

AMENDED FORM 51-102F3
MATERIAL CHANGE REPORT

Item 1 – Name and Address of Company:

Minera IRL Limited
Av Santa Cruz 830, Of. 401
Miraflores, Lima 18

Item 2 - Date of Material Change:

November 29, 2012

Item 3 – News Release:

The news release attached hereto as Schedule “A” was disseminated over Marketwire on November 29, 2012.

Item 4 – Summary of Material Change:

Minera IRL Limited announced the results of a Definitive Feasibility Study on its Ollachea Project (the “Project”), Peru. The Project is 100% owned by Minera IRL SA subsidiary Minera Kuri Kullu SA.

Item 5 – Full Description of Material Change:

5.1 Full Description of Material Change

The material change is fully described in the press release attached hereto as well as a summary derived from the technical report entitled “Ollachea Gold Project - Peru - NI 43-101 Technical Report on Feasibility Study” dated 29 November, 2012 attached hereto as Schedule “B”.

5.2 Disclosure for Restructuring Transactions

Not applicable.

Item 6 – Reliance on subsection 7.1(2) of National Instrument 51-102:

Not applicable.

Item 7 - Omitted Information:

Not applicable.

Item 8 – Executive Officer:

Trish Kent, Vice President, Corporate Relations
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Item 9 – Date of Report:

January 24, 2013



Minera IRL Ltd Announces Definitive Feasibility Study, Ollachea Project, Peru

London and Toronto, 29 November 2012: Minera IRL Limited ("Minera IRL" or the "Company") (TSX:IRL) (AIM:MIRL) (BVL:MIRL), the Latin American gold mining company, is pleased to announce the results of a Definitive Feasibility Study ("DFS") on its Ollachea Project (the "Project"), Peru. The Project is 100% owned by Minera IRL SA subsidiary Minera Kuri Kullu SA ("MKK"). The DFS was carried out by international engineering firm AMEC in conjunction with Coffey Mining, who contributed the resource estimation and underground mining aspects of the study.

Highlights:

Project Economic Indicators

- Using a gold price of \$1,300 per ounce, NPV @ 7% real of \$264 million (pre-tax) and \$155 million (post tax); and IRR of 29.2% (pre tax) and 22.1% (post tax)
- Up-front capital cost estimate of \$177.5 million
- Life-of-mine ("LOM") cash operating cost of \$499 per ounce

Project Physical Indicators

- Canadian National Instrument 43-101 ("NI 43-101") compliant Indicated Resource of 10.6 million tonnes grading 4.0g/t gold containing 1.4 million ounces gold
- Probable Mineral Reserve of 9.3 million tonnes grading 3.4g/t gold containing 1.0 million ounces
- Rate of 1.1 million tonnes per annum to produce an average of 113,000 ounces gold per year at full capacity
- Nine year initial mine life including ramp-up and down
- Underground mining accessed by a 1.2km tunnel currently over 800 metres advanced
- Conventional metallurgical processing to extract 91% of the gold

Next Steps

- Environmental Impact Assessment ("EIA") to be submitted before year-end thereby initiating permitting
- Investigating financing and early commencement of detailed engineering
- Production forecast to commence beginning 2015
- Upside potential includes the adjacent Concurayoc Zone with a 0.9 million ounces Inferred Resource which is not included in the DFS. The Minapampa and Concurayoc zones are open ended both along strike and down dip.

Note: \$ denominates United States ("US") dollars unless otherwise stated.

“Ollachea’s DFS confirms that Minera IRL has an economically and technically robust, long life project.” said Courtney Chamberlain, Executive Chairman of Minera IRL. “Our team of engineers and consultants have done an excellent job on this comprehensive evaluation. This has been bolstered by the practical underground mining experience being obtained from the ongoing exploration drive, which has now advanced over 800 meters. We are confident of a much longer mine life than the initial nine years defined in this study considering that over one million ounces of Inferred Resource has already been identified and that the gold bearing structures are open ended along strike and down dip.”

“The EIA will be submitted to the Peruvian authorities shortly thus commencing the permitting process. We are investigating financing options and intend to commence detailed engineering early in 2013. Our target is to start ore processing at the beginning of 2015.”

Financial Analysis

The financial analysis was undertaken in constant US dollars, 100% Project, stand alone in country and 100% equity finance basis. It was undertaken at a base case gold price of \$1,300/oz. However, the analysis was also performed using a gold price of \$1,600/oz to show the impact of a higher gold price. The results of the financial analysis are set out below.

Parameter	Units	Financial Results			
		\$1,300/oz (base case)		\$1,600/oz	
		Pre-tax	Post-tax	Pre-tax	Post-tax
Project cash flow	\$M	489	325	749	486
NPV at 5% real	\$M	316	194	506	310
NPV at 7% real	\$M	264	155	434	258
NPV at 10% real	\$M	199	108	343	194
IRR (real)	%	29.2	22.1	40.2	30.2
Payback	years	3.2	3.7	2.5	3.0
Note: 1. NPVs as at commencement of construction 2. NPVs are based on mid-period discounting 3. Before tax is before Special Mining Tax, Workers’ Participation Profit of 8% and Income Taxes of 30% 4. Payback starts from the commencement of production 5. The financial results are on 100% Project basis and exclude the agreement with the community for a 5% participation in MKK on commencement of production and the Second Additional Payment payable by MKK and due to Rio Tinto in accordance with Mining Claim Transfer Agreement dated 23 February 2007.					

Other assumptions included in the financial analysis are:

- US\$: PEN (Peru Sol) of 2.65
- Third party 1% NSR Royalty
- Peru Royalty based on an operating margin sliding scale

- Peru Special Mining Tax based on a operating margin sliding scale
- Peru Workers' Profit Participation of 8% of pre-tax profits
- Peru Income tax rate of 30%

Mineral Resources and Mineral Reserves

A NI 43-101 compliant Mineral Resource estimate was announced on 18 July 2012. This Mineral Resource estimate was carried out by consulting firm Coffey Mining Pty Ltd.

The Indicated Mineral Resource estimate over the Minapampa Zone totals 10.6 million tonnes averaging 4.0 g/t gold containing 1.4 million ounces. This resource is contained within six discrete horizons over a strike length of approximately 950 meters and down-dip approximately 350 meters. This estimate was based upon 151 diamond drill holes for 59,509 meters. The mineral resource estimate applies a 2g/t gold bottom cut and top cutting as appropriate for each of the six discrete gold-mineralized horizons that have been defined to date. The dry in-situ bulk density within mineralised zones, based upon 103 bulk density determinations, is 2.83 tonnes per cubic meter.

Included within the Indicated Mineral Resource envelope, the higher grade core Indicated Mineral Resource, using a 3.5g/t gold cut-off, totals 5.1 million tonnes grading 5.3g/t gold containing 0.9 million ounces.

In addition, the Inferred Mineral Resource at Minapampa and Concurayoc, approximately 400 meters west of Minapampa, totals 13.7 million tonnes grading 2.9 g/t gold for 1.2 million ounces. With additional future resource definition drilling, this Inferred Mineral Resource offers potential for a significant mine life extension. The deposit remains open along strike and down dip providing significant future exploration potential.

Probable Mineral Reserves at Minapampa, are shown in the following table. The Probable Mineral Reserves are included within the Indicated Mineral Resources and inclusive of mining dilution.

Category	Tonnage Mt	Au Grade g/t	Contained Au koz
Ore (+2g/t Au)	8.7	3.5	983
Low Grade Development Ore (+1g/t to 2g/t Au)	0.6	1.5	28
Probable Mineral Reserves	9.3	3.4	1,011

The low grade development ore is sourced from development drives that traverse through Indicated Mineral Resource but has been diluted below the Project COG of 2.0g/t Au. As the mining cost for this material will have already been expensed, it is economic to treat through the plant. A mill cut-off grade of 1.0g/t Au has been applied to this material.

Mining & Processing

The mining method will be long-hole open stoping with paste backfill. The main access to the orebody will be via a 1.2 km-long exploration access drive from the plant site in the adjacent valley. This drive is currently in progress and has already advanced over 800 meters. The drive will access the orebody near the lower limit of the drill defined deposit so most ore mining will be from the bottom upwards. Extraction will occur along the orebody strike direction on a retreat basis.

Mine development will continue in parallel with the plant and infrastructure construction. Whilst some ore will be mined and stockpiled during the development period, the actual ore stoping production is scheduled to commence in early 2015, ramping up to the full 1.1 million tonnes per annum rate by mid-2016. Development waste of 2.6Mt will be mined over the LOM.

A comprehensive metallurgical testing programme has been completed in Australia and the United States. This demonstrated good metallurgical response to conventional crush, grind, gravity concentration and carbon-in-leach technology. Gold recovery of 91% is projected.

The processing plant will have a capacity of 1.1 million tonnes per annum. Tailings will be filtered and split between underground cemented fill and dry stacking on surface.

The average steady state (~6.6 years) gold production is approximately 113koz per annum. The following table summarises the mine and processing production.

Year	Ore Mined		LG Dev. Ore Mined		Ore Processed		Recovery (%)	Au Production (koz)
	Ore (kt)	Au grade (g/t)	Ore (kt)	Au grade (g/t)	Total Ore (kt)	Au grade (g/t)		
2014	35	3.11	11	1.56	-	-	-	-
2015	586	3.46	110	1.51	680	3.21	90.2%	63
2016	811	3.07	80	1.53	938	2.91	88.8%	78
2017	1,097	3.48	55	1.49	1,117	3.45	90.3%	112
2018	1,095	3.66	99	1.44	1,127	3.60	91.2%	119
2019	1,099	3.63	87	1.47	1,120	3.59	91.2%	118
2020	1,106	3.81	132	1.51	1,132	3.76	92.0%	126
2021	1,099	3.58	16	1.50	1,137	3.51	91.5%	118
2022	862	3.25	-	-	1,128	2.83	91.1%	94
2023	738	3.50	-	-	738	3.50	91.8%	76
2024	203	2.90	-	-	203	2.90	93.1%	18
Total	8,730	3.50	590	1.49	9,320	3.38	91.0%	921

Taking into account the potential to convert the Inferred Mineral Resource at the nearby Concurayoc Zone to the Measured and Indicated categories, as well as the exploration upside, the Company considers that there is an excellent opportunity to extend the full 1.1 million tonnes per annum mining and treatment rate well beyond 2022.

Infrastructure

Ollachea is well served by existing infrastructure and sits astride the new Southern Interoceanic Highway. A high tension power line passes over the project site and a long term contract has been signed with the hydroelectric supplier. There is an abundant source of water and a significant portion of the workforce will be recruited from the local community.

A permanent camp will be developed close to the plant site to accommodate 200 employees.

Capital Cost Estimate

Project development capital cost is estimated to be \$177.5 million with an additional LOM sustaining capital of \$41.6 million and \$4.2 million for closure capital. Capital costs are summarised in the following table.

Item	Cost \$M
Project Capital	
Mining	55.4
Site Development	3.9
Process Plant	58.4
Ancillary Buildings	3.9
Tailings System	5.7
Indirect and Owners Cost	31.4
Contingency	19.0
Total Project Capital	177.5
Sustaining Capital	41.6
Closure Costs (net) - End of LOM	4.2
Total LOM Capital Cost	223.3
Note:	
1. Costs are in 3Q 2012 \$.	

Operating Cost Estimate

Operating costs to mine and treat at a steady state production rate of 1.1 million tonnes per annum were derived from first principles. The LOM average unit operating costs are summarised in the following table.

Item	\$/t ore	\$/oz
Mining	23.4	237
Processing	21.5	218
G&A	4.3	44
Total operating costs	49.2	499
Note:		
1. Costs are in 3Q 2012 \$.		
2. Operating cash costs exclude costs for freight and refining dore, and royalties.		

Environmental & Permitting

Environmental baseline information has been collected over approximately a three year period. This is being used in conjunction with special studies, such as hydrogeology and geotechnical, and DFS design details to produce an EIA which is currently in progress and is expected to be submitted by the end of 2012. The submission of the EIA to the Peruvian government authorities will be the basis for the development permitting process.

Community Relations

MKK has developed excellent relationships with the local community and has a 30 year development and operating permit in place. The community will become a 5% equity participant in MKK upon the commencement of production. A significant portion of the workforce will be local people who will be trained and employed at the operation.

Archaeological clearance has been granted for most of the required plant, tailings and infrastructure locations. Remaining clearance is in progress but no sites of national significance have been identified within the area of planned use.

Project Schedule and Moving Forward

The successful completion of the DFS establishes the basis for moving quickly towards development. The excellent progress on the exploration drive will provide the opportunity for uninterrupted progression toward establishing underground infrastructure and development. The EIA will be completed and submitted in a timely manner. Investigations into project financing will now be accelerated.

The project schedule is predicated upon a rapid move toward development. An engineering company will shortly be appointed to commence detailed design and identify long lead items for placement of early orders. Plant and infrastructure construction is scheduled for completion late in 2014 with first feed to the plant at the beginning of 2015.

Canadian National Instrument 43-101 compliant report will be filed within the ensuing required 45 day period.

Competent Persons Statement

The preparation of the technical information contained herein was supervised by Courtney Chamberlain, Executive Chairman, BSc and MSc Metallurgical Engineering, a Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM), who is recognized as a Qualified Person for the purposes of National Instrument 43-101, and who has reviewed and approved the technical information in this press release. Also by Donald McIver, VP Exploration of the Company, MSc Exploration and Economic Geology, a Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM), as well as the Society of Economic Geologists (FSEG), who is recognized as a Qualified Person for the purposes of National Instrument 43-101, and who has reviewed and approved the resource information in this press release.

The preparation of the Probable Mineral Reserve contained herein was supervised by John Hearne, FAusIMM, of Coffey Mining, who is recognized as a Qualified Person for the purposes of National Instrument 43-101, and who has reviewed and approved the technical information in this press release.

The preparation of the Indicated Mineral Resources contained herein was estimated by Doug Corley, Member of the Australasian Institute of Geoscientists (MAIG), and Registered Professional Geoscientist (RP Geo), of Coffey Mining, who is recognized as a Qualified Person for the purposes of National Instrument 43-101, and who has reviewed and approved the technical information in this press release.

Conference Call

Following the release, Minera IRL plans to host a conference call at 10:00 am Toronto (EDT), 3:00 pm UK (BST), 10:00 am Lima (PET) on November 29, 2012. To participate in the call please dial:

Toll Free (North America): 877-240-9772

Local Toronto and International: 416-340-8527

Global: 800-2787-2090

A live webcast and archive will be available at: <http://www.gowebcasting.com/4028>

REPLAY:

Dial-in numbers: 905-694-9451 / 800-408-3053/ 800-3366-3052

The replay is available till December 6th, 2012

Passcode: 5695777

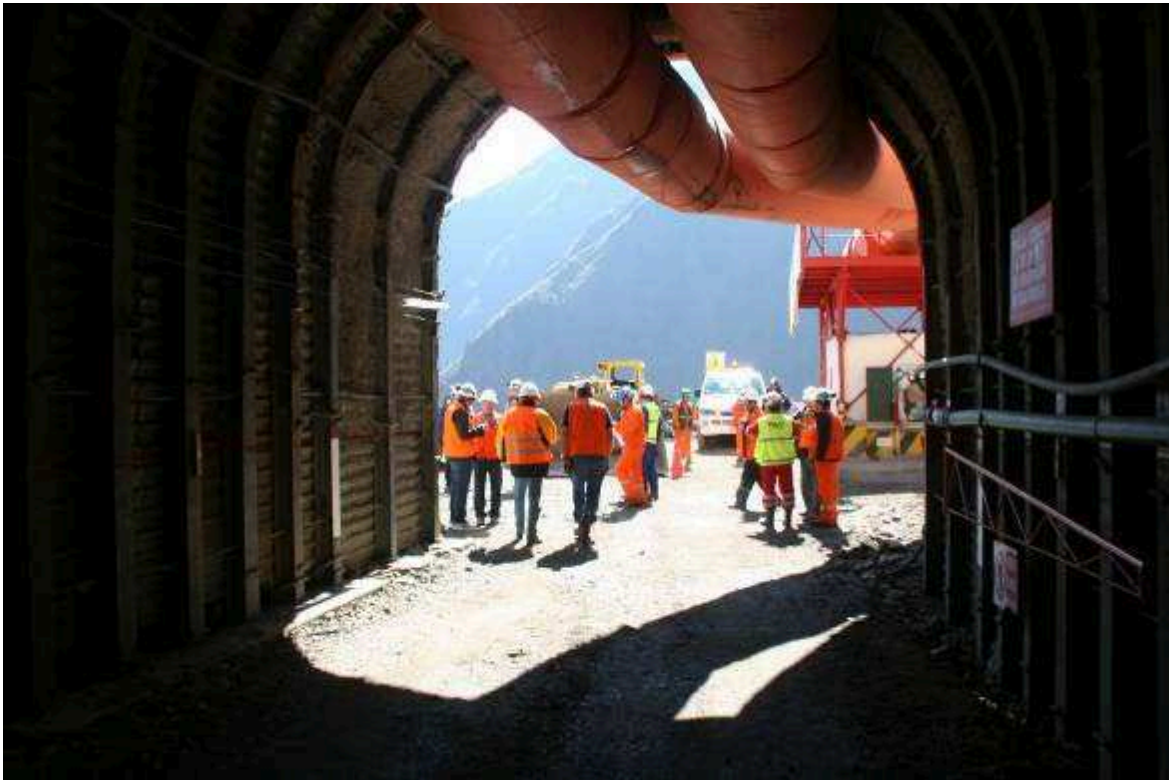


Photo: Ollachea Tunnel



Photo: Ollachea Tunnel



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Minera IRL Limited is the AIM traded, TSX and BVL listed holding company of precious metals mining and exploration companies focused in Latin America. Minera IRL is led by an experienced senior management team with extensive industry experience, particularly operating in South America. The Group operates the Corihuarmi Gold Mine and the advanced gold projects Ollachea in Peru and Don Nicolas in Argentina. For more information, please visit www.minera-irl.com.

The Toronto Stock Exchange neither approves nor disapproves the information contained in this News Release.

Some of the statements contained in this release are forward-looking statements, such as estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties.

While these forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect our current judgment regarding the direction of our business, actual results will almost always vary, sometimes materially, from any estimates, predictions, projections, assumptions or other future performance suggestions herein. Except as required by applicable law

or regulation, Minera IRL Limited does not intend to update any forward-looking statements to conform these statements to actual results.

Quality Assurance and Quality Control Procedures Disclosure

The Company has implemented and maintains a Minera IRL quality assurance/quality control (QA/QC) protocol on the Ollachea Project to ensure best industry practice in sampling and analysis of exploration and resource drill core samples. The insertion of field duplicates, certified standards and blank samples into the sample stream form part of the MIRC procedure (these act as an independent check on contamination, precision and accuracy in the analytical laboratory).

Assay results are reported once rigorous QAQC procedures have been approved.

Independent Audit Programmes

Towards maintaining compliancy with international standards as they pertain to the minerals industry resource evaluation and estimation procedure, MIRC regularly contracts the services of industry experts to conduct detailed audits of established QAQC procedures.

The following summary is derived from the technical report entitled “Ollachea Gold Project - Peru - NI 43-101 Technical Report on Feasibility Study” (the “**Ollachea Feasibility Study**”) dated 29 November, 2012. This summary is not complete and the full Ollachea Feasibility Study can be accessed on the SEDAR profile of Minera IRL Limited (the “**Company**”) at www.sedar.com.

Location, Accessibility, Climate and Physiography

The Ollachea Gold Project is located in the Puno Region of southern Peru. Minera Kuri Kulla SA, a wholly-owned subsidiary of Minera IRL SA and which is a wholly owned subsidiary of the Company, currently owns the property and retained AMEC Australia Pty Ltd and Coffey Mining Pty Ltd to conduct the Ollachea Feasibility Study on the viability of mining the deposit from underground and processing ore in a 1.1 Mt/y facility on the property to produce gold doré. The Ollachea Gold Project location is included as Figure 1.

Figure 1: Ollachea Gold Project Location



Road access to the Ollachea Gold Project is by the Interoceanic Highway, which is an international, transcontinental highway in Peru and Brazil, running immediately east of the proposed plant site for the Ollachea Gold Project. The stretch of the Interoceanic Highway in the vicinity of the Ollachea Gold Project consists of a two-lane asphalt-paved road connecting the Brazilian highway system with the south of Peru and the port of Matarani at the city of Ilo on the Pacific Coast of Peru. Portions of the highway between Macusani in the highlands to the town of Ollachea and for approximately 5 km from the town of Ollachea towards San Gaban are currently unpaved and are undergoing civil works to improve the stability of slopes over the highway. Road conditions in this interval of the highway are currently very good to moderate, with occasional closures for construction and road clearing activities.

A series of unpaved roads connect the town of Ollachea to the Minapampa area and the Oscco Cachi valley. These are currently used to support exploration drilling on the Ollachea Gold Project.

The Ollachea Gold Project can be reached by driving approximately four hours north from the airport at Juliaca, or five hours southwest from the airport at Puerto Maldonado. Both airports have daily commercial flights of one to two hours duration from Jorge Chavez International Airport in the District of Callao, immediately north of Lima.

The closest deep water port is at Matarani, which is at the Pacific end of the Interoceanic Highway and is located approximately 600 km southwest of the property. Matarani is located at the city of Ilo which is also on the Pan American highway that, except for an 87 km gap in Colombia, runs from North to South America.

The moderate climate allows exploration activities to be carried out year-round, and would also allow mine development and operation activities to be carried out year-round.

History

The earliest evidence of mining on the Ollachea Gold Project is attributed to Spanish colonial activity during the 18th century. Informal mining activity has been pursued in the area since at least the 1970s and probably considerably earlier.

Between 1998 and 1999, Peruvian Gold Ltd., a publicly-traded Canadian exploration company, drilled five diamond drill holes on the Ollachea Gold Project and encountered low-grade gold mineralization but did not do any further work.

In May 2003, Rio Tinto re-discovered the area while following-up a regional stream sediment sampling program. Between 2003 and 2004, Rio Tinto carried out surface sampling, encountering encouraging surface sample gold assays but in 2006 elected to farm out the Ollachea Gold Project.

Minera IRL SA started negotiations with Rio Tinto in 2006, which were followed by the negotiation of an Agreement of Use of Surface Lands and another related to Artisanal Mining

Exploitation with the Community of Ollachea, signed in November 2007, after which exploration works started over the property.

In 2007, the Community of Ollachea and Minera Kuri Kulla SA worked to formalize mining at Minapampa under the national Act of Formalization and Promotion of the Little and Artisanal Mining Industry and its regulations. Minera Kuri Kulla SA granted the Community of Ollachea right to exploit near surface mineralization at a part of the Minapampa area for five years in exchange for surface rights to carry out exploration activities on a portion of the property. On 30 May 2012, this surface rights agreement was extended for a period of 30 years. Small-scale artisanal mining continues on the Ollachea Gold Project.

Beginning with field activities in early 2008, Minera Kuri Kulla SA carried out bedrock sampling, geochemical sampling, mapping and structural geology based on aster image interpretation. By the end of September 2009, 71 diamond drill holes totaling 26,026 m had been drilled, and a Mineral Resource estimate and Preliminary Assessment was carried out for the Ollachea Gold Project by Coffey Mining Pty Ltd.

Minera Kuri Kulla SA continued diamond drilling and, in mid-2010, contracted AMEC Australia Pty Ltd to assist with a Prefeasibility Study (“PFS”) for the Ollachea Gold Project. By November 2010, an additional 60 drill holes for a total of 131 drill holes totaling 51,062 m had been drilled and the Mineral Resource estimate for the property was updated.

Figure 2: Artisanal Mine Workings at Minapampa - October, 2010



Between October 2010 and May 2011, Minera Kuri Kulla SA completed 26 more core drill holes totalling 11,143 m. At this stage, a PFS Mineral Resource estimate for the Minapampa Zone, based on 120 drill holes totalling 46,404 m, was completed. The results of the Ollachea PFS were announced in a Minera IRL SA press release dated 18 July 2011.

An extended period of exploration drilling from May 2011 was followed by another infill drill campaign by Minera Kuri Kulla SA on the Minapampa Zones to end of March 2012, which added another 49 core drill holes totalling 17,904 m. By this time, 206 drill holes totalling 80,109 m had been completed on the Ollachea Gold Project. The database provided to Coffey Mining Pty Ltd for the feasibility study resource update included information taken from this drill hole database. Subsequent to the provision of the resource data to Coffey Mining Pty Ltd, two additional drill holes were completed for the Ollachea Gold Project total of 208 diamond drill holes totalling 81,073 m in length.

Exploration and Mining Concession Tenure

The Ollachea Gold Project consists of 12 concessions covering an area of 8,698.98 ha. The concessions are map-staked and defined and registered spatially by the location of their vertices.

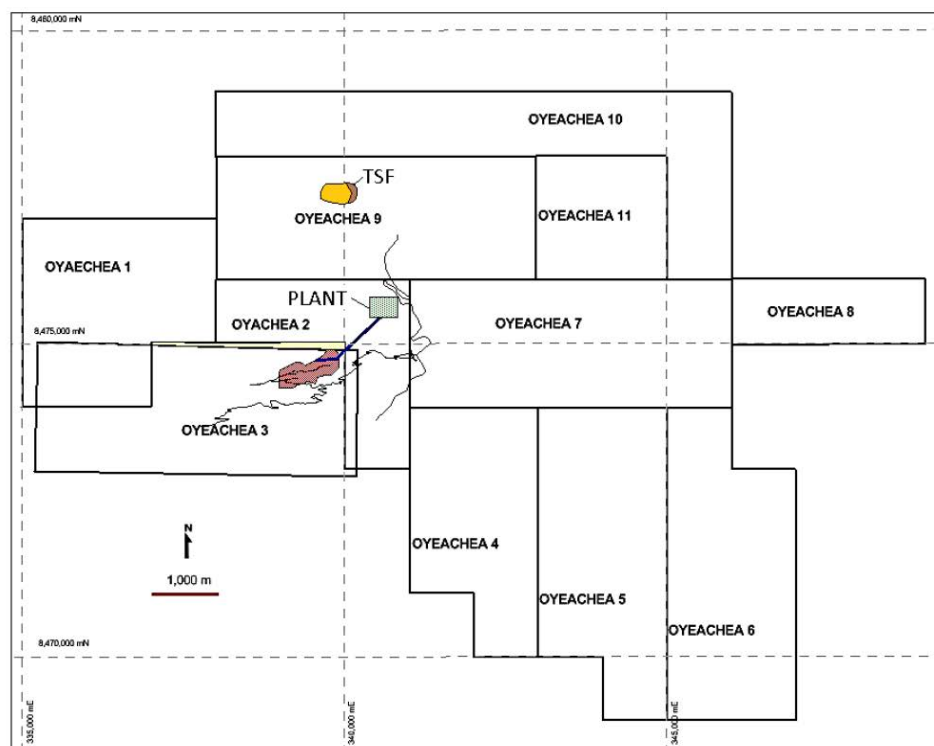
The mineralization included in the Mineral Resource and Mineral Reserves discussed in the Ollachea Feasibility Study occur within the Oyaechea 3 concession. The proposed plant site location will be located on the Oyaechea 2 concession. The portal location for the exploration access adit (currently being developed), which will serve as the main mine portal is located on the Oyaechea 2 concession. The Tailings Storage Facility (“**TSF**”) will be located approximately 2.5 km north of the mine portal and within the Oyaechea 9 concession.

A gap measuring approximately 3,000 m long by 130 m wide exists between the Oyaechea 2 and Oyaechea 3 concessions. This concession is not held by Minera Kuri Kulla SA but by third-parties. The proposed exploration drive and other mine infrastructure discussed in this report have been located to avoid this gap.

Table 1: Ollachea Concessions

Concession Name	Concession Number	Concession Holder	Area (ha)	Registration Date
OYAECHEA 1	10215003	Compañía Minera Kuri Kullu SA	800	22/05/2007
OYAECHEA 2	10215103	Compañía Minera Kuri Kullu SA	500	22/05/2007
OYAECHEA 3	10218103	Compañía Minera Kuri Kullu SA	998.98	22/05/2007
OYAECHEA 4	10215203	Compañía Minera Kuri Kullu SA	700	22/05/2007
OYAECHEA 5	10215303	Compañía Minera Kuri Kullu SA	900	22/05/2007
OYAECHEA 6	10215403	Compañía Minera Kuri Kullu SA	900	22/05/2007
OYAECHEA 7	10389907	Compañía Minera Kuri Kullu SA	1000	14/05/2009
OYAECHEA 8	10389807	Compañía Minera Kuri Kullu SA	300	07/05/2009
OYAECHEA 9	10139909	Compañía Minera Kuri Kullu SA	1000	18/02/2010
OYAECHEA 10	10140009	Compañía Minera Kuri Kullu SA	1000	11/02/2010
OYAECHEA 11	10140109	Compañía Minera Kuri Kullu SA	400	11/02/2010
OYAECHEA 12	10167809	Compañía Minera Kuri Kullu SA	200	08/04/2010

Figure 3: Ollachea Exploration Concession Map



Note: The red polygon is the surface projection of Indicated Mineral Resources in the Minapampa Zone. The green polygon is the footprint of the mineral processing plant proposed in this feasibility study. The yellow polygon between the Oyaachea 2 and Oyaachea 3 concessions is a wedge-shaped gap in the MKK tenure holdings, and is owned by third-parties. The proposed exploration access drive is marked as a blue line and roads are marked as thin black lines. The proposed TSF is marked as an orange area in the Oyaachea 9 concession.

The Oyaechea 1 to Oyaechea 6 concessions were originally registered by Rio Tinto Mining and Exploration Limited Sucursal del Peru (Rio Tinto) during its exploration activities at Ollachea beginning in 2006. On 1 September 2006, the Company and Minera IRL SA signed an agreement with Rio Tinto to acquire the original Ollachea concessions. On 23 February 2007 the agreement was ratified and the Rio Tinto concessions were transferred to Minera Kuri Kulla SA. These transfers were officially recorded on 22 May 2007.

From 2007 to 2009 Minera Kuri Kulla SA filed applications for the Oyaechea 7 to Oyaechea 12 concessions. These concessions were officially transferred during a period extending from 14 May 2009 to 8 April 2010. These concessions together with those previously held by Rio Tinto constitute the Ollachea Gold Project.

Agreements

Minera Kuri Kulla SA negotiated a surface rights agreement with the Community of Ollachea covering an area of 5,998.9848 ha of the Oyaechea 3 concession, which was signed on 25 November 2007. This agreement was originally drafted for a maximum of five years. However, on 30 May 2012 it was extended for a period of 30 years. Minera Kuri Kulla SA will make payments for surface rights access at a rate of 100,000 Nuevos Soles (approximately US\$37,736) each year for 2013 and 2014. In addition, Minera Kuri Kulla SA agreed to pay 150,000 Nuevos

Soles (US\$56,604) for subsequent years and until the contract remains valid. Minera Kuri Kulla SA also commits to making contributions to sustainability projects and to social responsibility programs for the community totaling 3,360,000 Nuevos Soles (US\$1,267,924) for the 2013 and 2014 years. This agreement is set to be revised for the contributions to social and community programs by 2015 when the mine is fully operational. The agreement also includes a contribution for technical support to artisan miners of US\$300,000 over the life of the agreement. As a part of the agreement, upon the commencement of commercial production, Minera Kuri Kulla SA will transfer a participation of 5% of the share capital of Minera Kuri Kulla SA to the Community of Ollachea, giving them a participating interest in the Ollachea Gold Project.

In September 2006 Minera IRL SA was granted an option to acquire the property rights and a 100% interest in the Oyaechea 1 to Oyaechea 6 concessions from Rio Tinto for an initial payment of US\$250,000 plus progressive payments totaling US\$6,000,000 over four years, together with two additional payments in the event that Rio Tinto's clawback right under the agreement was not exercised. The option was conditional on Minera IRL SA successfully negotiating a surface rights agreement with the local community within 120 days.

A surface rights agreement was reached in February 2007 and the Oyaechea concessions were transferred to Minera Kuri Kulla SA in accordance with Mining Transfer Agreement dated 23 February 2007.

Rio Tinto's clawback right lapsed in 2009 and on 15 December 2009, Rio Tinto notified Minera IRL SA and Minera Kuri Kulla SA that Minera Kuri Kulla SA was to make the first additional payment allowing Rio Tinto a 1% net smelter return in exchange for payment of approximately US\$3.81 million.

For the second additional payment to Rio Tinto, Minera IRL SA and Minera Kuri Kulla SA have committed to making an additional cash payment of 30% of the net present value of the Ollachea Gold Project (at a 7% discount rate) based on the results of the feasibility study, less 30% of the sunk costs determined after the exercise of this option. The second additional payment may be paid in three installments. The first installment is 34% of the second additional payment and is due 90 days after reception of notice from independent appraisers on the valuation of the Ollachea Feasibility Study. The second installment is 33% of the second additional payment and is due 12 months after reception of notice from independent appraisers. The third installment is 33% of the second additional payment and is due 24 months after reception of notice from independent appraisers. The second additional payment must be paid with a minimum of 20% cash with the balance in ordinary shares of the Company. The second and third installment shall accrue an annual interest rate of 7%.

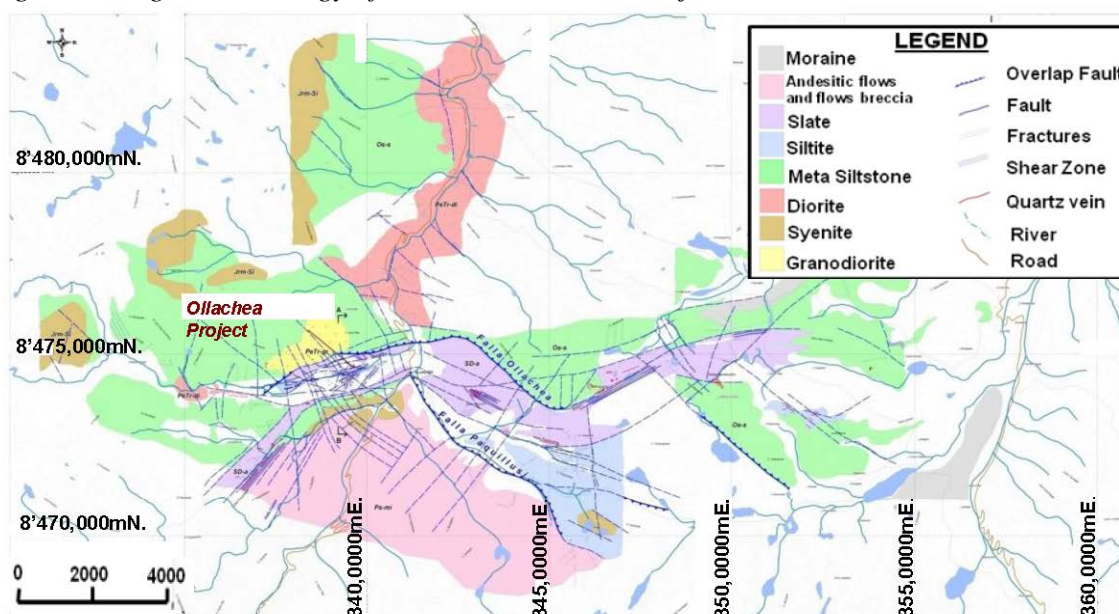
The Peruvian government currently levies a royalty based on gross profit per trimester from mining operations that ranges between 1% (for profits between 0% and 10%) and 12% (for profits greater than 80%). In addition, there is a royalty that is exclusive to mining activities that is based on operational margin (ratio between profit over sales per trimester), which ranges from 2% (for margins between 0% and 10%) to 8.4% (for margins above 85%).

Geological Setting and Mineralization

The regional setting of the Ollachea Gold Project is characterized by a significant change in the strike of the Andean range, whereby the stratigraphy is locally aligned approximately east-west, as opposed to the dominant northwest Andean trend. This deflection is postulated to have resulted from significant compression and thrusting to accommodate a prominent portion of the adjacent Brazilian Shield located to the east.

On a regional scale, high-grade gold deposits occur almost exclusively in slates/phyllites, (usually carbonaceous), and rarely in more arenaceous sediments but only when they lie adjacent to mineralized phyllites. This suggests that there may be a regional control on pre D1 syngenetic gold in sulphides that has been upgraded in areas of strong overprinting D1 deformation. Figure 4 shows the regional setting with respect to the Ollachea Gold Project.

Figure 4: Regional Geology of the Ollachea Gold Project



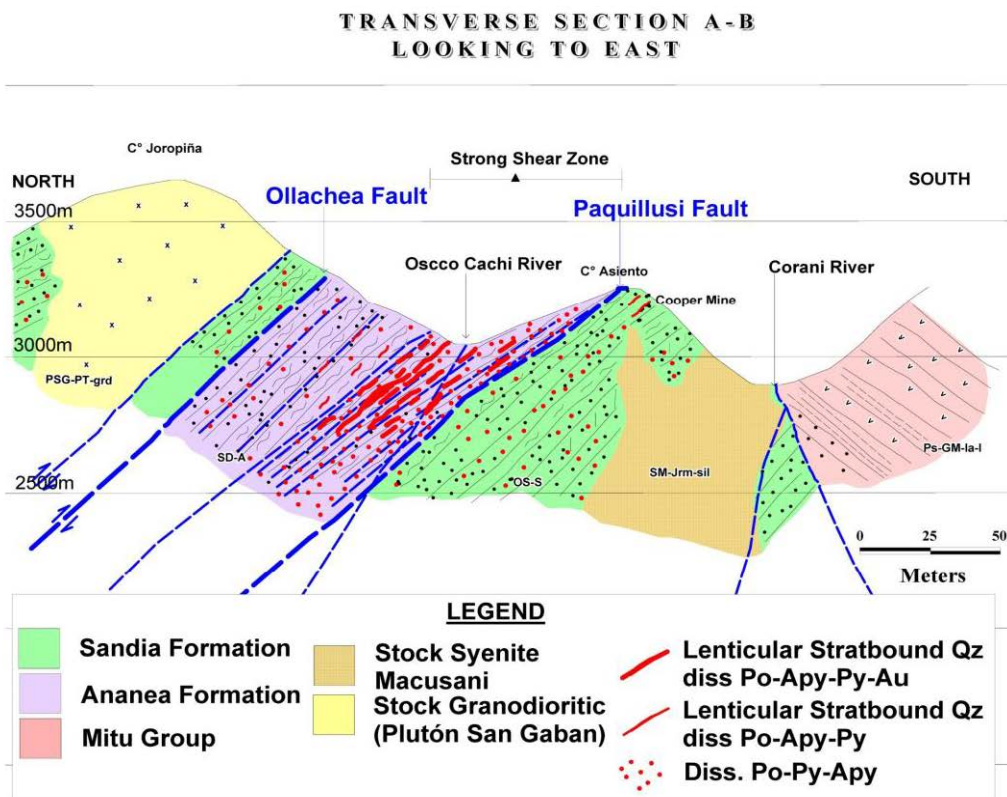
(after Ing. Valdivieso, Y., MKK, 2008. Regional Map of the Ollachea Project. 1:50,000 scale) Based on previous PSAD56 grid)

The geology of the Ollachea Gold Project is dominated by phyllites of the Devonian Sandia Formation, and variably bedded graphitic slates and shales of the Siluro-Devonian Ananean Formation.

Andesitic volcanic rocks crop out south of the sedimentary units and both the sedimentary and volcanic rocks are intruded by nepheline syenite to the south and granodiorite to the north. Intraformational contacts and a strong penetrative cleavage in the sedimentary package of rocks are oriented approximately east-west and are parallel to two regional-scale thrust faults that bound the phyllitic slates which play host to the gold mineralization at Ollachea.

The gold mineralization at Ollachea is broadly strata-bound within northeast to east-west-trending, north-dipping carbonaceous phyllites.

Figure 5: Schematic Cross Section of the Ollachea Deposit



(after Ing. Valdivieso, Y., MKK, 2008. Schematic Transverse Section looking East, Ollachea Project. 1:50,000 scale) based on previous PSAD 56 grid Qz = quartz; Po = pyrrhotite; Apy = arsenopyrite; py = pyrite; diss. = disseminated.

Delineated gold mineralization occurs within seven discrete east-striking, north-dipping structures below Minapampa and on the north side of the Oscoco Cachi River. Mineralization has been traced continuously for 900 m along strike. Gold mineralization has also been encountered to the west of the Minapampa Zone in a zone on the south side of the Oscoco Cachi River that is referred to as Concurayoc, located some 400 m west of Minapampa. The known mineralized zone at Ollachea, including both the Minapampa and Concurayoc Zones as well as the intervening 400 m of strike between the two mentioned deposits, is approximately 1,900 m long, up to 200 m thick and has been traced in places to over 400 m below surface and remains open along strike as well as at depth.

An extensive shear zone hosts the gold mineralized horizons. The shear zone is characterized by a well-developed slaty cleavage, with quartz-sulphide veins and veinlets, broadly concordant with the slaty cleavage. Quartz-sulphide veins and veinlets vary from a few millimetres to centimetres wide, up to a maximum of 40 cm, but do not always contain gold mineralization. The gold mineralization is hosted both within as well as along contacts of the quartz-sulphide veins and veinlets. The veins can be strongly boundinaged, resulting in the development of packages of irregularly mineralized veins and veinlets within discrete mineralized horizons, incumbent to the sheared slate package.

Gold mineralization is associated with a sulphide assemblage consisting predominantly of pyrrhotite with minor pyrite, arsenopyrite and traces of chalcopyrite. Coarsely crystalline arsenopyrite and free gold are frequently observed in close association with one another within the central Minapampa zone. The occurrence of coarse pyrite without other sulphides is often a counter-indicator of gold mineralization.

The deposit model guiding exploration targeting is mesothermal quartz vein style gold mineralization. The Ollachea deposit has been described as a member of the class of orogenic gold deposits, with the possibility of local syngenetic gold enrichment playing a role in the location of the mineral deposit. This variety of gold deposit can also go by the name slate belt gold deposit and can be both very large and very rich.

Drilling and Exploration Techniques

At the database closure date on 23 April 2012, there were a total of 172 holes totalling 67,298 m in the area around the Minapampa zone. A total 155 of these drill holes immediately adjacent to the Minapampa zone, totalling 60,306 m, were used to construct the Mineral Resource model.

Going back to Concurayoc, the database closure date was 8 August 2011. At that time there were a total of 45 drill holes totalling 16,943 m in the area of Concurayoc. All drill hole information from these holes was used in the construction of the Inferred Mineral Resource model as applied to Concurayoc.

The principal methods used for exploration drilling at Ollachea have been diamond core drilling by MDH SAC (a drilling company), using standard wire-line diamond drilling of HQ diameter then reducing to NQ then BQ as ground conditions dictate. Core recovery was very good (greater than 99%), except in large fracture zones where recovered core is noticeably fractured, but these zones are not expected to have a material impact on the accuracy and reliability of the results for the mineral resource estimate.

All surveying, plotting and mineral resource modelling utilises the National Geodesic Network grid in the UTM WGS 84 (Zone19S) coordinate system.

Down hole surveys have been undertaken by the contract driller utilising both a Reflex single shot and a multi-shot survey tool, with readings taken on average at 20 m down hole interval depths.

Exploration drill holes used in the mineral resource estimate were generally drilled to the south at between 40 degrees to 90 degrees dip. At different depths below the surface, holes were targeted to perpendicularly intersect the main trend of mineralization. Given the access from surface to deeper sections of mineralization, several of the deeper intersections are oblique to mineralization. The deeper sections of Ollachea will need to be targeted from underground or via >1 km surface directional drilling. The Minapampa zone has been drilled at a nominal spacing of 30 m by 30 m.

Drill holes typically intersect mineralization orthogonally, and the mineralized intercepts range between 60% and 100% of the true mineralized thickness.

Sample Preparation, Analysis and Security

The present sampling procedure requires that half-core samples of 1.0 m length be taken in mineralized zones recognized during the logging process. Core outside the 1.0 m sampling intervals but transitional to the visually identified mineralized zones, is half-core sampled on a 2.0 m sample length. Core interpreted to represent zones sterile of gold mineralization are quarter-sawn and sampled at 5.0 m lengths. Any intercept from the 2.0 m sampling which returns a greater than 0.5 g/t Au response, is re-sampled taking half-core samples, thus leaving no core remaining. If any assayed intercepts with greater than 0.5 g/t Au are encountered in the 5.0 m sampling intervals, these intervals are re-sampled taking half-core samples at 1.0 m lengths, thus leaving quarter-core remaining.

Drill core is split using a diamond core saw. Samples are numbered and collected in individual plastic bags with sample tags inserted inside as well as being stapled to the outside of the bag. Remaining core, from mineralized intervals that are identified as being of potential metallurgical interest, is currently stored at temperatures that are maintained at below -5°C in refrigerated containers at Minera Kuri Kulla SA's Juliaca core storage facility. Storage at -5°C limits oxidation of the core and maintains the core in semi-pristine condition in preparation for additional studies if required.

Minera Kuri Kulla SA has used the independent Certimin (previously known as CIMM) Peru laboratories as the primary laboratories for preparation and assaying of drill core samples from Ollachea since the Minera Kuri Kulla SA 2008 drill campaign. Certimin Peru has the System of Quality Management ISO 9001:2008 certification "System Management Quality" and is accredited with NTP-ISO/IEC 17025:2006 certification "General Requirements for the Competence of Testing and Calibration Laboratories", for the preparation and assay of geochemical and metallurgical samples.

The Certimin sample preparation laboratory in Juliaca prepared the drill core samples for the Ollachea Gold Project. Chemical analysis is conducted at the Certimin Lima laboratory and consists of fire assay (FA) with atomic absorption spectrometry (AAS) finish on the 50 g pulp aliquot. A 32-element suite was also analysed by ion-coupled plasma optical emission spectroscopy (ICP-OES) until the end of 2009 but was discontinued once sufficient analyses had been obtained from the initial nominal 100 m grid pattern.

Coffey Mining Pty Ltd considers that the sample preparation and security are adequate and appropriate for use in Mineral Resource estimation.

Quality assurance and quality control ("QA/QC") programs have been in place since the beginning of exploration work.

All of the Minera Kuri Kulla SA samples in the Mineral Resource database have been submitted with standard reference materials to control assay accuracy and, depending on the program, have included field duplicate samples, coarse crush duplicates, pulp duplicates to control sampling, sub-sampling and analytical precision. Not all programs have included preparation duplicates. Pulp duplicates at the primary assay laboratory have not been included in the QA/QC program

since the second half of 2009; however, pulp duplicates have been used for check assaying at a secondary laboratory for the entire QA/QC program.

A check assaying program has also been used to demonstrate the reproducibility of the assaying carried out in the primary laboratory, and to help establish assaying accuracy.

For the feasibility study, a metallurgical testwork program was designed to confirm the optimal conditions obtained from previous testwork and to generate process design data. Two types of composites were required for the testwork program: master composites (one for leaching and one for comminution) to examine the metallurgical response which would be representative of the ore body and several variability composites to investigate the effect of variability on metallurgical performance.

Samples selected for these composites were gold-bearing intervals from drill holes located in the Minapampa Zone. The preparation of samples used in this testwork program was based on composite recipes which were developed from set criteria.

The master composites involved the combination of several intervals based on the following criteria: spatial distribution, the masses of the main three ore zones proportional to the mine plan, and a target head grade of 3.69 g/t Au.

Variability composites are intervals of sample, from various drill holes, along different strikes, at various depths, gold grades and from different ore zones. The main criteria for selection of variability samples included:

- the number of samples for each of the seven zones reflecting the percentage of each ore zone mined according to the PFS mine plan;
- samples spatially distributed across the ore body (location and depth); and
- the number of samples from each location (easting section) matching the frequency distribution curve of gold and head grades ranging from 1 to 12 g/t Au.

For the master testwork program, 121 kg of samples were required for leaching testwork and 50 kg of sample was required for comminution testwork. Due to the availability of samples, two separate master composites were obtained for leaching (125 kg) and comminution (62 kg).

Variability leaching testwork required 7 kg of sample for each test, whilst variability comminution testwork required 15 kg of sample for each test. Recipes for 37 variability composites were composed with enough samples for 31 leaching tests and 10 comminution tests.

Composites were created at ALS Ammtec (Perth), during the period between January 2012 and July 2012.

Coffey Mining Pty Ltd has reviewed the entire sample chain of custody at Ollachea, from the drilling of the samples to the receiving of final analytical results, and is of the opinion that the in-house Minera Kuri Kulla SA custody control systems in place are of industry standard, and are adequate and appropriate for use in Mineral Resource and Reserve estimation.

Data Verification

Verification of sampling and assay procedures have been carried out by Barry Smee and Coffey Mining Pty Ltd on several occasions.

A field duplicate is collected after every 30 samples by Minera Kuri Kulla SA. Initially in the Ollachea Gold Project, the field duplicates compared $\frac{1}{2}$ core with $\frac{1}{4}$ core. Coffey Mining Pty Ltd has compared the results of the $\frac{1}{2}$ core versus $\frac{1}{4}$ core, $\frac{1}{2}$ core versus $\frac{1}{2}$ core and $\frac{1}{4}$ core versus $\frac{1}{4}$ core using the QC Assure software package. After examining the field duplicates, there does not appear to be much difference in the relative sample precision.

Coffey Mining Pty Ltd compared the preparation duplicate data (289 samples) using the QC Assure software. The results of these data show that the preparation duplicate has over 86% precision at 20% Rank HARD and 74% precision at 10% Rank HARD. This is a good result for this style of gold mineralization.

A total of 80 umpire pulp samples from the 2010 drilling campaign were sent to ALS Chemex laboratories in Santiago, Chile. The pulps were analysed using the same method as used by Certimin and showed high precision levels.

The following table lists screen fire assay results for samples in six grade ranges.

Table 2: Screen Fire Assay Results

Original Assay Au Grade (g/t)	Samples	Average Screen Fire Assay Au (g/t)	Fine Fraction Assay Au Grade AAS (0) (g/t)	Original Assay Au Grade AAS (1) (g/t)	Difference (AAS (1) -SFA)
> 10 g/t Au	3	21.8	13.71	18.32	81%
5 - 10 g/t Au	21	6.75	5.56	6.58	97%
2 - 5 g/t Au	57	3.15	2.73	3.2	100%
1 - 2 g/t Au	55	1.48	1.33	1.43	96%
0.5 - 1.0 g/t Au	42	0.81	0.75	0.74	91%
< 0.5 g/t Au	43	0.47	0.41	0.32	69%

Mineral Resources Estimates

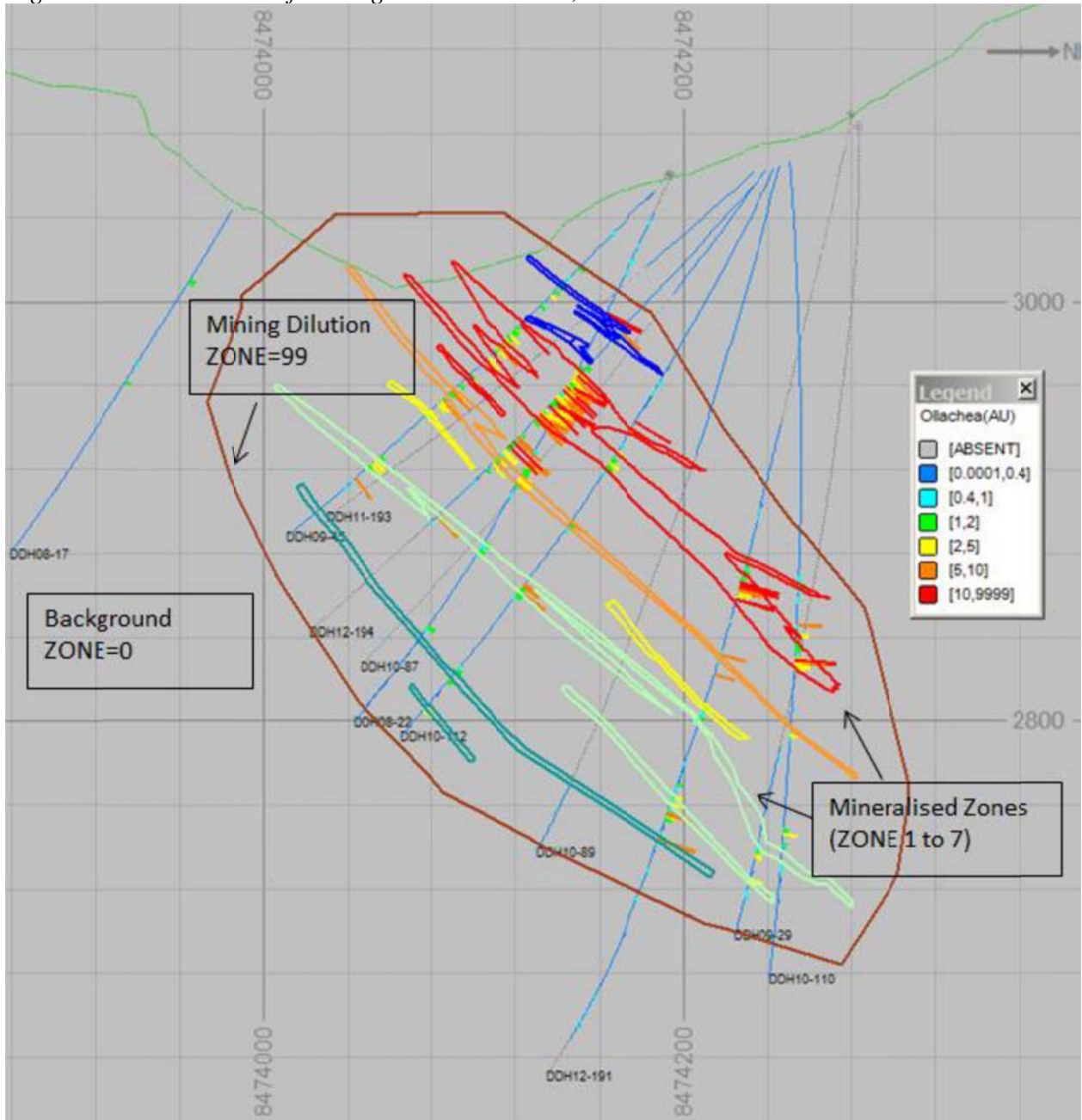
Coffey Mining Pty Ltd has estimated an Indicated and Inferred Mineral Resource for the Minapampa Zone of the Ollachea Gold Project as at 6 July 2012. All grade estimation was completed using Ordinary Kriging (“OK”) for gold.

For the purpose of Mineral Resource estimation, seven main high-grade mineralized domains were interpreted and modelled on a lower threshold of 1.0 g/t Au corresponding to the lower limit of mineralization having reasonable spatial continuity.

The Ollachea interpretation was restricted to the high-grade, relatively continuous zones (ZONE 1 to 7), within each ZONE, there are sub-domains of continuous mineralization called LODE’s.

A low-grade envelope (Zone 99) was also modelled around the main mineralized zones to account for mining dilution. Background mineralization (Zone 0) was also modelled. The modelled domains are shown here:

Figure 7: Cross Section of Geological Model – 339,160 mE



Interpretation and digitizing of all constraining boundaries was undertaken on cross sections orthogonal to the drill line orientation. The generated wireframes were all snapped to the available drill core data.

The resultant digitized boundaries have been used to construct wireframes defining the three-dimensional geometry of each interpreted feature. The interpretation and wireframe models were developed using the commercially-available CAE Datamine (Studio 3) mining software package.

The Ollachea database contains 777 bulk density measurements. The following table summarises bulk density determinations by ZONE:

Table 3 Summary Statistics of Density Determinations by Zone (g/cm³)

Zone	Description	Count	Min	Max	Mean	Std. Dev.	Variance	CV
0	Background	11811	0.003	82.54	0.136	1.384	1.917	10.183
99	Dilution Zone	15899	0.003	137.64	0.227	1.522	2.318	6.697
1	Min. Lens 1	226	0.019	42.55	3.092	3.965	15.719	1.282
2	Min. Lens 2	915	0.01	153	5.071	10.183	103.699	2.008
3	Min. Lens 3	418	0.012	118	3.981	7.828	61.282	1.966
4	Min. Lens 4	80	0.116	23.84	3.121	3.428	11.749	1.098
5	Min. Lens 5	587	0.003	121.45	3.469	7.233	52.309	2.085
6	Min. Lens 6	172	0.013	51.29	3.348	6.997	48.955	2.09
7	Min. Lens 7	57	0.063	17.04	2.596	2.539	6.448	0.978

High-grade capping (cutting) was determined for each zone. The composite data for each of the mineralized zones generally had a positively skewed grade distribution characterised by differences between mean and median grades, and moderate to high coefficients of variation (CV, standard deviation/mean).

The summary statistics for the 2 m composite data, calculated for uncut and cut values, are presented in the following table:

Table 4 Cut and Un-cut Composite Statistics

ZONE	Element	Uncut				Cut				% Change in	
		Number Data	Mean	Std. Dev.	CV	Upper Cut	Mean	Std. Dev.	CV	Number Data Cut	Mean
1	Au(g/t)	178	3.12	3.92	1.26	20	3.00	2.87	0.96	1	-4.1
2		633	5.06	9.03	1.78	40	4.80	6.24	1.30	3	-5.3
3		304	3.87	5.57	1.44	22	3.62	3.78	1.04	4	-6.5
4		63	3.10	3.43	1.11	18	3.00	2.91	0.97	1	-3.0
5		410	3.26	4.92	1.51	25	3.12	3.66	1.17	3	-4.3
6		142	3.52	7.48	2.13	20	2.85	3.92	1.38	6	-19.0
7		57	2.67	2.49	0.93	NC	2.67	2.49	0.93	0	0.0
99		12156	0.20	0.72	3.66	0.9	0.16	0.21	1.34	321	-19.8
0		16521	0.08	0.85	11.19	0.9	0.05	0.11	2.29	136	-35.6

A three dimensional block model was generated to enable grade estimation and mine planning and mine design. A parent block size of 20 mE x 20 mN x 4 mRL was selected with sub-blocking to a 2 mE x 2 mN x 0.4 mRL cell size to improve volume representation of the interpreted wireframe models.

A detailed validation of the OK estimate was completed for each zone and included both an interactive 3D and statistical review.

An Inferred Mineral Resource confidence category was assigned for blocks:

- having an estimated Au grade; and
- within the mineralized zones (Zone 1 to 7).

The Indicated Mineral Resource confidence category was assigned to blocks:

- located in a portion of the deposit with a density of drilling of approximately 40 m x 40 m or better, and an estimated grade greater than 2 g/t Au;
- with a slope of regression for the Au OK estimate that is greater than 0.47; and
- where the distance to the nearest sample used in the Au OK block estimate is within 0.3 (30%) of the first pass search ellipse radius.

Mineral Resources are reported above a cut-off grade of 2.0 g/t Au and within three-dimensional geological wireframes constructed to constrain the gold mineralization in the Mineral Resource estimate to zones defined by mineralized diamond drill core intersections. Mineral Resources above a 2.0 g/t Au cut-off grade have reasonable prospects for economic extraction, based on mineralization continuity, shape and distribution.

Mineral Resources for the Ollachea property (Minapampa) above a 2.0 g/t Au cut off consist of 10.6 Mt of Indicated Mineral Resources with an average grade of 4.0 g/t Au and 3.3 Mt of Inferred Mineral Resources with an average grade of 3.3 g/t Au. Mineral Resources were estimated by Doug Corley, MAIG, R.P. Geo, of Coffey Mining Pty Ltd Perth, a Qualified Person under National Instrument 43-101, and have an effective date of 6 July 2012.

Table 5: Mineral Resources for the Ollachea (Minapampa) Gold Project

Mineral Resources above a 2.0 g/t Au Cut-off Grade	Tonnage (Mt)	Au Grade (g/t)	Contained Au (Moz)
Minapampa			
Indicated	10.6	4.0	1.4
Inferred	3.3	3.3	0.3

Note:

Mineral Resources are inclusive of Mineral Reserves.

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Mineral Resources are reported above a cut-off grade of 2.0 g/t Au and within three-dimensional geological wireframes constructed to constrain the gold mineralization in the Mineral Resource estimate to zones defined by mineralized diamond drill core intersections. Tonnages are metric tonnes and ounces of contained gold are troy ounces. Mineral Resources above a 2.0 g/t Au cut-off grade have reasonable prospects for economic extraction, based on mineralization continuity, shape and distribution and as demonstrated in this study. Mineral Resources are estimated by Doug Corley, MAIG, R.P. Geo, QP, of Coffey Mining and have an effective date of 6 July, 2012.

Mineral Reserve Estimate

The *in situ* ounces of gold per vertical and lateral step (15 m) using a 2.0 g/t Au cut-off grade (“COG”) for the Indicated Mineral Resource are shown in Figures 8 and 9.

Points related to Figure 8 are:

- The exploration incline is located around 2775 mRL. Approximately 85% of the *in situ* ounces are located above this RL.
- Zone 2 contains approximately 46% of the *in situ* ounces over approximately 315 vertical metres. This zone contains the mineralized lodes that have the greatest width.
- Zone 5 contains approximately 24% of the *in situ* ounces over approximately 450 vertical metres. This zone has mineralized lodes that are of significantly lesser width than the mineralized lodes in Zone 2.
- Zone 3 contains approximately 18% of the *in situ* ounces over a similar vertical distance to that of Zone 2. Zone 3 mineralized lodes are of a similar width to those of Zone 5.
- The remaining 12% of *in situ* ounces are contained in Zone 1, Zone 4 and Zone 6.

Figure 8: Ounces per 15 m Vertical Step (Indicated Category Only)

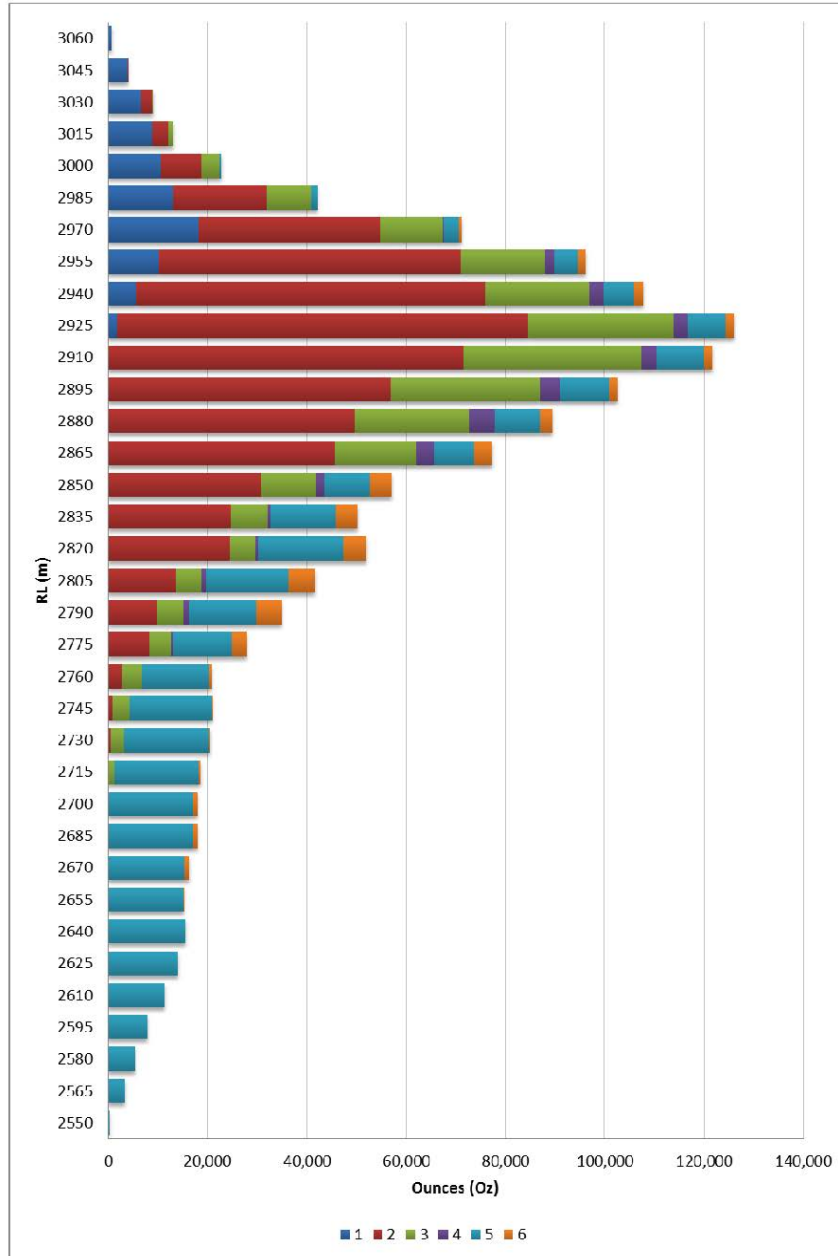
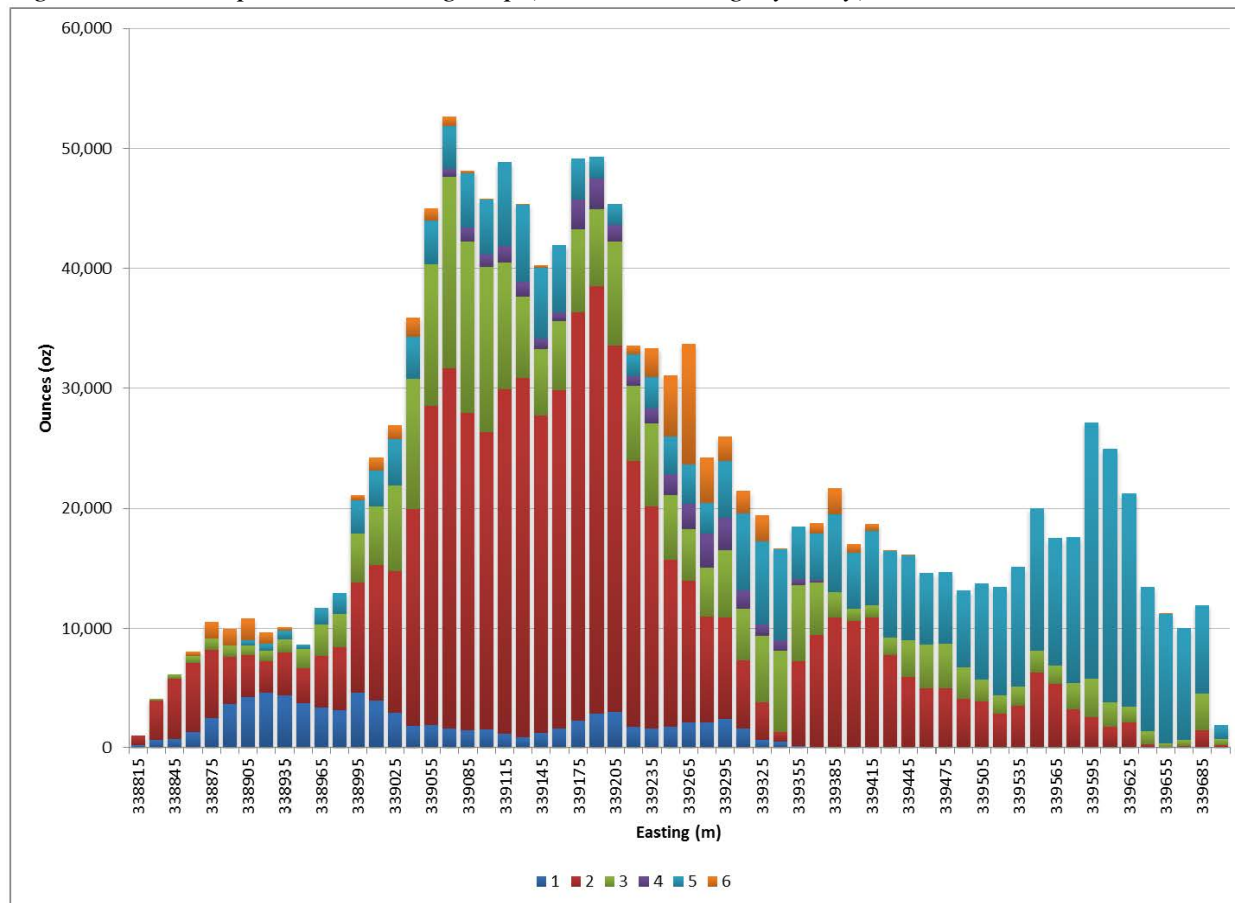


Figure 9: Ounces per 15 m Easting Step (Indicated Category Only)



No cut-off grade optimisation was completed during the Ollachea Feasibility Study. The selected COG is based on the application of a single COG for the life of mine. The basis of the calculation for an Ollachea Feasibility Study mine design COG was the costs and recoveries estimated at the end of the PFS.

A mine design cut-off grade of 2.0 g/t Au was used for the Ollachea Feasibility Study. The financial outcome of the PFS and company strategic objectives were key considerations in the selection process.

The initial mineable limits of the study were identified by using the Mineable Shape Optimiser (“MSO”) process.

Key final criteria or data used in the MSO process were:

- Ollachea Feasibility Study geological resource wireframes that represent the location of the lode mineralization;
- Ollachea Feasibility Study resource block model;

- dilution: 0.3 m on each wall for a total of 0.6 m;
- minimum mining width: 2.0 m (2.6 m with dilution);
- minimum waste pillar width: 7.5 m lode true width; and
- minimum mining unit dimensions of 15 m high by 15 m along strike by lode thickness (a 7.5 m half stope option for the strike direction was used in MSO to account for lode pinch out or changes in mineralisation grade).

The selection of a 15 m by 15 m mining unit dimension limit is based on geotechnical recommendations, mining practicalities (drilling and support installation), lode geometry and the nature of the MSO process and economic considerations.

From the outcome of the financial modelling step, Table 6 shows the Mineral Reserve estimate for the Ollachea Gold Project, based on a COG of 2.0 g/t Au. The Mineral Reserves are included within the declared Indicated Mineral Resource and is declared inclusive of mining dilution.

Table 6: Mineral Reserve Estimate (November 29, 2012)

Classification	Tonnes (Mt)	Au Grade (g/t)	Contained Gold (koz)
Ore (+ 2 g/t Au)	8.7	3.5	983
Low Grade Development Ore (+1 g/t to 2 g/t Au)	0.6	1.5	28
Probable Mineral Reserves	9.3	3.4	1,011

Notes:
 Probable Mineral Reserves are included within Indicated Minerals Resources and are declared inclusive of mining dilution with an effective date of 29 November, 2012.
 Tonnages are metric tonnes and ounces of contained gold are troy ounces.
 Probable Mineral Reserves are declared based on a base case gold price of US\$1300 / oz, a project COG of 2.0g/t, LOM project operating costs of US\$49.2 /t ore and a mill recovery of 91.04%.
 Low Grade Development Ore is sourced from development drives that traverse through Indicated Mineral Resources but has been diluted below the project COG of 2.0 g/t Au. As the mining cost for this material will have already been expensed, it is economic to treat through the plant. A mill cut-off grade of 1.0 g/t Au has been applied to this material.
 Mineral Reserves were estimated under the supervision of John Hearne, BEng(Mining), MBA, FAusIMM, CP(Mining), of Coffey Mining, and who is recognized as a Qualified Person for the purposes of National Instrument 43-101.

The Mineral Reserve estimate has been determined and reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards (2010).

Development

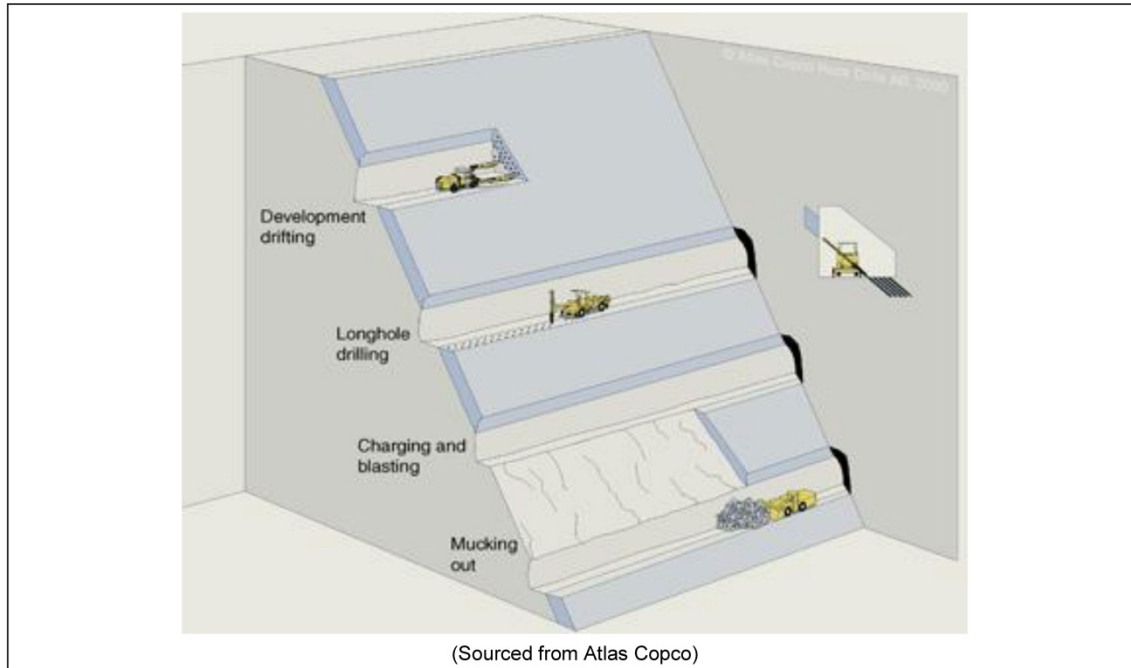
Mining Methods

The mining method selected for the Ollachea Feasibility Study was long hole open stoping (“**LHOS**”) with paste backfill, which can also be referred to as bench stoping with paste backfill. Extraction occurs along the orebody strike direction on a retreat basis.

Stopes will be accessed longitudinally (along strike) on each level by, one, two or three strike ore drives dependent on lode thickness. Figure 10 shows a generic interpretation of the main components of the LHOS mining method excluding the paste backfilling, which occurs after

mucking out. Open stope strike length is dictated by geotechnical considerations and varies with lode width.

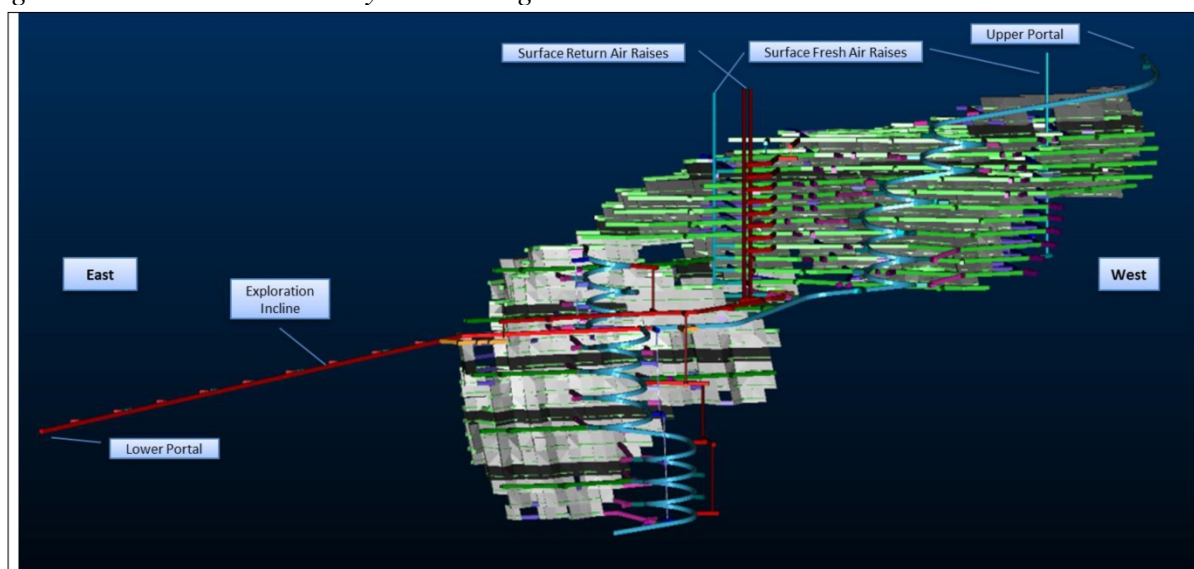
Figure 10: Typical View of the Selected Longitudinal Mining Method



The direction of mining for the deposit will be from the bottom up. As each mining level is completed, the next level will start using the backfilled stope void as the mining platform.

The final Ollachea Feasibility Study mine layout is shown here:

Figure 11: Isometric Mine Layout Looking South



The main access to the mineralisation will be via a 1.2 km-long exploration access incline (1.5%) which has its portal in a valley on the north-eastern side of Cerro Joropiña and the Oscco Cachi River valley. The drive is currently being excavated and will be used for exploration drilling as well as providing the primary access and haulage drive for the planned mine. This portal (lower) will be the main mine access portal and is located above the process plant area at 2765 mRL.

An incline drive and a decline drive will be excavated at a grade of one in seven from the main exploration incline, located at approximately 2782 mRL, to access the eastern part of the mine. The decline drive will extend to 2550 mRL to service the deepest planned mining level at 2565 mRL. The incline drive will extend to a mining level at 2865 mRL.

The main exploration incline will be extended as an incline drive at a grade of one in seven and will be developed to meet a decline drive that will be developed simultaneously from a second (upper) portal at 3060 mRL. These drives when connected will provide a second means of egress, access to all the mineralisation in the western part of the mine, and early establishment of the primary ventilation system.

The mine is split into two main production areas, east and west, with the western part of the mine providing approximately 71% of the life of mine production tonnage. All mining is completed using a bottom up mining direction.

To maximise mine extraction, the eastern part of the mine will be split into multiple mining panels consisting of four levels that can be mined simultaneously. The lowest level of each of these mining panels requires an artificial sill pillar to be created using high strength paste backfill to allow the mineralisation located directly below to be completely extracted. The western part of the mine has also been split to minimise the impact from the life of mine production tail. A sill pillar level has been located on 2940 mRL.

Due to the non-visual nature of the orebody, grade control diamond drilling is planned on a minimum of a 15 m by 15 m grid. In the eastern part of the mine, this will be completed from dedicated hanging wall drives that will provide coverage for four production levels. The western part of the mine will be grade control drilled on each level from the main hanging wall access drive. Mineralised zones will be re-interpreted from the grade control program; ore drives will then be driven primarily on survey control and backed by face and wall channel sampling. An onsite laboratory is planned and this has been designed to provide a 24 hour turnaround of samples.

Production from the eastern part of the mine will start on 2790 mRL and 2805 mRL for the western part of the mine. The primary ventilation system will be fully established prior to the start of stope production.

Stope size will be controlled by the nature of the lodes (dip and width variability) and interpreted geotechnical conditions. Stope sublevel spacing will be 15 m vertically floor to floor. Planned stope strike length is based on geotechnical interpretation and varies between 13 m and 23 m dependent on lode width. To control the stability of the longitudinal stopes and minimise dilution, the length of open voids can be altered based on local ground conditions.

Production drilling will be medium diameter (76 mm or 89 mm) down holes with some requirement for up-holes when mining below an artificial sill pillar. Up-holes will also be used where lodes pinch out and there is no requirement for development above. Stope blast initiation (void) will be via the use of drop raise slots as the distance from the floor of the top cut to the back of the bottom cut will be approximately 10 m vertically or 14 m on dip.

To minimise dilution, maintain stability and maximise open stope strike length, cable bolts will be installed in the hanging wall of the stopes. A dedicated cable-bolter (drill and install) is planned to complete this activity. Development ground support installation will be completed by development jumbos.

Stopes will be backfilled using paste derived from mine tailings to maximise the resource extraction, provide long term mine stability and reduce the surface area required for waste and tailings disposal. Small quantities of waste rock will be used as a capping for tramming purposes on all paste filled stopes.

The primary ventilation system consists of the exploration incline, other incline and decline drives, four surface raises (two return air raises and two fresh air raises), and an internal return air system and connecting drive that services the eastern part of the mine. Primary fans will be located on the two surface return air raises.

AMEC Australia Pty Ltd completed a hydrogeological characterization of the Ollachea Gold Project site. The Ollachea Gold Project infrastructure is planned to be distributed along the lowermost elevation area of three sub-basins, near the Ollachea River: the Oscco Cachi, Challuno, and Cuncurchaca sub-basins. The three sub-basins are characterized by seasonal precipitation patterns, with a rainy season from December to March, a dry season from May to August and the remaining months of April, September, October, and November as transition months.

The geomorphology surrounding the Ollachea Gold Project site consists of moderate to steep slope mountains and ranges, with occasional valley areas, several of which will be occupied by the Ollachea Gold Project components. The geology of the Oscco Cachi river area consists of phyllites of the Devonian Sandia Formation, and variably bedded graphitic slates and shales of the Siluro-Devonian Ananea Formation. South of these formations andesitic volcanic rocks outcrop. Both sedimentary and volcanic rocks are intruded by nepheline syenite to the south and granodiorite to the north. The surficial geology of the Cuncurchaca and Choyouno sub-basins areas is mainly comprised of sandstone rocks, with some granodiorite intrusions in the south side. Unconsolidated materials overlying the bedrock can be found along the active stream channels of the sub-basins.

The rock sequence is highly affected by tectonic events, which have deformed and fractured the rock units. Evidence of these tectonic events is the two regional-scale thrust faults that cross the area: the Ollachea and the Paquillosi faults.

AMEC Australia Pty Ltd has defined two main hydrogeological units: an unconsolidated deposit unit and a consolidated deposit unit.

The unconsolidated unit comprises Quaternary deposits of alluvial, colluvial, and fluvial origin. These deposits are located at the sides of the streams and rivers; most of them appear to have been disturbed. The hydraulic conductivity of these deposits ranges in the order of 10⁻¹ to 10⁻⁴ cm/s, according to field tests performed by AMEC Australia Pty Ltd during the feasibility study. The consolidated deposits are represented by the Ananea Formation rock units, which have hydraulic conductivities ranging from 10⁻⁶ to 10⁻⁸ cm/s, based on field work and drilling evidence. Also, these deposits are highly affected by fractures, which increase the secondary porosity and hydraulic conductivity.

AMEC Australia Pty Ltd developed a hydrogeological numerical model to understand the behavior of the groundwater system in the Ollachea Gold Project area. The model was based on and calibrated using the hydrogeological information obtained during the completion of the Ollachea PFS and Ollachea Feasibility Study. The main goal of the model was to estimate the groundwater exfiltration into the underground mine, and to determine the quantity of water that had to be extracted from the mine via dewatering. According to the pre-development modeling results, the groundwater flow is generally towards the Ollachea river, roughly parallel to the Oscco Cachi and Cuncurchaca streams.

It is estimated that the water flow rate from the underground mine will be up to 80 m³/h during the exploration tunnel excavation, and will reach a flow rate of approximately 120 m³/h during the production period. This numerical model is updated frequently based on the on-going water monitoring taking place in the exploration tunnel and recalibrated as more data become available.

Due to the nature of the planned mine development, mine dewatering will be predominately gravity assisted. The water volumes estimated are not considered sufficiently large to present mine dewatering problems.

The rock mass conditions assessment was based on the core log data, core photographs and intact rock strength properties. A total of 44 diamond drill holes were logged using the Rock Quality Index Q System.

The Deformation Rate Analysis technique was used to determine the local *in situ* stress tensor as summarised in Table 16-2.

Table 7: In Situ Stress State

Principal Stress	Trend
Major Principal Stress (σ_1)	$y=0.0188x + 5.5749$
Intermediate Principal Stress (σ_2)	$y=0.0249x + 3.1312$
Minor Principal Stress (σ_3)	$y=0.0227x + 0.9247$

The uniaxial compressive strength values of slate (the dominant rock type) range from 35 MPa to 69 MPa, with an average of 50 MPa, thus classifying the rock as of “medium strength”. Triaxial results range from 35 MPa (σ_1) under 2 MPa (σ_3) of confinement, to 67 MPa (σ_1) under 10 MPa (σ_3) of confinement. A mean friction angle of 33° and a mean cohesion of 0.1 MPa were determined from the nine direct shear tests. These properties were used as part of the basis to estimate rock mass strength and also as input variables to the excavation stability analysis and ground support selection.

The presence of discontinuities and other inherent defects in the rock mass downgrades intact rock strength. RocData software was used to determine the rock mass parameters which are presented in Table 16-2. The rock mass strength has been estimated to be 7.7 MPa. The data shown in Table 8 was used as input parameters to the numerical model.

Table 8: Rock Mass Properties

Hoek-Brown		Mohr-Coulomb	
mb	1.33623		
s	0.0026	Cohesion (C)	1.98983 MPa
a	0.505734	Friction angle (Phi)	30.4359°
sigt	-0.09728 MPa	sigcm	7.73277 MPa
sigc	2.4638 MPa		

Oriented core logs indicate that the foliation is the major structural feature followed by the sub-vertical faults striking parallel to the orebody. A bias in structural information is present in the data set due to the dominant drilling angle of the geotechnically logged holes.

Reports provided by the Company identify three fault set groups and a shear zone. Of the identified major structures, the shear zone, which cuts obliquely across the orebody, is considered to present the greatest risk to the Ollachea Gold Project. The shear zone material has been classified as “extremely poor”, however, its thickness and persistence across the orebody has not been accurately defined. To mitigate risk, stopes immediately adjacent to the thickest part of the interpreted shear zone have been excluded from the Mineral Reserves estimate. As new geological and geotechnical data become available the structural model should be updated.

Non-linear finite element numerical modelling was undertaken using the ABAQUS/FEA program. The modelling results indicate that zones of relaxation and tensile failure, in both footwall and hangingwall regions, will result in void instability unless adequately supported. Rock mass damage due to accumulated plastic strain is also seen to be problematic when remaining waste pillar dimensions are insufficient. Restrictions on stope excavation sequencing (footwall to hanging wall only), long anchor cablebolt support and the provision of critical pillar dimensions (minimum pillar ratio of 1.5 times the drive width) will lessen these impacts.

The Modified Rock Mass Quality Index (Q) was utilised to characterise the *in situ* rock mass at Ollachea. Based on the information available, Q is calculated to be from 1.8 to 4.0, which is rated as “Very Poor” to “Poor”. In the absence of any notable difference in rock mass conditions in terms of lithology, quality index and structure, geotechnical domains were based upon geometry of the orebody.

The main controlling factor on the maximum recommended stope dimensions is the width of the stope backs, which, in turn, is controlled by the orebody width. For the maximum ore width of 45 m, the stable support strike length of the stope is calculated to be 15 m.

Where orebody widths are ≤ 21 m, the strike length can be increased to 23 m, which is calculated as the maximum stable supported stope strike length.

Stope strike lengths are further reduced where they intersect the poorer ground conditions found in the crown pillar domain in the uppermost stopes. Here stable stope strike lengths are limited to 13 m for the maximum ore body width of 45 m. Calculated stable strike lengths of 25 m are possible when stope widths are restricted to ≤ 16 m.

Based on results of the numerical modelling analysis, infrastructure stand-off distances from the planned productions stopes have been determined. Table 9 provides a summary of the minimum stand-off distance used as design criteria for the Ollachea Feasibility Study mine design.

Table 9: Infrastructure Stand-off Distances

Development Category	Design Life span	Acceptable level of Strain damage (ϵ_{eq}^p) or Relaxation (Sigma 3)	Recommended Stand-off distances	Additional Restrictions / controls
Capital Development and infrastructure	Life of Mine	$\leq 0.5\%$ (ϵ_{eq}^p) and / or No relaxation or tensile failure	$\geq 30m$	None
Exploration and Access drives	Medium term	$\geq 0.5\% \leq 1\%$ (ϵ_{eq}^p) and / or minor relaxation or tensile failure	$\geq 15m$	Some rehabilitation Subjected to No-Entry exclusions when adjacent footwall voids are present
Ore drive development	Short to medium term	$\geq 1\%$ (ϵ_{eq}^p) and / or significant relaxation or tensile failure	0 – 15m	Rehabilitation required. Subjected to No-Entry exclusions when adjacent footwall voids are present

Empirical analysis of the crown pillar indicates a minimum crown pillar thickness of 30 m, based on a restriction of the adjacent stopes to 7 m wide and 15 m long. This equates to a Factor of

Safety of 1.2. This is a 50% increase in crown pillar thickness from recommendations made in the PFS. Additional work is necessary to further investigate and define controlling variables.

Two possible locations for vertical surface ventilation shafts were subject to a shaft stability exercise to provide an indication of raise boring risk and provide life of mine (“**LOM**”) support recommendations.

Drilling and geotechnical logging of dedicated diamond drill holes in close proximity to the final Ollachea Feasibility Study designed ventilation shaft locations is highly recommended. Rock mass reinforcement and surface support is anticipated to be necessary for any LOM shaft with a diameter greater than 3 m.

The location of the main mine accesses are in the orebody hanging wall. This was selected based on the location of the exploration incline, which is currently being developed, and planned process plant, the recommended stope extraction sequence of footwall to hanging wall, and because there is no discernible difference in the rock mass between hanging wall and footwall.

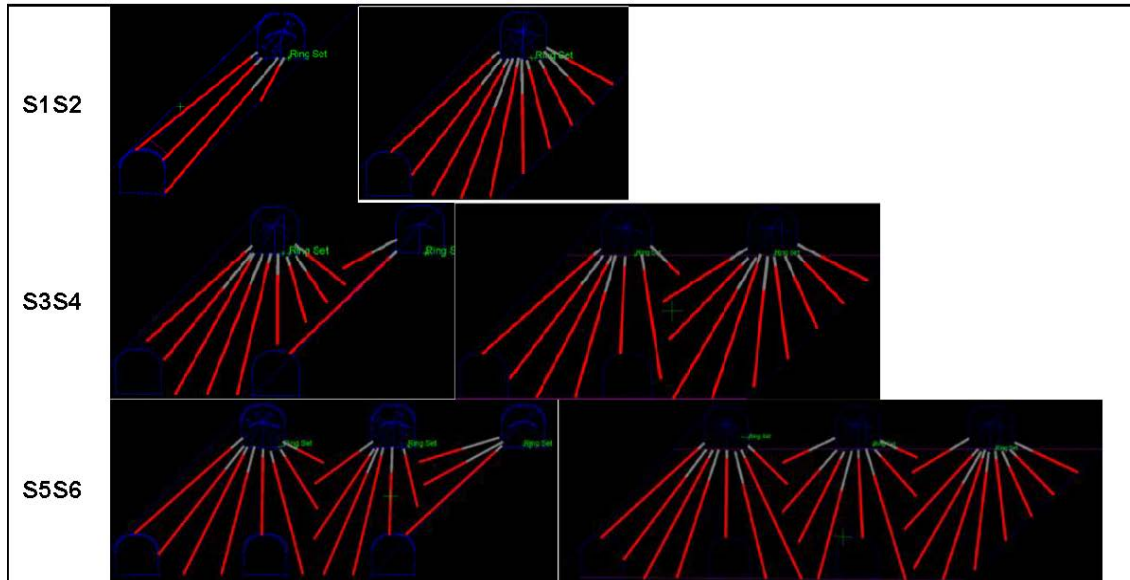
Some design parameters are:

- maximum grade for access development is 1 in 7;
- minimum grade is zero (flat);
- minimum turning radius is 30 m; and
- lateral development overbreak is 15%.

All production levels have been designed with no grade (flat), including level access crosscut development. This is required due to the complexity of the orebody, the strike extent of the orebody, small inter-level spacing and bottom-up mining direction. Drain holes for water will be drilled as required to remove water to lower, mined-out levels. Water from mining areas located above the main access incline will gravity drain. Water from mining areas located below the main access incline will gravity drain before being pumped to the main access level.

Each level of development is separated vertically by 15 m (floor-to-floor). The top level drive is a drill drive for the bottom stope and becomes an extraction drive for the stope above. The stopes will be drilled using down holes, except for stopes located at the top of a lode or where artificial sill pillars are encountered. These will use up-holes to eliminate the requirement for specific drill drive development or because of extraction sequence practicalities.

Figure 12: Schematic of Stope Production Ring Drill Layout



The LHOS mining method and extraction sequence adopted for the Ollachea Gold Project is reliant on the use of paste fill. Process plant total tailings will be used to produce the paste fill. Approximately 42% of the process plant tailings will be used as paste fill. Waste rock will be used as a floor cap to paste-filled stopes, for loading and tramming requirements.

The overall backfill volume requirement, split between low strength and high strength paste fill, is 84% and 16% respectively.

The selected mining method requires stopes to be extracted on a continuous retreat basis. Cemented backfill, placed in retreat stopes, will be exposed by the mining of adjacent stopes, so it must be strong enough to remain stable when the confining rock is removed. The planned turnaround is 14 days; hence backfill should reach the design strength at this curing age.

The design strength of backfill required for vertical wall stability was estimated under the Limit Equilibrium Wedge approach. The width of the exposed vertical paste fill walls will range from 4 m to 47 m at the nominal height of 15 m. The majority of the stopes (91%) will be exposed on average at 7 m width.

Over 200 paste uniaxial compressive strength (“UCS”) tests were conducted to investigate the impact of cement type and cement and tailings content on the UCS over a testing period of seven to 182 days. Representative testing was conducted using locally sourced cements, ore tailings and tailings processing water produced during Ollachea Feasibility Study process testwork.

Table 10: Vertical Exposure Backfill Strength Requirements

Exposure width, m	Bottom 5m lift		Middle 7m lift		Top 2.7m lift	
	UCS, kPa	Cement%	UCS, kPa	Cement%	UCS, kPa	Cement%
4-10	160	2.6	140	2.4	350	3.9
11-20	230	3.2	180	2.8	350	3.9
21-35	280	3.6	210	3.0	350	3.9
36-47	310	3.8	220	3.2	350	3.9

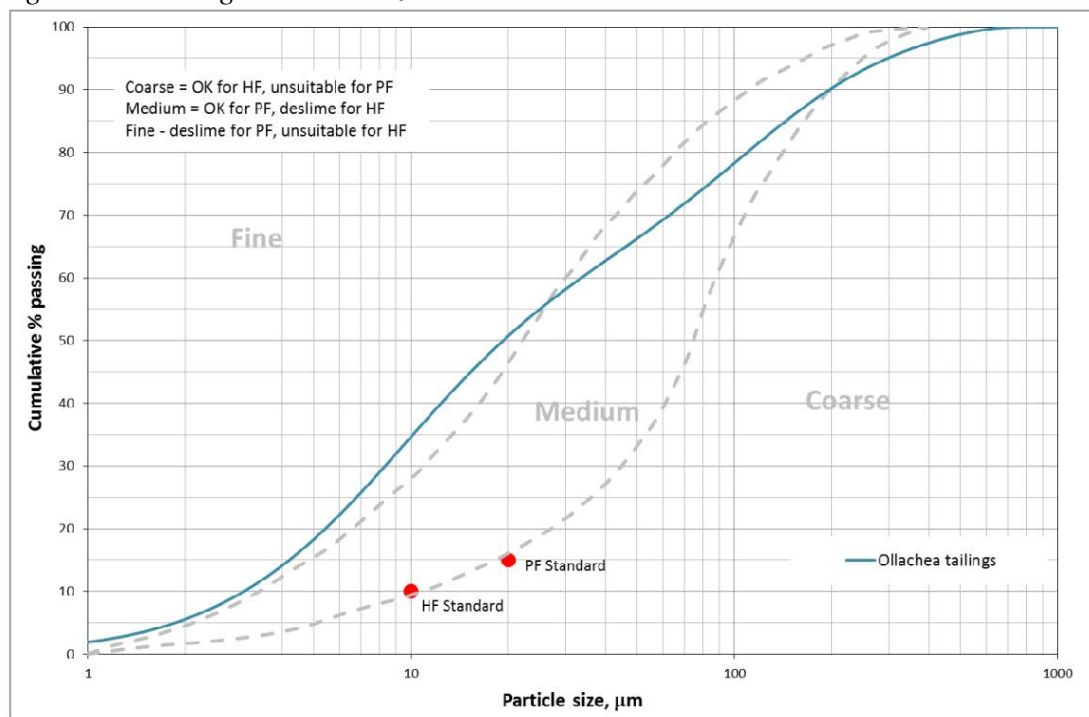
Some backfilled stopes are required to be undercut by the mining of underlying stopes. The expected dimensions of the undercut are 25 m along strike and 8 m (average) to 10 m (maximum) width (span hanging wall to footwall). Stability of backfill sill pillars was assessed based on the analysis of five potential failure mechanisms. Recommended UCS values of backfill to be undercut are presented in Table 11.

Table 11: Undercut Backfill Strength Requirements

Strike Length of Undercut Sill	Width of Undercut Sill	Required UCS, kPa
23m	3m to 12m	400-1550

Suitability of process plant tailings for production of backfill was determined from the analysis of particle size distribution, mineralogy and rheological properties. It was found that the tailings are rather fine and suitable for paste fill.

Figure 13: Tailings Particle Size Distribution



Yield stress values of paste fill, determined by the vane method, are presented in Table 12.

Table 12: Yield Stress

Cement dosage, % Cw of total mix	Tailings, % Cw of total mix	Total solids, % Cw	Yield Stress, kPa
4	66	70	294
10	60	70	462

Paste fill mix designs that satisfy the backfill strength requirements are presented in Table 13. UCS requirements and cement dosage rates vary with wall and sill pillar exposure dimensions.

Table 13: Paste Fill Mix Design

Exposure	UCS required, kPa	Cement dosage, % Cw of total mix	Cement dosage, % Cw of total solids	Tailings, % Cw	Total solids, % Cw
Vertical wall	160 - 350	2.6 – 3.9	3.7 – 5.6	66.1 – 67.4	70
Undercut	400 - 1550	4.2 – 9.1	6.0 – 13.0	65.8 – 60.9	70

Physical properties of paste fill are presented in Table 14.

Table 14: Paste Physical Properties

Cement dosage, % Cw of total mix	Total solids, % Cw	Slurry density, kg/m ³	Dry density, kg/m ³	Cohesion, kPa	Friction Angle, deg.	Young's Modulus, MPa
4	70	1820	1270	80	21	35
10	70	1840				

A reticulation design was determined taking into consideration the geometry of the mine, location of the backfill plant, backfill demand and production rates and rheological characteristics. The outcome of the design is the geometry and specification of the backfill piping requirements and specification of pumping requirements.

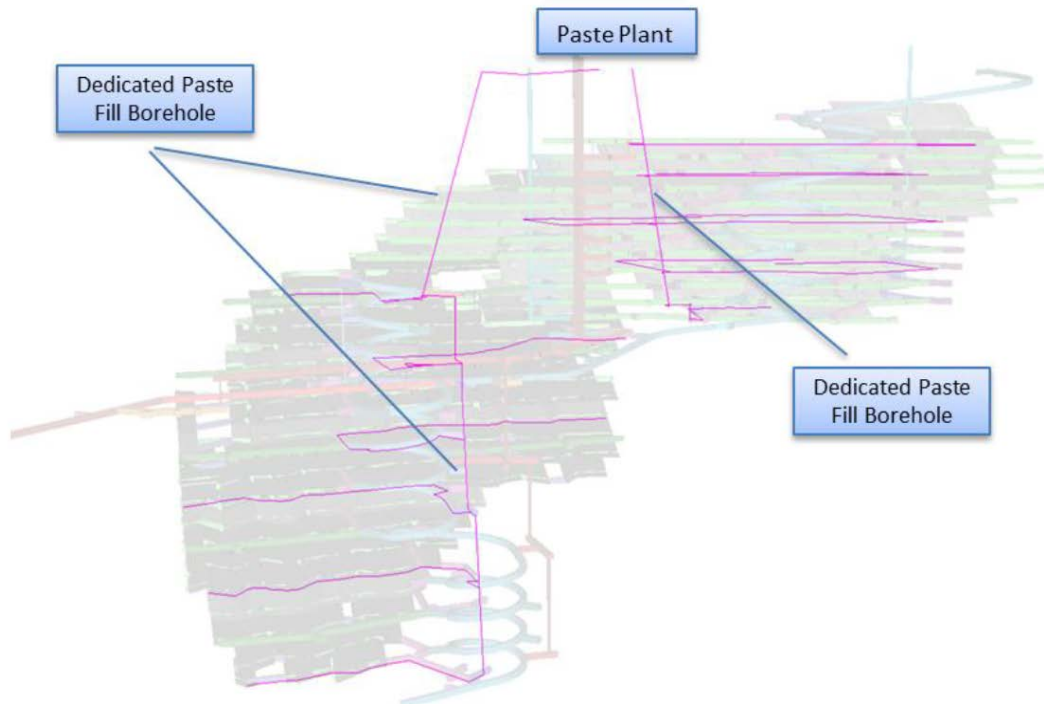
The assessment of rheological properties was undertaken using established laboratory scale tests including a Haake viscotester and a dynamic stress rheometer to determine the yield stress and viscosity of the design mix. Pipe line friction loss was calculated using established empirically derived formulae. Pipe loop testing was not undertaken at this stage due to the limited availability of tailings.

The paste fill plant will be located on the surface at Minapampa above the planned underground workings. Paste will be delivered to the two main production areas via two short horizontal surface runs linking to two sub vertical delivery boreholes. A network of internal boreholes and horizontal pipework will deliver the paste to the required locations within the two main production areas. Gravity alone will not be sufficient to overcome the required yield stress due to extensive horizontal runs along the orebody. A positive displacement pump of 4-2.6 MPa nominal capacity is required to ensure backfill is delivered to the most remote stopes. Reticulation specifications are presented in Table 15 and a simple schematic of the paste fill reticulation network is shown in Figure 14.

Table 15: Paste Fill Reticulation Specifications

Friction Losses	Pump Maximum Rated Pressure	Maximum Operating Pressure in Pipes	Pipe Types	Location
4.65 to 5.20 kPa/m	4.0 MPa	6,500 kPa	150mm Steel Sched 80	High Pressure areas (delivery boreholes, decline and level accesses)
			150mm HDPE PN16	Low pressure areas (level ore drives)

Figure 14: Schematic of Paste Fill Reticulation



Fill retention barricades should have sufficient strength to withstand both earth and pore water pressures, which develop during the placement of paste fill slurry. A staged filling approach (maximum 2 m) of the initial paste plug (6 m) allows the use of a low capacity sling type barricade, which is low cost and easily installed from readily available materials. This method has been adopted for the Ollachea Feasibility Study.

The strategy adopted for the Ollachea Feasibility Study is for all ore and waste material to be loaded using 14 t-capacity load-haul-dumps (“**LHDs**”) and transported to dumping areas located outside the two mine portals or internally as waste rock capping for paste filled stopes by dedicated 26.4 t-capacity on-highway tipper trucks.

For both development and stoping, LHDs will load trucks at the nearest stockpile/cuddy. Backs will be stripped as required to allow efficient truck loading. The stockpile/cuddy will be used as a temporary storage area when no trucks are available for direct loading.

Declared Mineral Reserves contain two ore categories, ore (+2 g/t Au) and low grade development ore (+1 g/t to 2 g/t). Ore will be transported directly to the process plant ROM pad. Low grade development ore will be transported directly to the process plant ROM pad during the production ramp up period. During full production the majority of the low grade development ore will be transported to a stockpile located at Minapampa. Small quantities of this material will be processed with the ore during full production to ensure stockpile capacity at Minapampa is not exceeded. When ore production begins to decline stockpiled low grade development ore will be used as a supplementary feed. This material will be back-loaded to ROM pad using trucks that transport tailings from the process plant to the paste plant that is also located at Minapampa.

Filter cake (tailings) from the process plant will be transported to the paste plant located at Minapampa via the underground mine using dedicated 34.2 t capacity on-highway tipper trucks.

The planned primary ventilation system consists of:

- two surface intake shafts;
- two surface return air shafts that will have a single primary fan with a duty of 350 m³/s;
- two intake ramps and connected internal ramps; and
- an internal return air way system connected to the surface return airway system.

The expected peak flow at full production will be 700 m³/s at a prevailing air density of 0.8kg/m³ (equivalent of 470 m³/s at 1.2kg / m³).

Figure 15 shows an isometric view of the major components of the Ollachea Gold Project primary ventilation system.

Figure 15: Primary Ventilation System

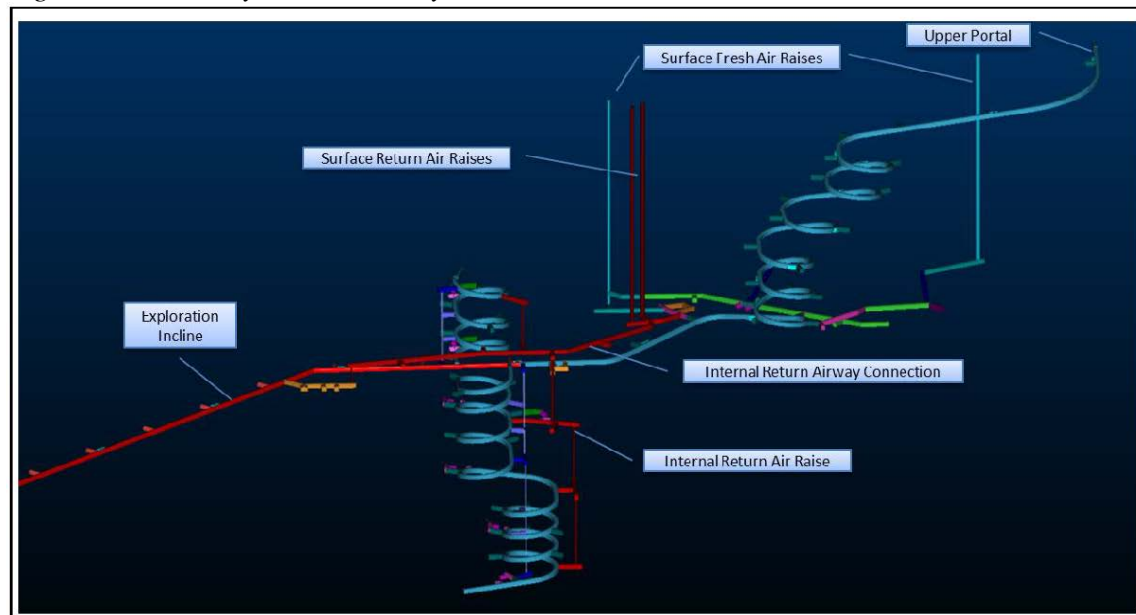


Table 16: Primary Ventilation Milestones

Milestone Date	Description of Milestone
April 2014	Maximum development before first surface FAR operational. Lower ramp $Q_{TOTAL}=54\text{m}^3/\text{s}$. Upper ramp $Q_{TOTAL}=54\text{m}^3/\text{s}$.
July 2014	First surface FAR commissioned. Lower ramp $Q_{TOTAL}=100$ to $180\text{m}^3/\text{s}$. Upper ramp $Q_{TOTAL}=54\text{m}^3/\text{s}$.
October 2014	Both surface RAR's commissioned and main access ramps joined up. $Q_{TOTAL}=250\text{m}^3/\text{s}$.
March 2016	Eastern lower exhaust connected up; Second surface FAR operational (for some time); first internal RAR leg above and below ramp in the eastern part of the mine operational. Eastern lower ramp in progress. $Q_{TOTAL}=700\text{m}^3/\text{s}$.
May 2020	Mining is at its extremities and at maximum production rate $Q_{TOTAL}=700\text{m}^3/\text{s}$.

The mine has three general layouts for secondary ventilation circuits during planned operations:

- a long-range configuration for development designed to establish or extend the primary ventilation circuit;
- the levels of the eastern part of the mine where the secondary fan is located in the fresh air decline and ducting is run into the level with branches to each heading or stoping area; and
- the levels of the western part of the mine where secondary fans are located in walls in drives that connect directly to the two primary surface fresh air raises. Ducting is run from these fans branching off where required into drives and stoping areas.

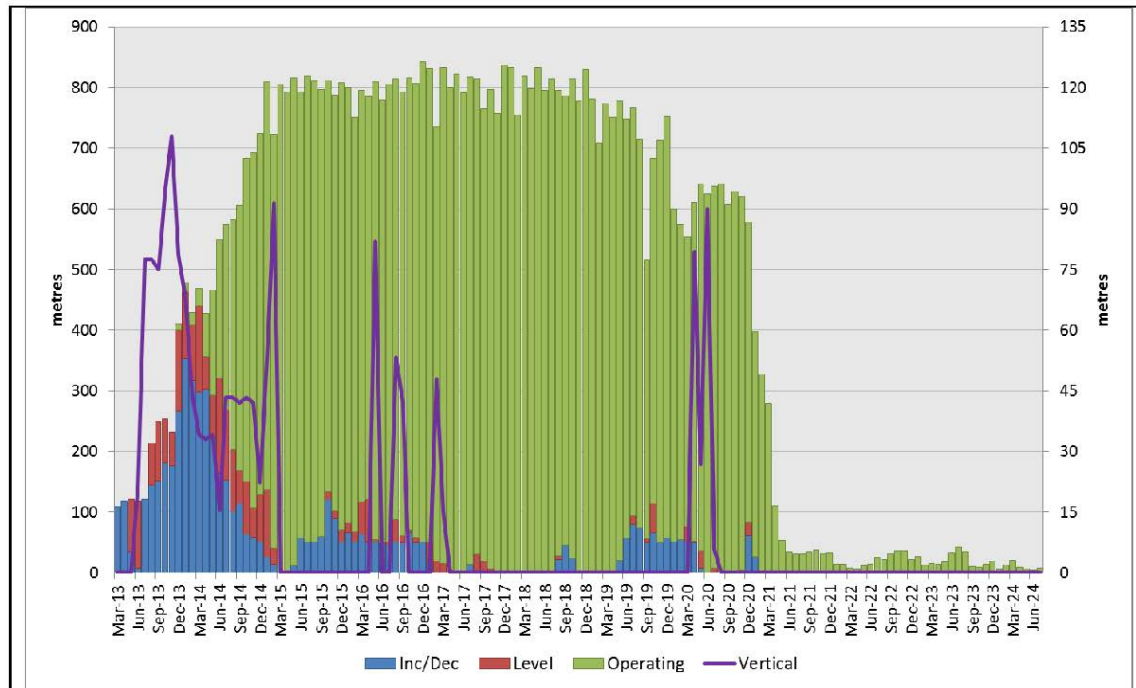
Access to the mine will be via two portals. The two portals will be connected via a single primary incline/decline. This will form the main egress system. The lower portal is located close to the processing plant and administration buildings and will be the main access to and from the planned underground mine. The upper portal will be used to provide access to the paste plant and shotcrete batch plant located at Minapampa.

The eastern part of the mine will be serviced by dedicated escape raises located off the main incline and decline. The majority of the western part of the mine will also be serviced by dedicated escape raises. These are located on each level at the extremities of each of the stope access crosscuts (two per level). These will join as the mine is developed to form two independent escape routes down the footwall of the western part of the mine.

In addition, self-contained refuge chambers of suitable size will be used and placed in locations where a second means of egress has not been established or where a second means of egress is available but not supplied with fresh (safe) air. This will ensure no person working underground will be at risk from rock fall entrapment or fire.

Figure 16 shows the average lateral development metres per month split by development type. The number of metres per month is approximately 800, which is equivalent to requiring four jumbo crews per shift for a period of four and half years.

Figure 16: Lateral Development Metres per Month



The vast majority of mine development is scheduled to be completed by the end of 2020 with production scheduled to extend until 2024.

LOM underground mining physicals are summarised in Table 17.

Table 17: Mining Physicals Summary

Physical	Units	LOM	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Lateral Dev.	Capital dev.	m	8,019	1,939	3,308	718	875	163	97	524	367	28		
	Operating dev.	m	56,987	10	3,374	8,851	8,723	9,435	9,551	8,160	6,953	1,372	240	252
Vertical Dev.	Capital dev.	m	1,586	533	465	145	178	63			202		1,586	533
	Operating dev.	m	220			30	20	50	30	40	50		220	
	Total Mined	Mt	11.9	0.2	0.5	1.0	1.3	1.5	1.5	1.5	1.4	1.1	0.9	0.7
	Waste	Mt	2.6	0.2	0.5	0.3	0.4	0.4	0.3	0.3	0.2	0.0		
	Ore	Mt	8.7		0.0	0.6	0.8	1.1	1.1	1.1	1.1	1.1	0.9	0.7
	Contained Gold	koz	983		3	65	80	123	129	128	136	127	90	83
	Gold Grade	g/t	3.5		3.1	3.5	3.1	3.5	3.7	3.6	3.8	3.6	3.2	3.5
Production	Low Grade Dev. Ore	Mt	0.6		0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0		
	Contained Gold	koz	28		1	5	4	3	5	4	6	1		
	Gold Grade	g/t	1.5		1.6	1.5	1.5	1.4	1.5	1.5	1.5	1.5		
	Cable drill	kdm	662	2	7	35	55	78	77	81	74	89	73	69
	Production drill	kdm	697			32	58	83	80	88	84	101	81	70
	Haulage	Mtkm	30.1	0.2	0.9	1.8	2.7	3.6	3.8	4.1	4.0	3.4	2.7	2.3
	Backfill Void (Paste)	km ³	3,012			136	246	349	346	377	371	442	356	306

Totals may not sum due to rounding

Waste material generated from the development of the exploration incline and pre-production waste development will be hauled to the lower portal and dumped on the site of a permanent waste dump that will be located in close vicinity to this portal.

Waste rock from the development of the upper portal and decline prior to decline/incline breakthrough will be deposited temporarily on an upper waste dump then backhauled during the LOM to the waste dump located close to the lower portal. All other waste rock generated throughout the mine life will be hauled to the lower portal waste dump, used to cap paste filled stopes or hauled to the TSF for co-deposition.

The LOM of waste balance is outlined in Table 18.

Table 18: LOM Waste Balance

Description	Tonnage (Mt)
Lower portal waste dump design capacity	+2.45
<i>UG waste development</i>	-2.67
<i>Paste stope waste capping</i>	+0.11
<i>Road base (non-permanent haulageways)</i>	+0.03
Lower portal waste dump final capacity	-0.08
Tailings storage facility (TSF) design capacity	+5.85
<i>Total tailings</i>	-9.34
<i>Tailings to paste</i>	+3.66
<i>UG waste to TSF</i>	-0.08
Tailings storage facility (TSF) final capacity	+0.09

The Ollachea Gold Project will require a standard, medium scale, underground mobile production fleet of jumbos, LHDs, trucks and drills. The primary, direct and indirect equipment used as a part of the basis to design the underground mine is shown here:

Table 19: Primary, Direct and Indirect Underground Mobile Equipment

Generic Description	Type or Size
Primary	
Development jumbo	Twin boom electro-hydraulic
Underground loaders	14 t for development and production (tele-remote)
Underground trucks	25 t (6x4) on-highway tipper trucks (ore and waste)
Underground trucks	34 t (8x4) on-highway tipper trucks (tailings)
Production drill rig	Top hammer (76mm and 89mm)
Cablebolt rig	Dedicated cablebolt rig (drill (64mm) and install)
Direct	
Scissor Lift	4wd UG specification
Charge-up vehicle	4wd dedicated UG charge up vehicle (dev. and production)
Shotcrete sprayer	4wd UG specification
Shotcrete transmixer (carrier)	4wd UG specification
Indirect	
Grader	6wd UG specification
Maintenance/fuel truck	4wd UG specification
Backfill services loader/IT	4wd UG specification
Flat bed truck (materials)	2wd UG specification
Light vehicles	4wd UG specification

All mobile and fixed plant equipment will be purchased, operated and maintained by Minera Kuri Kulla SA.

Metallurgy and Mineral Process Design

Results from the metallurgical test work completed on the six ore lenses, comprising the Ollachea ore body, have been utilised to formulate the basis for the process plant design. Test work concludes that the crushing and grinding of the ore, to a P80 of 106 µm, is required to sufficiently liberate the gold from the pyrrhotitic slate host.

Gravity concentration into two distinct components, a free gold concentrate and gold bearing sulphide concentrate, followed by carbon in leach (“**CIL**”) treatment of the respective tailings streams, which host the majority of the preg-robbing carbonaceous materials present within the ore, will achieve a LOM gold residue grade of 0.30g/t, translating to a LOM gold recovery of 91.0%.

Test work indicates the presence of a significant component of gravity recoverable (“**GRG**”) gold, with GRG gold contributing 39% to overall gold recovery. Sulphide associated gold, reporting to the continuous gravity concentration step, and leached within its own dedicated CIL circuit, contributes 32% to overall gold recovery. The preg-robbing nature of the ores, necessitate the implementation of a CIL leach on the tails of the GRG and sulphide circuit, to recover the remaining gold from tailings, which contributes 20% to the overall gold recovery. Tabling of the GRG concentrates, in conjunction with the adsorption and desorption of solubilised gold onto carbon, followed by electrowinning and refining will be utilised to produce gold doré on site.

Detoxification test work concludes that the implementation of an Air/SO₂/Cu²⁺ catalyst followed by a ZnSO₄ treatment circuit will produce a discharge slurry containing less than 1

mg/L total cyanide, which satisfies the legislated discharge requirements. The detoxified tailings are amenable to high rate thickening and will produce thickened slurry, containing 58% solids by weight. Filtration test work completed on the thickened tails slurry concluded that pressure filtration will produce a filter cake containing 14.8 % w/w moisture. This filter cake will be suitable for use to produce paste fill for the underground mine. When backfill is not required, the filter cake will be hauled to a dry-stack tailings storage facility.

Infrastructure

Access to the Ollachea Gold Project is relatively straightforward from the Southern Interoceanic highway, although road construction to provide access to the mine, plant, camp and TSF will be required. The access road to the TSF from the Southern Interoceanic highway is approximately 1.8 km long.

Access roads to the Minapampa area for exploration activities pass through the town of Ollachea. A new access road bypassing the town of Ollachea is planned that will merge with the existing access road. Minera Kuri Kulla SA plans to construct this road in the first part of 2013.

Plant site infrastructure includes a power supply line and substation connecting to the national power grid on the San Gaban line that passes over the plant site. Auxiliary buildings for administration, mine surface shops, and security facilities will be constructed around the plant site. A permanent operations camp facility has been designed and will be located south of the Challouno area, in the vicinity of the lower portal and within 200 m of the Interoceanic Highway. The camp will have catering and accommodation capacity for approximately 275 persons.

The Ollachea Feasibility Study mine schedule has surface waste rock disposal requirements of 2.2 Mt during the life of mine. A waste rock storage facility has been designed to permanently contain the life of mine waste rock. The waste rock facility will be located immediately south of the process plant, near the lower portal. Temporary waste storage will be required at the upper portal Minapampa area until the incline and decline tunnels meet. At that time, the waste rock temporarily stored at the upper portal will be transported to the permanent waste storage facility at the lower portal.

A preferred TSF site has been located and negotiations are underway to secure the remaining surface rights to the site, with 30% of the required surface rights already obtained. AMEC Australia Pty Ltd considers there is a reasonable expectation that these surface rights can be obtained. The TSF site is within 1.8 km of the plant site and can be accessed from the Interoceanic Highway. A dry stack tailings facility has been designed for 5.5 Mt of tailings consisting of a toe berm, underdrains, temporary coverage system, and coverage for final TSF closure.

The TSF has been designed for a capacity of 5.85 Mt of filtered tailings with overall ultimate slopes of 2.5H:1V and an ultimate height of approximately 145 m as measured from the toe of the starter buttress to the crest. A contingency area for temporary tailings management has been designated near the TSF access road for drying and temporary storage of “off-spec” tailings, resulting from upset conditions at the plant or wet weather. The temporary tailings management area will include a geomembrane-lined area and contact water pond.

A starter buttress will be constructed at the toe of the TSF for stability and erosion protection. The starter buttress will be constructed of compacted colluvial soils sourced from within the TSF footprint.

The TSF design considers two zones for tailings placement: (i) perimeter TSF tailings shell (Zone A), and (ii) interior TSF zone (Zone B).

The compacted “Zone A” tailings zone will form a structural “shell” that will be located at the exterior perimeter area of the TSF. Zone A tailings will be placed in 0.3 m-thick lifts that will be compacted to achieve at least 95% of the maximum dry density as determined by the standard Proctor test (ASTM D698).

To support cost estimation and development of general arrangements, design of other infrastructure - including a paste plant, surface warehouse, shops and administration buildings – has been progressed.

Environmental

A physical, biological and socio-economic baseline has been established on the basis of ongoing social, environmental and archaeological, baseline surveys carried out by Minera Kuri Kulla SA since 2007.

The study area is located in the Ollachea river sub-watershed located in the Inambari river watershed, which flows to the Atlantic Ocean basin.

Results of water quality monitoring in the study area indicate that water quality generally meets the national water quality standards. Air quality has been measured using 12 monitoring points in which the parameters analyzed meet the Peruvian environmental regulations for lead, arsenic, PM10, PM2,5 SO2, NO2, H2S and O3 concentrations. However in 2010, 2011 and 2012 it was found that 3 points of monitoring for carbon monoxide (CO) exceeded the ECA (10000ug/m3-8horas). The three unexpected readings were most likely caused by their location near the Interoceanic Highway. Baseline noise levels registered in the industrial areas of the study area were below the daytime and night time national environmental noise standards. Noise levels recorded in the town of Ollachea were above daytime and night time standards, mainly due to Interoceanic Highway traffic.

Current land use in the study area consists of natural grassland, artificial or plantation of woodlands and unused or unproductive lands. The land use potential has been identified as land suitable for forest production, grazing, permanent farming and protection land.

Vegetation in the study area consists of subtropical montane rainforest, subtropical lower montane rainforest and subtropical lower montane humid rainforest.

A total of 72 plant species were identified in the study area, grouped in 34 families of vascular and non-vascular plants. The only species of flora identified is considered “vulnerable” according to the list of Peruvian protected species is the *Escallonia resinosa*.

Eleven species of birds pertaining to 10 families have been identified in the study area. One type is categorized as “endangered”, the *Vultur griphus* which is not within in the environmental direct area of influence of the Ollachea Gold Project.

Additionally, five species of wild animals have been observed in the study area. Of those five species, two are protected, the *Tremarctos ornatus* is endangered and the *Puma concolor* is near threatened. Both of the protected species are not within in the environmental direct area of influence of the Ollachea Gold Project.

The water bodies observed contained 11 species of macrozoobenthos, 54 species of phytoplankton and 16 species of zooplankton. A low density of the *Oncorhynchus mykiss* trout was also observed.

A reconnaissance of archaeological sites has been carried out on the Ollachea Gold Project area. A few archaeological sites have been identified in the Challuno process plant site and Cuncurchaca TSF. These sites have now been cleared of archaeological remains.

The socioeconomic study area consists of the Ollachea district which comprises the Ollachea settlement, located near the Ollachea Gold Project area.

The population of the study area amounts to 4,919 inhabitants, with decreasing population trend from 2005 to 2007. More than half of the population consists of men, while the median age of the population is 25 years old. The majority of the population are Quechua speakers (83.96%) and the most important religion is Catholic.

Current liabilities for the Ollachea Gold Project are limited to the re-vegetation of drill platforms that are currently in use and closure of artisanal mine workings. Previously-used drill platforms have been formally closed and reclaimed.

The artisanal mine workings are restricted to an area measuring approximately 500 m x 100 m on the north flank of the Oscco Cachi River.

As part of the current surface rights agreement with the Community of Ollachea, Minera Kuri Kulla SA is monitoring the artisanal miners and taking actions to mitigate further environmental liability associated with the small-scale mining activities. This monitoring includes regular water quality determinations both up- and down-stream of the mine to monitor for possible contamination related to mining activities.

A formal closure plan has been developed as part of the feasibility work plan for the Ollachea Gold Project.

The extent of closure plan for Ollachea is restricted to the mine portal and mineral processing plant areas and the closing of these areas require relatively limited work, given that the mine is an underground mine and the TSF will be progressively closed as it is developed. A budget of US\$ 3.1 M for closure activities has been estimated as part of the capital cost estimate for the Ollachea Gold Project.

Primary objectives and criteria for closure of the lower portal waste dump include:

- long-term physical stability;
- geochemical stability;
- erosion protection;
- surface water control; and
- restore to the extent possible the original land use.

To achieve these objectives, the following activities will be carried out at closure of the waste rock dump:

- to the extent possible during operations, potentially acid generating waste rock will be covered with non-acid generating waste rock on exterior slopes of the waste dump;
- re-grade waste rock dump to 2H:1V overall slopes, with emphasis to restore the topography to landforms that replicate the natural landscape to the extent practical;
- compact waste rock surface as practical to form low-permeability barrier layer to reduce infiltration of precipitation into the waste rock. It has been assumed that the slate waste rock will break down under compactive effort to form a low permeability cap on the waste rock dump. Should the waste rock not adequately break down to form a barrier layer, a low-permeability soil layer will be placed over the waste rock;
- placement of an organic layer over the waste rock dump will be re-vegetated with native grasses and shrubs. The established vegetative cover will serve to reduce erosion due to surface runoff; and
- unnecessary access roads and diversion channels will be decommissioned and reclaimed. This task will include re-grading and re-vegetation of disturbed areas.

Low-grade ore in the upper portal ore stockpile will be completely processed prior to closure. The stockpile area will be re-graded to restore natural topography and provide positive drainage to the Oscoco Cachi drainage. An organic soil layer will be placed over disturbed areas and re-vegetated with grasses and shrubs native to the area.

Minera Kuri Kulla SA currently holds permits allowing the company to carry out exploration activities on the property including the development of the exploration adit which was in progress at the time of writing this report. Permits in place include an Authorization by the National Water Authority or Autoridad Nacional de Agua (ANA) to discharge residual water from the Ollachea Gold Project to the Corani River and Oscoco Cachi stream.

Other permits include:

- authorization by ANA for Minera Kuri Kulla SA to use water resources from the Oscco Chachi River and Maticuyoc Cucho spring for the purpose of mining exploration studies until 31 December 2012;
- authorization from the Community of Ollachea to use the land covered by the Ollachea Concessions for exploration activities for a term of five years from 25 November 2007. However, on 30 May 2012 it was extended for a period of 30 years; and
- authorization from the MEM to carry out exploration activities outlined in Minera Kuri Kulla SA's Semi Detailed Environmental Assessment (SEA) of the Ollachea Gold Project approved in 2008 with subsequent modifications approved in 2010 and June 2011.

For construction and operation of the mine, plant and other surface infrastructure Minera Kuri Kulla SA will require:

- an approved EIA, compilation of which is currently in progress;
- a mine closure plan;
- an approved mine plan;
- a beneficiation concession;
- permits for water use, process and drainage water discharge;
- permits for use of explosives and powder magazines;
- permits for storage and use of chemical reagents;
- permits for storage and direct use of hydrocarbons (diesel, kerosene); and
- construction permits for the facilities.

Minera Kuri Kulla SA has conducted a continuous programme of community awareness workshops and communications, and worked closely with the Community of Ollachea since it entered into agreement to acquire the property from Rio Tinto in 2006. The company's cooperation in formalizing illegal mining on the property and its surface rights agreement with the Community of Ollachea are part of a plan to incorporate to the maximum possible the community in the advancement and future operation of the Ollachea Gold Project.

One issue that precisely sets the Ollachea Gold Project apart from other projects in the region is the fact that the surface rights agreement between Minera Kuri Kulla SA and the Ollachea community is coupled with a strategic social management plan that involves the different interest groups around the Ollachea Gold Project. Among them are the Ollachea farming and artisanal mining communities.

Operating and Capital Costs

Operating costs include fixed and variable costs for mine production, plant production, tailings management and general and administrative services for the operation. Operating costs were estimated based on labour and productivity data from current Peruvian mine operations including the Corihuarmi Mine operated by Minera Kuri Kulla SA's parent company Minera IRL SA, from AMEC Australia Pty Ltd and Coffey Mining Pty Ltd cost estimation databases, and from quotations for major reagents, consumables and wear parts.

A life-of-mine staffing schedule was developed and indicates a peak operating staffing of 364 personnel. As much as 25% of the workforce will be locally based, with the remainder being based nationally.

A consolidated unit operating cost schedule is shown in Table 20. Mine operating costs average US\$23.4/t ore processed (costs include backfill). Plant operating costs average US\$21.5/t ore processed (including tailings disposal) and G&A costs average US\$4.3/t ore processed. Total site operating costs are US\$ 49.2/t ore processed or US\$499/oz of gold.

Table 20: Overall Operating Cost Schedule

Operating Cost		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total LOM
Process Plant															
Supplies	US\$M			11.8	15.5	18.4	18.5	18.4	18.6	18.7	18.5	12.2	3.6		153.6
Labour	US\$M			1.0	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.0	0.6		11.3
Maintenance supplies and Misc.	US\$M			1.0	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.0	0.7	-	11.8
Total Process Plant	US\$M			13.3	17.9	21.0	21.1	21.0	21.2	21.3	21.1	14.2	4.8		176.7
TSF	US\$M			1.9	2.4	2.7	2.7	2.7	2.7	2.7	2.7	2.0	1.0		23.3
G&A	US\$M			4.1	4.3	4.5	4.5	4.5	4.4	4.3	4.0	3.8	2.1		40.5
Mining	US\$M														
Fuel	US\$M			1.6	1.9	2.4	2.4	2.4	2.3	2.2	1.9	1.6	0.5		19.2
Explosives	US\$M			2.3	2.6	3.0	3.0	2.8	2.5	1.5	1.0	0.9	0.2		19.8
Maintenance Supplies	US\$M			3.2	3.9	5.0	5.1	5.0	4.4	3.9	3.5	2.8	1.0		37.9
Labour	US\$M			4.7	5.0	5.6	5.7	5.5	5.3	4.1	3.9	3.1	1.1		44.0
Power	US\$M			2.1	2.3	2.5	2.5	2.5	2.4	1.8	1.4	1.2	0.5		19.2
Consumables	US\$M			6.1	7.5	9.5	8.7	8.8	8.9	8.3	5.4	4.3	1.2		68.7
Other	US\$M			1.1	1.1	1.2	1.3	1.2	1.2	0.9	0.7	0.5	0.2		9.4
Total Mining	US\$M			21.1	24.4	29.1	28.7	28.3	26.9	22.7	17.8	14.4	4.6		218.2
TOTAL	US\$M			40.4	49	57.3	57	56.5	55.2	51	45.6	34.4	12.5		458.7

The capital cost estimate for the processing plant and associated infrastructure was prepared by AMEC Australia Pty Ltd and the mining cost estimate was prepared by Coffey Mining Pty Ltd. Minera IRL SA provided the estimate for the owner's capital cost. The accuracy of this estimate is within -10/+15%.

The initial capital is estimated to be \$177.5 M and sustaining capital cost is estimated to be \$45.7 M over the life of mine.

The total capital cost estimate is shown in Table 21.

Table 21: Capital Cost Estimate Summary

CAPEX	US\$(M)
Mine	55.1
Process Plant	72.0
EPCM	18.6
Below The Line Costs (Incl Contingency & Owners costs)	31.8
Total Capital Cost Estimate	177.5
SUSTAINING CAPITAL	
Mining Sustaining	38.3
Waste Dump Closure	2.0
TSF Closure	2.2
Process Plant Sustaining	3.2
Total Sustaining Capital Estimate (Life of Mine)	45.7
Project Total	223.3

A financial evaluation of the Ollachea Gold Project was undertaken using the discounted cash flow analysis approach. Cash flows were projected for LOM, which includes construction, operation and closure phases. The cash inflows were based on projected revenues for the LOM. The Ollachea Gold Projected cash outflows, such as capital costs, operating costs, royalties and taxes; were subtracted from the cash inflows to estimate the net cash flows. A financial model was constructed on a monthly basis to estimate the net cash flows over the LOM. The net cash flows were summarised on an annual basis. The cash inflows and outflows were assumed to be on a constant third quarter 2012 US dollar basis.

The Ollachea Gold Project was evaluated on a 100% project stand-alone and 100% equity-financed basis. The financial results, including net present value and internal rate of return do not take past expenditures into account; these are considered to be sunk costs. The analysis was done on a forward-looking basis from commencement of development in January 2013, with the exception of the sunk costs to date, which were taken into account for tax calculations as an allowable deduction. Any other expenditure after 31 December 2012 not related to Ollachea Gold Project construction has not been included.

The inputs and assumptions that form the basis of the Model include metal prices, mining schedule, mining inventory, processing throughputs, metallurgical recoveries, realisation costs, operating costs, capital costs, royalties and taxation parameters.

The base case gold price used in the financial evaluation was US\$1,300/oz. The PEN/US\$ exchange rate used was 2.65. The results of the economic analysis represent forward-looking information as defined under Canadian Securities Law. The results depend on inputs that are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented here.

A summary of the results of the financial analysis is shown in Table 22.

Table 22: Summary of Ollachea Financial Results

Parameter	Unit	Base Gold Price	Upside Gold Price
		US\$1,300/oz	US\$1,600/oz
Net Cash Flow before tax	US\$ M	489	749
NPV @ 5% real (before tax)	US\$ M	309	497
NPV @ 7% real (before tax)	US\$ M	256	422
NPV @ 10% real (before tax)	US\$ M	192	331
IRR (before tax)	%	29.2	40.2
Payback (before tax)	Years	3.2	2.5
Net Cash Flow (after tax)	US\$ M	325	486
NPV @ 5% real (after tax)	US\$ M	194	310
NPV @ 7% real (after tax)	US\$ M	155	258
NPV @ 10% real (after tax)	US\$ M	108	194
IRR (after tax)	%	22.1	30.2
Payback (after tax)	Years	3.7	3.0

Sensitivity analysis was performed on the Base Case net present value, using a 7% discount rate, and internal rate of return (Figure 17 and Figure 18, respectively). Positive and negative variations up to 15% were applied independently to each parameter: gold price, capital cost, operating cost and gold grade). The results demonstrated that the Ollachea Gold Project is most sensitive to variation in gold grade and gold price, and least sensitive to variation in capital cost.

Figure 17: NPV at 7% real (post-tax) Sensitivity Chart

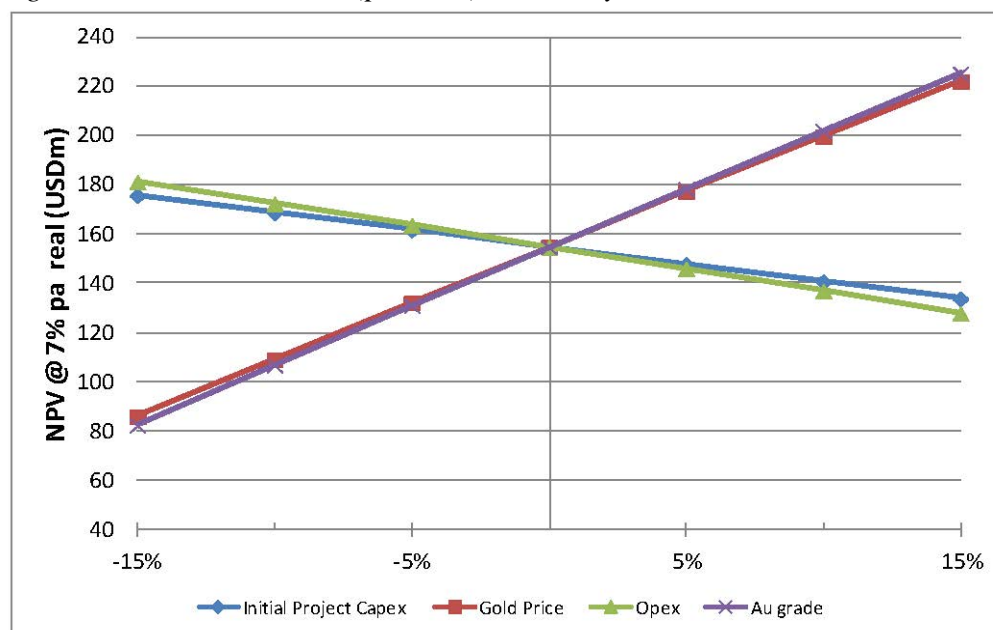
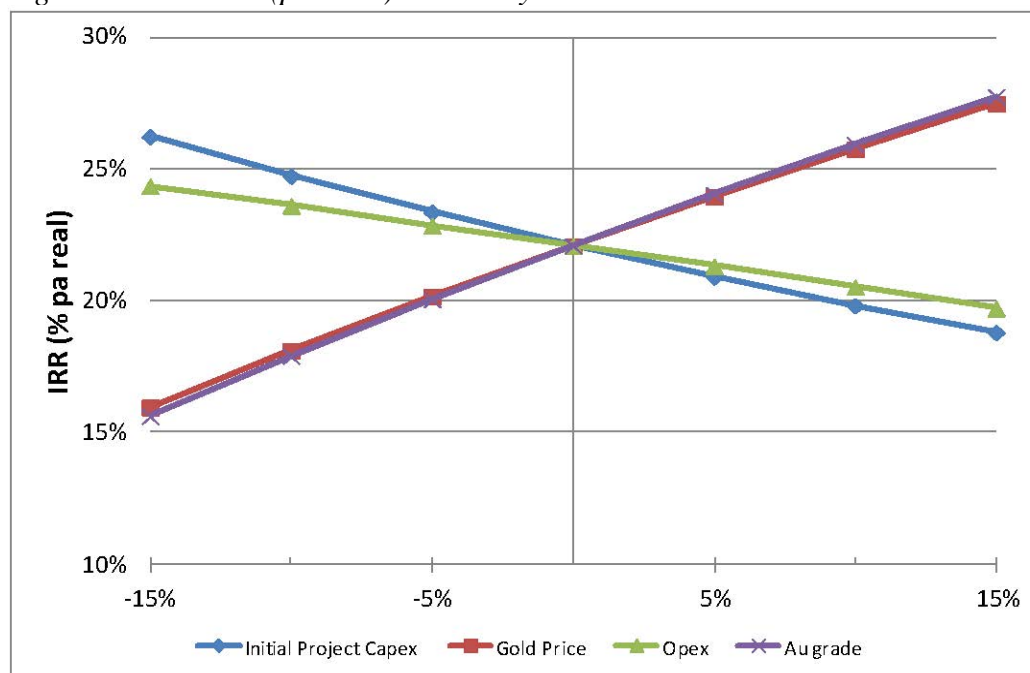


Figure 18: IRR real (post-tax) Sensitivity Chart



As with most gold projects, gold price is one of the most sensitive elements of the analysis. The breakeven point of the gold price for the net present value @ 7% real (after tax) is US\$872/oz whereas the real internal rate of return (after tax) reaches zero when the price of gold is US\$679/oz. Table 23 shows the impact of different gold prices on Ollachea Gold Project returns.

Table 23: Sensitivity of Financial Returns versus Gold Price

Gold Price (US\$/oz)	Pre-tax		Post-tax	
	NPV @ 7% (US\$ M)	IRR (%)	NPV @ 7% (US\$ M)	IRR (%)
1,000	89	15.6%	48	12.2%
1,100	148	20.6%	84	15.8%
1,200	206	25.1%	120	19.1%
1,300	264	29.2%	155	22.1%
1,400	320	33.0%	189	24.9%
1,500	377	36.7%	224	27.6%
1,600	433	40.2%	258	30.2%
1,700	490	43.5%	292	32.6%
1,800	546	46.7%	325	35.0%
1,900	601	49.7%	359	37.3%
2,000	657	52.7%	392	39.5%