

ASX ANNOUNCEMENT

March 2023 Quarterly Report

AuTECO kicks off 2023 with exceptional drill results in the March quarter

KEY POINTS

- Further high-grade intercepts demonstrate Pickle Crow Project's 2.2 Moz at 7.8 g/t gold Inferred Resource remains open in all directions
- Step-out drilling at Tyson discovery extends mineralisation with intersections including:
 - 2.7m @ 16.1g/t gold from 309.6m downhole AUDD0347
 - 2.3m @ 16.4g/t gold from 320.2m downhole AUDD0347
- Assays confirm new zone of banded iron hosted mineralisation from near-mine drilling
- Further assay results from the winter exploration campaign are pending with detailed analysis and interpretations to follow, along with an update to the Mineral Resource
- An extensive regional exploration program programme will commence in the June quarter to target key gold structures outside of the main mine trend, which has had little to no previous historic testing
- Placement successfully raised approximately \$9 million (before costs) to fast-track regional exploration
- \$10.4M in cash and cash equivalents at 31 March 2023

AuTECO Minerals Ltd (AUT:ASX) (**AuTECO** or the **Company**) is pleased to provide a summary of activities for the March quarter of 2023. Field activities continued to focus on the Pickle Crow Gold Project in Ontario, Canada.

AuTECO Chief Executive Officer Darren Cooke said:

"We achieved more success in the March quarter with the drill bit, with further high-grade intercepts demonstrating the Pickle Crow project's 2.2 Moz at 7.8 g/t Inferred Gold Resource remains open in all directions.

"Firmer ground over the Canadian winter has enabled us to continue our aggressive exploration drilling campaign in areas not normally accessible in warmer months. More assay results are anticipated and I look forward to sharing them as they become available.

"The quarter also saw the Company successfully raise approximately \$9 million, which has helped fast-track our regional exploration plans as we look to grow the potential resource away from the historical mine site.

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Kevin Tomlinson - Non-Executive Director
Darren Cooke - Chief Executive Officer
William Nguyen - CFO & Joint Company Secretary
Maddison Cramer - Joint Company Secretary

“As the weather warms up, we are in the advanced planning stages of our summer exploration campaign, which will look to conduct the first modern belt-scale exploration campaign in the northern Pickle Lake greenstone belt.

“We look forward to providing further updates as we continue working towards delivering an upgrade to the existing inferred high-grade gold resource at Pickle Crow.”

EXPLORATION PROGRAM

The 50,000-metre drill campaign concluded during the March quarter at the Pickle Crow project in Ontario, Canada.

The key strategic objectives of the drill program demonstrate AuTECO’s continued commitment to the dual pathways of driving near-mine resource growth combined with early-stage exploration and discovery drilling on the 500km² of regional tenure.

Firming of the ground during the winter period provided the Company with access to areas across its tenements that are harder to reach in warmer months, such as parts of Tyson. This window of improved access allowed the Company to deploy two diamond drill rigs on site.

The initial focus of the winter exploration program was to follow up significant drill intersections from last year’s seasonal campaign at the Talia discovery (5.5m @ 18.0g/t gold) and Cohen-MacArthur, where assays of up to 92g/t gold were returned (refer to the [ASX release](#) dated 3 May 2022 and the [ASX release](#) dated 23 June 2022).

The Company completed a total of 10,786 metres of diamond drilling during the quarter.

SUMMARY OF MARCH QUARTER EXPLORATION RESULTS

Tyson Vein System

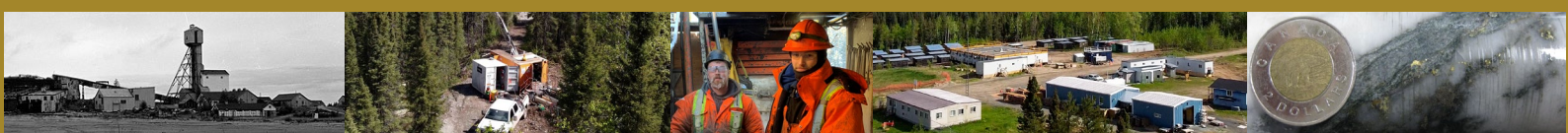
During the quarter, AuTECO’s exploration program uncovered further near-mine high-grade gold intercepts at the Pickle Crow Project (see Figure 1).

Step-out drilling at the Tyson discovery continued to extend mineralisation with two separate high-grade intersections – 2.7m @ 16.1g/t and 2.3m @ 16.4g/t gold (AUDD0347), as announced in the [ASX release](#) on 24 January 2023.

These intersections were just slightly apart from each other and ~70 metres along strike of the previously reported zone of 7.8m @ 16.7g/t gold in hole AUDD0266 (see [ASX release](#) dated 3 May 2022).

The Tyson vein system is a series of mineralised quartz lodes first discovered by AuTECO in 2021 (see [ASX release](#) dated 5 October 2021).

In October 2022, a step-out hole was drilled to test for continuity and depth extensions of the Tyson veins encountered in previous drilling.



Hole AUDD0333 was completed at a depth of 1,263 metres and intersected six zones of veining. Assay results received from AUDD0333 include the highest-grade intersection achieved by AuTECO to date – 0.4m @ 1,020g/t gold from 809.9m (see [ASX release](#) dated 22 November 2022).

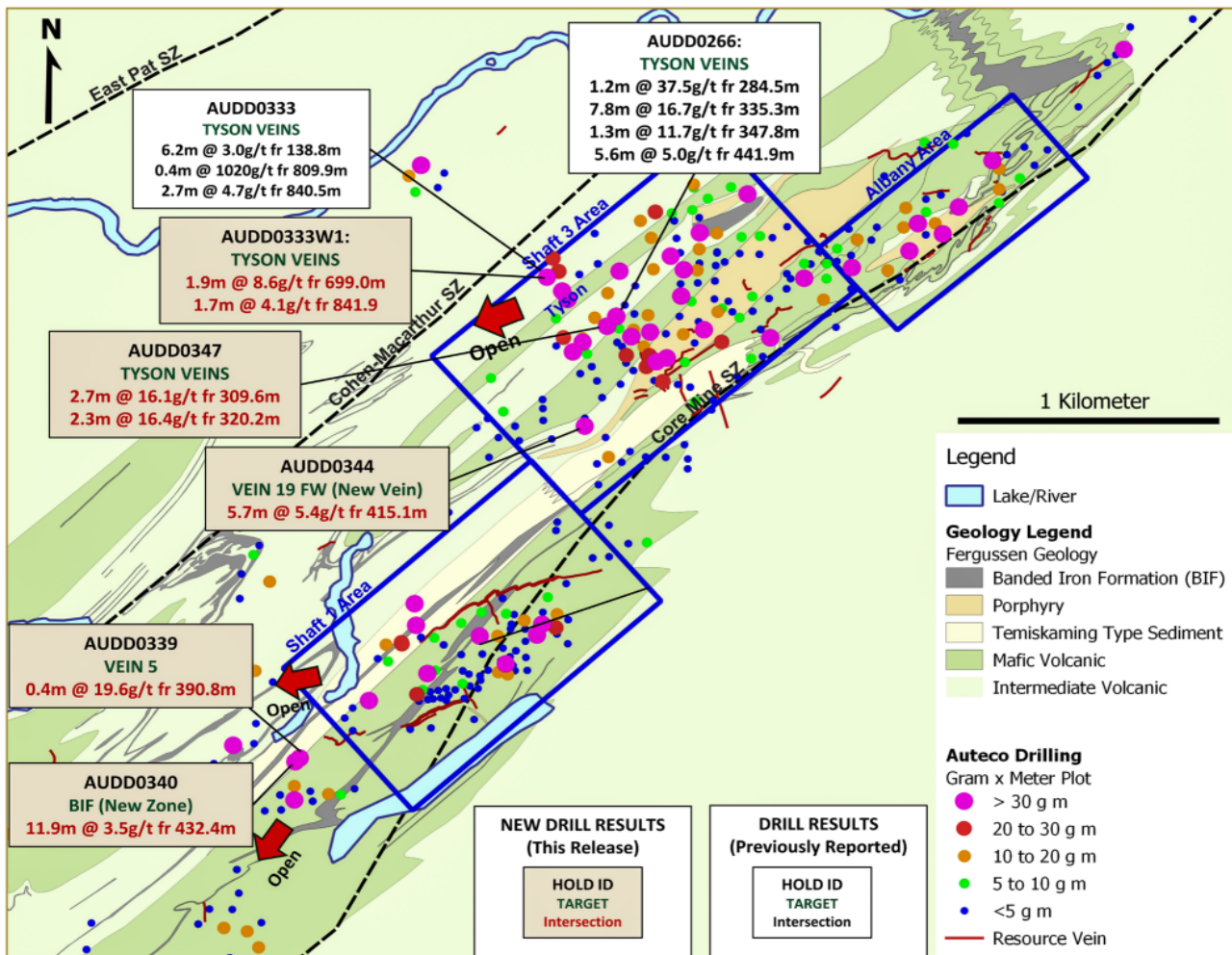


Figure 1: Summary map showing AuTECO near mine drilling intersections, as announced on 24 January 2023

Shaft 1 Drilling (Vein 5 plus a new mineralised BIF Zone)

AuTECO received further assay results during the quarter from recent drilling in the Shaft 1 Area, which was aimed at testing potential extensions of the Vein 5 structure (see [ASX release](#) dated 24 January 2023).

These results confirmed a new zone of banded iron hosted mineralisation returning an intersection of **11.9m @ 3.5g/t gold from 432.4m downhole (AUDD0340)**, which remained open both along strike and at depth.

AuTECO also received another high-grade assay result from hole AUDD0339, intersecting 0.4m @ 19.6g/t gold from 390.8m downhole.



This demonstrates continuity of the high-grade vein structure when taken into consideration with results announced in the prior quarter (refer [ASX release](#) dated 11 October 2022 and [ASX release](#) dated 22 November 2022) including:

- **0.4m @ 71.9g/t gold from 126.1m AUDD0315**
- **0.4m @ 29.8g/t gold from 62.9m AUDD0331**
- **0.4m @ 9.4g/t gold from 152.1m AUDD0338**
- **1.0m @ 7.2g/t gold from 433.7m AUDD0335**
- **1.8m @ 5.5g/t gold from 346.0m AUDD0334**
- **1.2m @ 5.1g/t gold from 65.8m AUDD0334**

Historically, more than 200,000 ounces of gold was extracted from the high-grade vein, with the continuous structure averaging approximately 0.5 metres in width. Recent drilling by AuTECO has successfully demonstrated the vein continues along strike beyond the extents of historical mining.

Vein 19 Footwall Structure

A previously unidentified quartz vein was encountered in the footwall of Vein 19 during the quarter, with an intersection of 5.7m @ 5.4g/t gold from 415.1m downhole in hole AUDD0344 (see [ASX release](#) dated 24 January 2023).

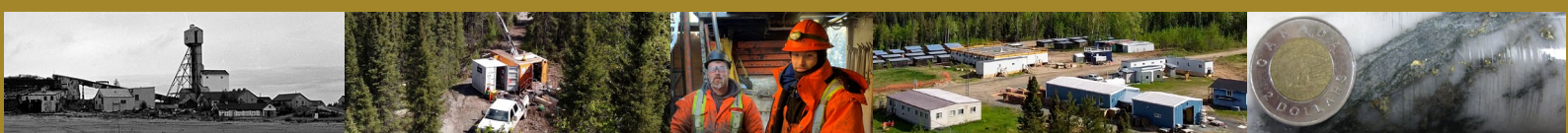
FORWARD WORK PLAN

Work is in progress on a revised Mineral Resource Estimate (**MRE**) which will be released when completed. Following the updated MRE, the Company intends to assess underground access options and progress associated permitting activities. The purpose of the underground access is primarily to convert the Inferred Resource to a higher confidence category, in addition to continuing year-round exploration from more favourable subsurface drill positions.

Whilst the underground access review and permitting is undertaken, AuTECO will focus on unlocking the regional potential of the 500sqkm land holding in the Pickle Lake greenstone belt.

This will mark the first modern camp-scale exploration campaign in the district, with an extensive lease-wide mapping and sampling campaign planned for the summer field season between June and October 2023.

Regional exploration drilling is scheduled to recommence in late 2023.



CORPORATE

PLACEMENT RAISES \$9 MILLION

During the quarter, the Company successfully raised approximately \$9 million (before costs), with the funds to be used to fast-track seasonal exploration at Pickle Crow, as announced in the [ASX release](#) dated 2 February 2023.

AuTECO received firm commitments from institutional, sophisticated and professional investors to raise the funds through a placement (**Placement**) of 180 million fully paid ordinary shares at an issue price of 5c each.

The funds will help further unlock the upside potential in the Company's regional acreage surrounding the Pickle Crow mine site as AuTECO continues to work towards increasing the size of the existing 2.2Moz at 7.8g/t gold Inferred Resource at the project.

FINANCIAL INFORMATION

AuTECO's cash position at 31 March 2023 was \$10.4M. Refer to Appendix 5B report provided separately for principal movements in consolidated cash for the quarter.

Information as disclosed in the Cash Flow Report:

- Net cash used in exploration activities (expensed and capitalised) totalled ~\$3.2M;
- There were no mining production and development activities during the quarter; and
- Payments to related parties of the Company and their associates for Executive and Non-Executive Directors fees, including (where applicable) superannuation, totalled \$141K.

HEALTH AND SAFETY

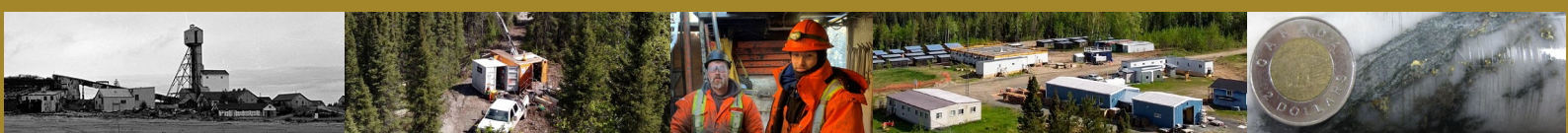
COVID-19 prevention practices remained in place at Pickle Crow, with no impact on day-to-day operations.

The Pickle Crow gold project 12-month rolling average Lost Time Injury Frequency Rate (LTIFR) as of 31 March 2023 remains at zero (0.0). There were no reportable incidents recorded during the quarter.

For and on behalf of the Board.

Mr Ray Shorrocks
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ABOUT AUTECO MINERALS

AuTECO Minerals Ltd (ASX:AUT) is an emerging mineral exploration company focused on advancing high-grade gold resources at the Pickle Crow Gold Project in the world-class Uchi sub-province of Ontario, Canada.

The Pickle Crow Gold Project currently hosts a JORC 2012 Mineral Resource of 2.23 Moz at 7.8g/t gold, with a 50,000m drilling program recently completed to expedite Resource growth. Pickle Crow is one of Canada's highest-grade gold mines – historically producing 1.5 Moz at 16g/t gold.

The Company also holds a 90% interest in the Limestone Well Vanadium-Titanium Project in Western Australia.

For further information regarding AuTECO Minerals Ltd please visit the ASX platform (ASX:AUT) or the Company's website <https://www.autecominerals.com>

COMPLIANCE STATEMENTS

Exploration Results referred to in this announcement (including pre-AuTECO historical drilling results) were first reported in accordance with ASX Listing Rule 5.7 in the Company's ASX announcements dated 28/01/2020, 26/03/2020, 29/06/2020, 01/09/2020, 11/11/2020, 19/01/2021, 7/04/2021, 16/06/2021, 15/07/2021, 2/8/2021, 5/10/2021, 2/12/2021, 18/01/2022, 15/02/2022, 03/05/2022, 23/06/2022, 11/10/2022, 22/11/2022 and 24/01/2023. AuTECO confirms that it is not aware of any new information or data that materially affects the information included in the original announcements. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

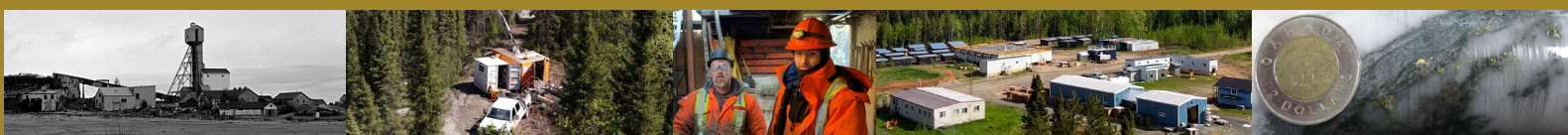
The Company's **Mineral Resource Estimate** referred to in this announcement and set out in the table below was first reported in its ASX release dated 15 February 2022, titled "Resource increases by 500,000oz to 2.23Moz at 7.8g/t". AuTECO confirms that it is not aware of any new information or data that materially affects the information included in the original announcement and that all material assumptions and technical parameters underpinning the estimates in the original announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcement.

Inferred Mineral Resource Estimate – as at 31 December 2021

Mineralisation Domain	Lower Cut-off	Tonnes (Mt)	Gold Grade (g/t)	Gold (Million oz)	Variance to 30 June 2021 Resource
Quartz Lodes	3.5g/t	6.4	9.3	1.92	+0.45Moz
Alteration Hosted (BIF)	2.0g/t	2.5	3.8	0.30	+0.06Moz
TOTAL		8.9	7.8	2.23	+0.51Moz (+30%)

DISCLAIMER.

References to previous ASX announcements should be read in conjunction with this release.

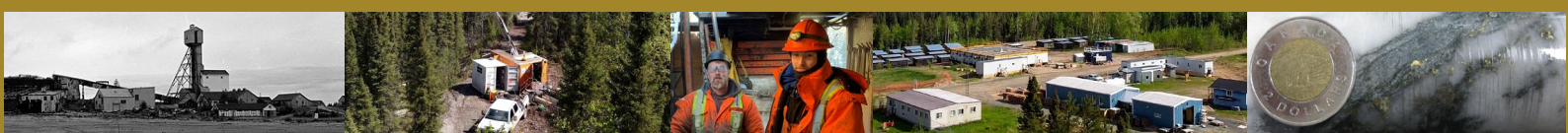


FORWARD LOOKING INFORMATION

This announcement may contain certain forward-looking statements and projections, including statements regarding AuTECO's plans, forecasts and projections with respect to its mineral properties and programs. Although the forward-looking statements contained in this release reflect management's current beliefs based upon information currently available to management and based upon what management believes to be reasonable assumptions, such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of the Company. The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved.

For example, there can be no assurance that AuTECO will be able to confirm the presence of Mineral Resources or Ore Reserves, that AuTECO's plans for development of its mineral properties will proceed, that any mineralisation will prove to be economic, or that a mine will be successfully developed on any of AuTECO's mineral properties. The performance of AuTECO may be influenced by a number of factors which are outside the control of the Company, its directors, staff or contractors.

The Company does not make any representations and provides no warranties concerning the accuracy of the projections, and disclaims any obligation to update or revise any forward looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws.



APPENDIX 1

Summary of Mining Tenements held at the end of March 2023 Quarter

AuTECO Minerals Ltd

Western Australia

PROJECT	TENEMENT NO.	STATUS	INTEREST	TENURE HOLDER
Limestone Well	E20/846	Granted	90%	AuTECO Minerals Ltd
Limestone Well	E57/1069	Granted	90%	AuTECO Minerals Ltd

Monax Alliance Pty Ltd

South Australia

PROJECT	TENEMENT NO.	STATUS	INTEREST	TENURE HOLDER
Kulitjara	ELA 2013/168	Application	100%	Monax Alliance Pty Ltd
Anmuryinna	ELA 2013/169	Application	100%	Monax Alliance Pty Ltd
Poole Hill	ELA 2013/170	Application	100%	Monax Alliance Pty Ltd

Revel Resources Ltd

Ontario, Canada

PROJECT	TENEMENT NO.	STATUS	INTEREST	TENURE HOLDER
Trappers Cabin	604520 to 605119 605437 to 605480	Granted	100%	Revel Resources Ltd
Gold Thrust	605481 to 605784	Granted	100%	Revel Resources Ltd

Revel Resources (JV Project) Ltd

Ontario, Canada (interest 70%)

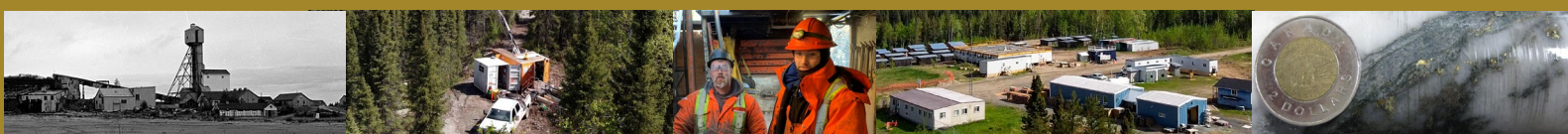
Pickle Crow Project: AuTECO has entered into an earn-in agreement with First Mining Gold Corp (TSX:FF) to acquire up to an 80% interest in PC Gold Inc, the 100% holder of the Pickle Crow Gold Project. For further details refer to ASX announcements dated 28 January 2020, 17 February 2020, 13 March 2020, 18 March 2021 and 2 August 2021.

GRANTED TENEMENT NO.

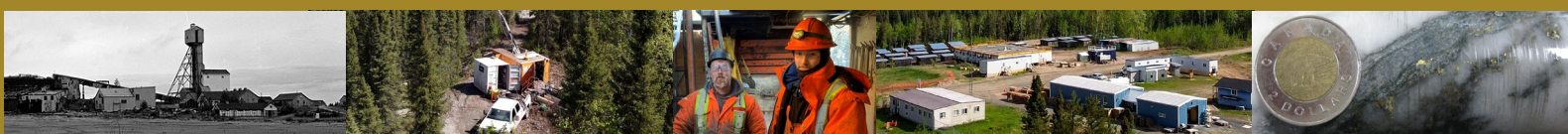
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102655	173138	265530	335468	672236
102656	173544	265531	344008	672237
102688	173853	265581	344010	672238
102716	173854	265585	344012	672239
102717	173875	265601	344013	672240
102720	182415	265604	344014	672241
102773	182433	265623	344029	672242
102796	182434	265624	344030	672243



102797	182438	266182	344031	672244
102827	182440	266185	344580	672245
102882	182468	266188	344581	672246
102979	182472	266203	344582	672247
103184	182473	266205	344583	672248
103203	183017	266847	344584	672249
112269	183069	266850	344633	672250
112270	183090	267574	344637	672251
117286	183091	272992	344655	672252
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117314	183093	273011	344681	672579
117315	183115	273012	344683	711253
117334	183118	273017	344745	711477
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117935	188414	273618	345328	720020
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117947	188443	273642	562622	PA 187 (PA2063)
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117998	188519	274255	562651	PA 201 (PA 2066)
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118002	189122	274325	562653	PA 202 (PA 2069)
118032	189170	275021	562654	PA 2062A)
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118121	189903	275551	562658	PA 2140
118227	189922	276008	562659	PA 2141
118288	189923	285057	562660	PA 2185
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124494	196963	285059	562662	PA 63
124495	196967	285060	562663	PA 637
124496	196968	285069	562664	PA 638
124519	196969	285076	562665	PA 639
124522	196984	285088	562666	PA 64
124523	196985	285089	562667	PA 640
125042	196986	285090	562668	PA 644
125043	202396	285091	562669	PA 646
125075	203622	285629	562670	PA 65
125076	207336	285634	562672	PA 66
125145	207590	285635	562673	PA 665 (PA 2073)
125147	207603	285652	562674	PA 666 (PA 2076)
125150	207626	285657	562675	PA 667 (PA 2077)
125151	207649	285708	562676	PA 668 (PA 2075)
125176	207652	285709	562677	PA 669 (PA 2078)
125177	207653	285732	562678	PA 67
125772	207654	285734	562679	PA 670 (PA 2070)
125797	207655	285759	562680	PA 671 (PA 2074)
125837	207657	286396	562681	PA 675
125856	207720	286415	562682	PA 676
127040	208244	287100	562683	PA 677
127041	208316	287122	562684	PA 68
127444	208340	287631	562685	PA 684
135139	208385	292388	562690	PA 685
137058	208401	292389	562765	PA 686
137059	208405	292410	562766	PA 69
137060	208406	292411	562767	PA 696



137199	208936	292412	562768	PA 697
137200	208938	292416	562769	PA 698
137848	209208	292417	562770	PA 699
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152985	215596	292455	562776	PA 702
152991	217803	293007	562777	PA 703
152992	217811	293008	562778	PA 704
152993	217812	293009	562779	PA 705
152998	218333	293032	562781	PA 706
153006	218335	293035	572086	PA 707
153007	218362	293058	626535	PA 725
153008	218363	293547	672170	PA 726
153009	218364	293548	672171	PA 727
153012	218365	293675	672172	PA 728
153013	218368	293710	672173	PA 729
153037	218369	294406	672174	PA 730
153039	218381	294432	672175	PA 735
153040	218392	294433	672176	PA 736
153068	218393	305805	672177	PA 737
153615	218448	312407	672178	PA 738
153617	218449	312408	672179	PA 739
153633	218450	312492	672180	PA 740
153740	218470	321608	672194	PA 741
153741	218471	321614	672195	PA 742
153759	218480	321616	672196	PA 743
154984	218481	321617	672197	PA 744
154985	219051	321618	672198	PA 745
155002	219052	321619	672199	PA 746
155022	219053	321622	672200	PA 747
157233	219054	321636	672201	PA 748
157234	219055	321667	672202	PA 749
161424	219145	321669	672203	PA 750
169618	219146	321673	672205	PA 751
169638	219147	321683	672206	PA 755
169639	219166	321699	672207	PA 756
169646	219167	321700	672208	PA 757
169672	220349	322281	672209	PA 758
169674	220350	322284	672210	PA 759
169675	220351	322303	672211	PA 760
169709	225800	322304	672212	PA 761
169710	225801	322361	672213	PA 762
169711	225802	322387	672214	PA 763
170264	225804	322388	672215	PA 773
170269	225818	322949	672216	PA 774
170280	225819	322950	672217	PA 775
170281	225833	322951	672218	PA 776
170302	225834	323594	672219	PA 777
170303	225835	323613	672220	PA 778
170304	226401	323614	672221	PA 779
170362	226403	323615	672222	PA 780
170363	227038	323616	672223	PA 781
170889	227086	323620	672224	PA 90 (PA 2161)
170936	227087	323640	672225	PA 91 (PA 2157)
170957	227106	324716	672226	PA 92 (PA 2158)
171607	227793	325337	672227	PA 93 (PA 2159)
171632	227821	325338	672228	PA 94 (PA 2162)
171633	227822	333761	672229	PA 95 (PA 2163)
171655	238344	334628	672230	PA 96 (PA 2160)
171905	238522	334629	672231	



Mining Tenements and Beneficial Interests acquired during the Quarter:

Nil.

Mining Tenements and Beneficial Interests disposed of during the Quarter:

Nil

