, we are for the first time since I have been at the mine, 100% compliant on our vibration limit. For Trio the limit is 6mm/s and we are 100% compliant for the first time.

Harriet asked: How does your equipment tell the difference between a mine blast and an earthquake?

Charlie said: They have very different traces. The frequency is a lot higher for mine blasting and for earthquakes you have got very low, very long, amplitude waves.

Harriet asked: What has been puzzling me is that on 20 September 2014 at 8.55am at our place, there were several of us sitting at the kitchen table, there was quite a thump. I looked it up on GeoNet and there was nothing so what was it? I did tell the mining company and they said there was nothing there so what could it be?

Charlie said: I can absolutely guarantee that it wasn't something we fired in the underground that day. We are not allowed to fire even a 'pop'. For our blast consent for Trio we are allowed to fire 'pops' which are up to 20kg and that is not considered a blast event but for Correnso that would be so we can't even fire a pop in Correnso.

Harriet said: So its going to stay a puzzle for me for the rest of my life. Did anyone else feel it?

Charlie said: I have had the foreman come to me and ask if he can fire a pop to square up a face. For us a pop is a non event, it would almost not register but it would be defined in the Correnso consent as a blast and we are only allowed to do 3 blasts a day and those windows are very strict as well. So, I say no you have to wait, and we fire that in a blast window.

Charlie said: When someone has a query like that we talk about it every morning at the managers' meeting. Donna will say 'Charlie did you guys do anything', and I will go away and chase up with the underground and say 'guys did we have anything' and they haven't so no.

Kerry said: I understand that one was looked at and investigated and there was no blast at that time. Unfortunately if it is nothing we have caused we can't give an answer as to what it was. We look at the instrumentation and look at the blast sheets, that process was followed through and there was no blast at that time on that day.

Maggie asked: Did it show up on the vibration monitors?

Charlie said: No. But it is important that if you have that sort of query then you ask.

Harriet said: I should have gone on to GeoNet and asked them to follow up.

Maggie said: What does a 'pop' mean?

Charlie said: Sometimes when we do a development it does not come out perfectly. We are looking to go out 3m and get a nice square face but sometimes a hole might not fire properly or it does fire but the rock doesn't break so you are left with a little lump of rock that can be quite problematic for your next shot because you want to advance squarely. So, the guys will come in and put a couple of kgs of explosive in it, evacuate that drive and 'pop' it. It is a very small charge, it will never trigger anything but we don't even allow that to happen at Correnso outside of the firing window. That is a big implication for us as an operation as we develop the mine, every day has very high fixed costs and it is very important that we turn these headings over and get the advance rate. If we have a pop, we can't come in and do the advance round until we sort the pop out. In a normal operation you would just pop that and carry on but in Correnso we don't do that.

Andrea said: Charlie you talked about the 3mm/s average for Correnso. What does that mean and how does that affect the way you mine?

Charlie said: It is a new consent condition for us. We are going into Correnso and there are new conditions that we need to meet. Some of those conditions we still have to understand how we are going to work with as well. For Trio, 6mm/s is our limit, there is no averaging condition in there and we are 100% compliant. For Correnso it is a 5mm maximum vibration, however for stoping it is a 3mm/s average based on the nearest monitor so each monitor is going to have a 3mm/s average on it. (That means) we can't sit at one end of the mine and go 4mm/s, 4mm/s, 4mm/s because that part of the mine will be over that averaging condition so it is about making sure that we mine without high levels of vibration in one area. We haven't worked with that condition before but that is the condition we will work to.

Maggie asked: Have you mined under a residential town before in your career?

Charlie said: I have actually mined at another mine where we were right next to a town. The ore body didn't go under the town but the open pit was probably closer than the open pit here. I can tell you that one day there we fired a blast that had 75 tonnes of explosive in it.

Maggie asked: And what did they do to you?

Charlie said: I stood at the end of the street as a blast guard and it went on for what seemed like an eternity and the whole place shook. So I haven't mined under a town before although in Cornwall I have been down the mine a few times that was directly under the town, but obviously they had been mining there for several hundred years as well. I have worked in operations in Western Australia where we have mined right next to a town and you could throw a stone from the school yard into the pit.

Graeme asked: Was that an open pit?

Charlie said: No it was an underground where we were mining the open pit out. So we actually fired the whole bottom of the pit out into the underground.

Nancy asked: You said the ore body is pretty much straight up and down?

Charlie said: Yes it is more or less sub-vertical, there is some variation there.

Nancy continued: I remember Andrea saying on the radio not long ago that you are finding that the ore body north of Mataura Road is

Charlie said: Yes we are finding that it is about 50 degrees (indicating a sideways angle with his hands) so it is leaning over a bit.

Nancy asked: So does that affect anything?

Charlie said: Yes it affects our design. Recovery of the ore body becomes more difficult.

Nancy asked: Will that affect those above?

Charlie said: No, absolutely not. The conditions are still the conditions. We can't have any impact on the surface. What it does mean is that we will probably end up leaving pillars of ore. So, we leave in-situ pillars behind. We are still drilling so we are still trying to understand the exact orientation and the gold distribution within that section of the ore body. Geotechnically it will be designed to maximise extraction but not at the risk of surface expression. We just have to leave dirt behind.

Nancy asked: Will it take longer?

Charlie said: It is hard to say. I wouldn't expect so. The initial design at the moment looks like we will end up leaving design pillars, solid columns of rock.

Eric said: Ruth and I are both in our 70's and Ruth was born in Broken Hill in Australia, that's all underground mining. They were underground mining before she was born and they are still going which shows that if the way you mine is done correctly there shouldn't be much of a problem.

Charlie said: Yes, the whole design of this mine, there is no way we can have that surface expression. What the old timers did – when you are backfilling by hand it is a hell of a lot of work (so they wouldn't have wanted to do it).

Trevor said: Mining can't be too bad for the place because in the old days they did a mine and built over the top of it. It is virtually what you are doing but back to front.

Charlie said: I can't speak for the old days but they probably thought we are so far below the surface that if we leave a big hole here it is probably not going to do anything but in hindsight they would probably say 'we have left a big hazard there' that has the potential to work its way to the surface. That is just the way it was done I guess.

Trevor said: In the old days, I am sure they put a box of jelly in each hole and when they blasted you could feel it from about a kilometre away. They were 200 feet underground. You fellas are doing a pretty good job.

Charlie said: I have worked out in the desert and also right next to towns in Western Australia and there are different complications but it is just what you have to design and work for.

Kerry Watson: Environment Manager

3. Environmental Overview

Slide 10: Item 2 – Environmental Overview – Vibration

Vibration

- Main Central and Main South have been triggered by development (up to 2.3mm/s).
- Correnso development blasts (at 03 Nov):
 - Average 0.87mm/s (consent limit 2mm/s)
 - 95 percentile: 1.41mm/s (consent 5mm/s)
- Monitors continue to pick up other vibration events (e.g. residential activity and Trio production blasts).
- Why didn't Correnso monitors pick up the recent 4.00am earthquake?
- Blast notification update – Tsunado device



Kerry said: I'm just going to give a quick update on the environmental things we have been doing. The settlement monitoring, the piezometers and the vibration. The vibration has gone along. There have been 174 blast events in the last 6 month period. Of those the average has been 0.87mm/s. As Charlie mentioned before, for production it (our limit) is 3 mm/s but for development it is 2mm/s. We are well under those consent limits that were put in place. For people's information, the reason why the averages were put in was that people were concerned that if the limit was 5mm/s then they worried we would blast every single blast at 5mm/s which is a lot different to what happens now. The figure is a reflection that some might get up to 5mm/s but the average is well below that. The 95th percentile is set at 5mm/s in the conditions but is sitting at 1.41mm/s and that is again because they are development blasts, they are smaller blasts. When we get into the production stuff we will see larger blasts come in at that 95th percentile.

Tim asked: What does the 95th percentile mean?

Kerry said: It (the 5mm/s) is the point which 5% of the blasts could be over. That figure is there because there will be blasts (I think there were 6 above 6mm/s over the life of Trio)

over this limit. Obviously we don't want that to happen and we do not design for that but that is where the 95 percentile came from.

Kerry said: We have also asked the question (on slide 10 above) why didn't the monitors pick up the earthquakes at 3.46am last week? What happens with the Correnso monitors is that because we do not blast at night they go to sleep. The reason for that is that they (would otherwise) pick up very truck, every vehicle that goes past which would clog up their memories. Now, just to show that we are not letting off a sneaky blast in the middle of the night, three of them stay on, these three in the middle (showing on the PowerPoint slide). Now these three did not pick up the earthquake however the vibration monitors at Grey Street over by the pit and Clarke Street for Trio did. They were about 1.? (1 point something). The reason the Correnso ones didn't is probably the same reason that the others around the place didn't, and that is just that there are differing ground conditions underneath those. So they do pick up the earthquakes and we send that information to GeoNet. They are quite interested in that information because that allows them to correlate people feeling the earthquake with what actually was recorded – we provide that information to them.

With the Tsunado devices, the trial has finished and we are going ahead with it (the use of the Tsunado devices). We are going through the process of installing new antennas to ensure the coverage for the frequencies they use, covering the whole of Waihi. That will be done in about a month or so.

Tony asked: Are you getting complaints at the moment?

Kerry said: People are ringing up and saying they are noticing it and a lot of people are hearing it rather than feeling it. That has been consistent throughout and we are not hiding from the fact that people will hear them and feel them. People are telling us that they are noticing those.

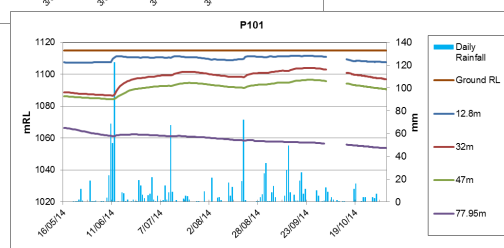
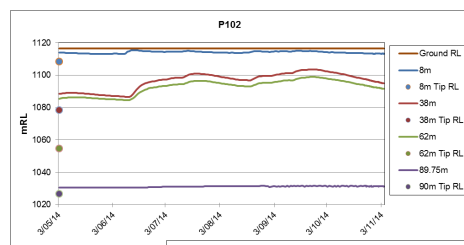
Eric asked Kerry to again point out the vibration monitors that are left on.

Kerry said: These ones up the middle. They are the centre line (just about central above the ore body). The reason for that is we needed to leave something on to give people some comfort that we are not blasting outside our windows, that we are not blasting at 2.00am.

Slide 11: Item 2 – Environmental Overview – Dewatering

Dewatering

- Monitoring of two new piezometer installations on-going.
- Results showing response to rain events in shallow piezometers.



Kerry said: This next slide is the peizometers. You remember through the hearing we had the Gladstone Road issue and the subsidence that caused damage to some of the houses? When we looked at the peizometers for that we saw that the decline was dramatic – 15m in a month.

These peizometers were put in as extras. P102 on Barry Road (here) and P101 at the bottom end of Gladstone Road. They have been operating as we would expect. They go up and down as a result of rainfall. What we can see here (see slide 11 above) is if there is a rainfall event there will be a jump as these aquifers re-charge and the lower ones will do a bit of their own stuff. And, because we are heading into summer these will slowly start declining. Then they will get the rainfall again in the future and jump up.

What Charlie was talking about with the importance of the andecite layer, with this one here and here (pointing to lines on each graph of slide 11 above) there is a layer of rock that is (they say) impermeable – there is very little ability for water to move between the two. With Gladstone Road, the issue was that there was a pathway (through the layer) by a drill hole which allowed those two layers to connect. In this area we don't have any drill holes and what we are seeing from this result is that they are staying separated. It is the upper one that causes the issues – the upper ones dewater at a very fast rate. If we plotted that (the Gladstone Road problem) on here (this graph) you would see a dramatic drop (in the water level) very quickly. So those (new peizometers) have gone through, these are the results (on the graphs on the powerpoint slide) and we will continue to put these up at the meetings.

Tim asked if there were questions about dewatering.

Trevor asked: Gladstone Road, since you plugged that hole, has it come back up again?

Kerry said: Correct, yes it rebounded pretty quickly to what it was pre-drilling. These aquifers, what we find is that they re-charge very quickly.

Dale asked: You know how we are flat out dewatering underground, what recharges that aquifer, the lower level?

Kerry said: That comes from all round the area. There is slow seepage through. It comes from the sides and some of the rivers around will be re-charging. Some of the deeper aquifers have been draining to the pit for ages because that is the natural gradient.

Dale asked: Does the pit act as a hole like those drill holes? Do you see that upper layer being able to drain more freely?

Kerry said: What we do see is a slight increase in the drainage because of the pit, and that is what is going to fill the pit after it is shut. We will supplement that with river flows but that is going to the natural water coming in and that will re-bound.

Dale asked: So how far back (from the edge of the pit)? You have those two layers and the pit coming down and breaking through the back of them, does the water in this top layer come back at a lower rate?

Kerry said: I can check. I am pretty sure there is a slight gradient there but nothing that is dramatic which is what was anticipated when this was put forward. The issue with the settlement is when we get one part sinking much faster than another, when we get differential settlement. If it all settles slowly at the same rate then it is fine.

Maggie asked: That stuff that was pumped in under a house in Gladstone Road, if it (the water level) has gone back up has it pushed the house up?

Kerry said: They would have taken that into consideration. What Maggie is talking about is some of the houses that had subsidence. They have done a lot of this in Christchurch,

pumping a resin or something similar underneath the property on the side (that has subsided) and that will raise it. They will have taken into account the rebound to make sure it doesn't go the other way.

Slide 12: Item 2 – Environmental Overview – Settlement

Settlement

- Second survey for new marks over Correnso late October. No evidence of settlement.
- Routine six-monthly survey over Waihi scheduled this month.



Kerry said: We also talked about the extra monitoring points that were put in place. What we did is in late October we went out and sampled a lot of the new ones (settlement markers) because we knew this meeting was coming up and there is no evidence of settlement. There are 39 markers and 24 rose and 15 went down. The largest decrease was about 1.4mm which is well within the norm of that happens with those upper aquifers going up or down. Those that actually dropped the most were away from the mining area. 1.4mm is nothing – it is just normal ground movement as a result of wetting and drying.

Graeme asked: Is that what you would expect on a national basis?

Kerry said: It is what we expect around here. We have been doing these settlement markers since 1987 so we have a picture of what happens on a seasonal basis and it is well within that.

Andrea Durie: External Affairs Manager

Slide 13: Item 3 – Social Overview – Communication - Offers

Communication

- Survey findings - *The East Ender*, property & vibration

Offers

Correnso:

- confirmed northern stopes (8 properties) underway
- *southern stopes (13 properties) - see map*
- development (31 properties)
- (full funding approval for the project)
- Exploration Development Drive (23 properties)



Andrea said: This (slide) is talking about the social aspects that are in the conditions. We are trying to find ways to improve upon what we are doing so if we can get feedback from people at these meetings or over time that would be great.

Recently we went through the social impact assessment and got some good feedback through the consultants who conducted that. That was useful but we don't get really specific information, we get generalisations, the general themes that are coming through. We wanted to understand more specifically what people are after and the best way to deliver that information so we conducted a survey. There may be some people in the room who filled that out and sent that back, thank you very much for doing that. What has resulted from that survey is the East Ender (copies available). It is a newsletter that we will be circulating to the letter boxes of those living in Waihi East each month. As you will be aware we are required to provide a monthly mine plan to indicate where we have been and where we are working for the coming month. That monthly mine plan will be part of the newsletter and people will get it delivered (previously they could go and pick it up). We will have the newsletters available from the Service Centre and the Information Centre but this means people will have it delivered hot off the press and have it there. The feedback from the survey was that people preferred hard copy to refer back to. The reason that it is a newsletter as opposed to just the monthly mine plan is to give people an update on what we are actually doing. Rather than waiting for these meetings we will be able to give more information about what is going on.

The other piece (of information) that came through (from the survey), and we did ask specifically about people's level of concern about property and vibration. We wanted to know how people would like information presented and were they interested in this topic. As we expected it is an area that a lot of people are unsure about so we will be working on something in relation to this (property and vibration) and we will be providing the information in the way that people want it, putting information in peoples' letterboxes, turning up to workshops and all that. That is based on information from the survey.

I haven't put a lot of maps into this presentation because they are all in the East Ender. Please grab one if you haven't received one in your letterbox.

Offers (see slide 13 above)

The discussion of these is not new for most people because this started towards the end of last year with the Exploration Development Drive and the development offers that took place. The next thing, when we had full funding approval was to go out and make offers to those over the Correnso Development, which is what Charlie is working on at the moment. What we had hoped to happen was for The Property Group to go out to all those over the Correnso stopes but because of the way that the drilling programme has worked we have had to do that in sections. So, from Mataura Road south, we know where the stopes are and that is the map that is up there (see slide 13). Again that (map) is in the East Ender. That (offer) has been confirmed in a visit to the 13 properties above stopes. We have an understanding of aspects of the stopes north of Mataura Road, there are eight properties that we have confirmed in that area but we don't have all the results back to be reviewed yet to confirm whether that is the extent of the stopes or whether there may be some others. There could be in the next month or so confirmation as to whether there is a handful more (properties) that we need to look at to see whether they are over stopes. There are eight currently in the northern end that we have approached but there could be some others.

These (other bullet points on slide 13) are just confirmation of the number of properties that have been approached. While we haven't settled with all of the home owners that we are speaking with about what they are going to do, there is probably a majority that will look to stay in their homes in one form or other. Whether that is taking ex-gratia or whether that is having Newmont purchase and then rent back and see how things go. That is a positive for us and I think it is a positive for the community.

We have talked before about what is involved in the offer process. We have Julianne here from Hauraki District Council (HDC). She has put quite a few of the information sheets that HDC have developed on the table by the door. It is like a “frequently asked questions” scenario to give people an interpretation of the consent conditions. Newmont had input into that, in that we are in agreement with the position that HDC have taken on the consent so you can say that it is an agreed view of those consents. If you would like a copy then please grab one. Julianne is it on the HDC website? It is, then you can also go onto the HDC website.

Any further questions about what the offer entails may be covered in that information sheet. It is quite comprehensive, council have done a good job of taking on the feedback and questions they have received and incorporating them into this information sheet.

Nancy asked: Hi Andrea, you said you may be drilling to see if there is anything in those shadow areas. If there was a set budget, as I understand there was through the mediation process, for house purchases and ex-gratia payments, if you find more ore to be mined how do you come up with more funding? Do you go back to get more money or do you just make your pot of money stretch further?

Andrea said: In essence that is not a new mine but it is a new project so we go back with a request for more funds from our corporate office. Within those costings will be the number of houses that we need to provide offers to so that will be part of the costing that they will weigh up as a company, to decide whether this is something they wish to pursue.

Nancy asked: So the full funding for Correnso is just what we can see now?

Andrea said: Yes, and for the northern end.

Nancy asked: Now as you indicated the northern end might not be so up and down, it is a bit more sideways, does that cover more properties than you were anticipating?

Andrea said: Potentially and that is why it is taking us a bit longer to analyse the samples to understand what is happening with that.

Nancy asked: So again does that little pot of money have to be stretched to accommodate extra houses that you weren't anticipating?

Andrea said: We probably need to step back a little. This pot of money is coming from what was the now defunct PCIP – Property and Community Investment Policy. That was based on the Golden Link Project Area which was a much larger project as well as a much larger area. The amount of ore and the area of ore that we were looking to pursue was far greater than what Correnso looks like now. So, we have had to strip the project back and down based on the feedback that we have been getting from various quarters including from the consent process. The PCIP allowed for a budget for what we thought would be a larger project. So, we don't necessarily have to scrimp and save. It is still a very tight budget but it is not out of our reach in terms of what was expected under the Golden Link project.

Maggie asked: Do you have an estimated map of where the ore goes to the north?

Andrea said: We have an understanding of where the ore goes under the eight properties, we are very clear on that. It is an area towards the top of the northern end that we are not sure about where it sort of lays over a little so we are just trying to get a handle on the tonnage and grade of the ore and whether it is worth pursuing.

Tim asked: Andrea, this map that we have here (see slide 13), is this an accurate representation or is it more of a graphic representation? If people look on there and say 'there's my property, there's the line' can they know that is exactly how it goes?

Andrea said: Kit is the one who provides us with these maps and they are as accurate as the software package allows us to be.

Tim asked: So there will be another map like that for the area north of Matuara Road?

Andrea said: Absolutely. The plan is, once we have the northern end confirmed, within a month or so, we will release the full north and south map as one complete stoep ore body.

David asked: There is a property up there from Barry Road that has no access to it. Is that landlocked or is it council reserve?

Andrea said: That actually backs onto a property that someone already owns, so it is like a large section. The people own two sections, one with the property on it and one as the section. They access it through their section.

Slide 14: Item 3 – Social Overview (cont'd) – SIA – SIMP - Cultural

Social Impact Assessment (SIA)

- *snapshot in time of impacts (positive and negative)*
- submitted to HDC & anticipate release of final SIA November 2014

Social Impact Management Plan (SIMP)

- *identifies key social indicators, monitored annually throughout project*
- submitted to HDC: draft approved with further amendments post-SIA
- anticipate release of final / approved SIMP approx. Dec 2014

Cultural

- Iwi Advisory Group continues to meet
- pilot for Cultural Awareness induction held early Nov 2014

Andrea said: I am pleased to say from a social research point of view we can stop talking about these and release some documents. The Social Impact Assessment (SIA), people are most likely to be aware of because we had consultants out in the community meeting with people, meeting with groups. That has been submitted to HDC for viewing (out of courtesy). As soon as we get word from them that they have read it (probably December) we will be able to put that on our website, the council will be able to put it on their website and let people know through the update in the Waihi Leader. It will also go into the East Ender so people will be aware of it when it comes out.

The SIA is a snapshot in time of what is going on with people in the community and how mining is affecting them either positively or negatively. The purpose of this particular SIA was to provide baseline information for an Impact Management Plan (SIMP). The SIMP identifies the key indicators that people have raised as either positives or negatives, issues or concerns, that we monitor on an annual basis. We need to conduct an SIA every 5 years. [Now we have completed this one] what will happen is that we will monitor [against these indicators] annually. We have a couple of small things to iron out to understand some things from the consent conditions that have been put in there. We need to understand what they mean in practice. Then we will be able to submit that to HDC for approval. They must approve this document before it is accepted and released publicly. We hope to be able to do that fairly soon, before the end of this year.

The SIA will be available before the SIMP will be and we hope it will all be out for people to view before the end of the year. If the SIMP isn't it will be very early in the new year that it will be circulated.

Tim asked: Are the indicators gauged on an annual basis thereafter?

Andrea said: That's right.

Tim asked: For how many years?

Andrea said: For the life of the project.

Tim asked: Is there room for new indicators to be introduced during the life of the project?

Andrea said: Yes, the idea of monitoring this annually is there will be a mechanism to allow that to occur. If there are new issues raised, or indicators that are no longer relevant, then that will be taken into account with that review. That review is undertaken independently as well. We need to establish structures to gather the material and an independent party will review that on an annual basis.

Andrea said: The Iwi Advisory Group continues to meet. We have undertaken the pilot for the cultural awareness training and that should be something that we roll out very shortly to our full-time workforce which is great. The next project is to start talking about the Cultural Balance Monitoring Plan that we put in place. As you will be aware, Martha used to be a hill of significance to local iwi, and that is now gone. That is one example. How do we now work with that? Those are the discussions that start early next year.

Maggie said: Perhaps you could build a mountain back in the same place?

Dale said: They are, the tailings storage facility.

Andrea said: We have had all sorts of suggestions including a water supply for the region.

Andrea said: We do have the Trio underground mine that is finishing at the end of November at this stage. It might edge into December but that would be it. That closes off and we will transition the workforce into the Correnso underground. We are currently still looking at pit closure in the first or second quarter of 2016.

Tim asked: Possible or definite pit closure?

Andrea said: At this stage, unless something changes dramatically we are not anticipating that it would change. Something could happen to the gold price overnight and away we go again but the way the predictions are, we are looking to close the pit.

Conclusion

Tim reminded people that the consent conditions required four meetings in the first year and two in the second. He explained that the current thinking is to hold the two 2015 meetings in March and September 2015.

Tim asked, given that production will commence around July 2015, for thoughts on those proposed meetings dates. People agreed.

Tim asked if there is anything he and Sharon can do to improve the meetings. There were no suggestions for improvements.

Tim asked if (provided HDC agrees) participants have any concerns if in future there is one rather than two facilitators present at the meeting, provided Out of Court still produces the independent minutes based on the recording. No-one raised any issue with that approach.

The meeting concluded at 3.30pm.

The next meetings will take place 11 March 2015

Attendance Register	
Erich Schmidt	Nancy McGuire
Helga Schmidt	Roy Hansen
Dale Riddle	Maggie Wilkinson
Murray Elliott	Graeme Wilkinson
Trevor Skinner	Fritha Tagg
Hazel Stewart	Julianne Dyer
Harriet Taylor	Tony Butterick
Eric Rhodes	David Carrington