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QUARTERLY ACTIVITIES REPORT

QUARTER ENDED MARCH 2024

Exploration and Development Activity for the Quarter

Athena Resources Limited (ASX: AHN) ("Athena" or the "Company") is pleased to present its Quarterly Report for the period ending March 31, 2024.

COMPANY HIGHLIGHTS

Scoping Study Update

- The FE1 Scoping Study is now complete and is under review with the ASX. Release to the market is anticipated for the coming week.

Exploration

- New Rare Earth Element (REE) and base metal anomalies identified from maiden soil geochemistry survey at Milly Milly Intrusion
- REE anomalies include a peak value of **888ppm TREO** with high percentage of valuable magnetic rare earth elements **37% MREO/TREO**, and **29% NdPr/TREO**
- **Three +300ppm TREO soil anomalies have strike lengths >2km**.
- Multiple new significant copper and nickel anomalies confirmed with values to **1,300ppm Ni, and 152ppm Cu**.
- Infill soils program prepared and scheduled to commencing in the coming month.

Corporate

- Fenix Resources Ltd (ASX: FEX) entered into a binding agreement whereby Fenix subscribe for up to $1,000,000 worth of convertible notes in Athena.
- First Tranche of $320,000 drawn.
- If fully converted, Fenix would, subject to any necessary shareholder approvals, become Athena's largest shareholder.

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Exploration

During the Quarter, Athena received assay results from a geochemical soil sampling program carried out at the Byro Project during late 2023. The program targeted the Milly Milly ultramafic intrusion and surrounding lithologies within E09/1637, and E09/1781. The program included a total of 1,020 samples submitted for multi element analysis at Australian Laboratory Services (ALS) in Malaga. The results revealed highly significant Rare Earth Element (REE) anomalies, and additional base metal anomalies providing high priority targets for further exploration programmes.

Sampling was carried out on a broad 400m by 100m grid spacing covering the most of E09/1637. The programme followed a 2023 assessment of drilling at the project, which identified a several zones of strongly elevated REE pathfinder elements (Ce, Y, La, Sc) in the shallow, clay zones. The recent soil sampling programme was the first time systematic geochemical work was carried out targeting REEs along with other elements, particularly base metals.

New REE Anomalies Identified

The results of this first pass geochemical sampling produced highly significant results identifying several new targets for follow-up sampling programs. The highly encouraging credentials of the sampling program include:

- Peak Total Rare Earth Oxide (TREO) peaks, with maximum values of 888ppm.
- The top 33 sample results have >350ppm TREO with average magnetic rare earth oxides (MREO) of 37%.
- Ratio of neodymium (Nd) + Praseodymium (Pr) to TREO averages a high 32%

Three large +300ppm TREO anomalies were identified, having strike lengths exceeding two kilometres with widths of 200m to 300m. These are adjacent to contact zones along the “tail”, or southern extension, of the Milly Milly Intrusion near fault zones. This represents a prime location for REE mineralisation and associated carbonatites. In addition, the area is very weathered with the potential for REE ionic clay style mineral deposits.

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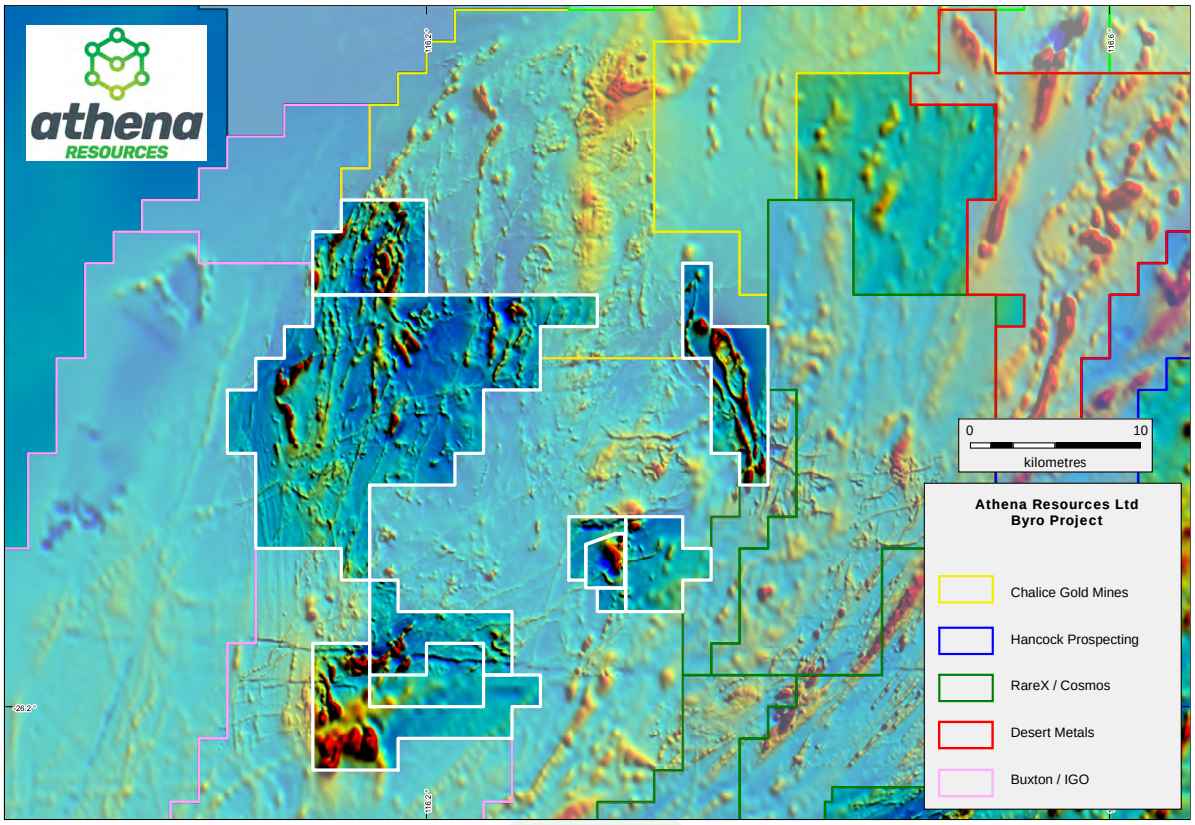

Figure 1: Byro Project. Surrounding tenure on TMI RTP aeromagnetic image.

Nickel-Copper-Chrome anomalies

The Milly Milly Intrusion has previously shown to have significant nickel and copper mineralisation that has been previously targeted by both the Company, and by previous explorers. The recent sampling has shown extensions to previous base metal soil anomalies, and their special relationship with the ultramafic body. Of significance, is the southern "tail" region, which may represent the feeder zone to the system, although this has undergone significant deformation post its formation.

In addition to the high grade REE mineralisation in this area, are strong nickel anomalies occurring in a linear trend along the southeastern contact with the surrounding metasediments and granitoids. Copper anomalies appear more widely dispersed and sporadic, with a peak value of 152ppm, interestingly in the same location as one of the TREO peak anomalies.

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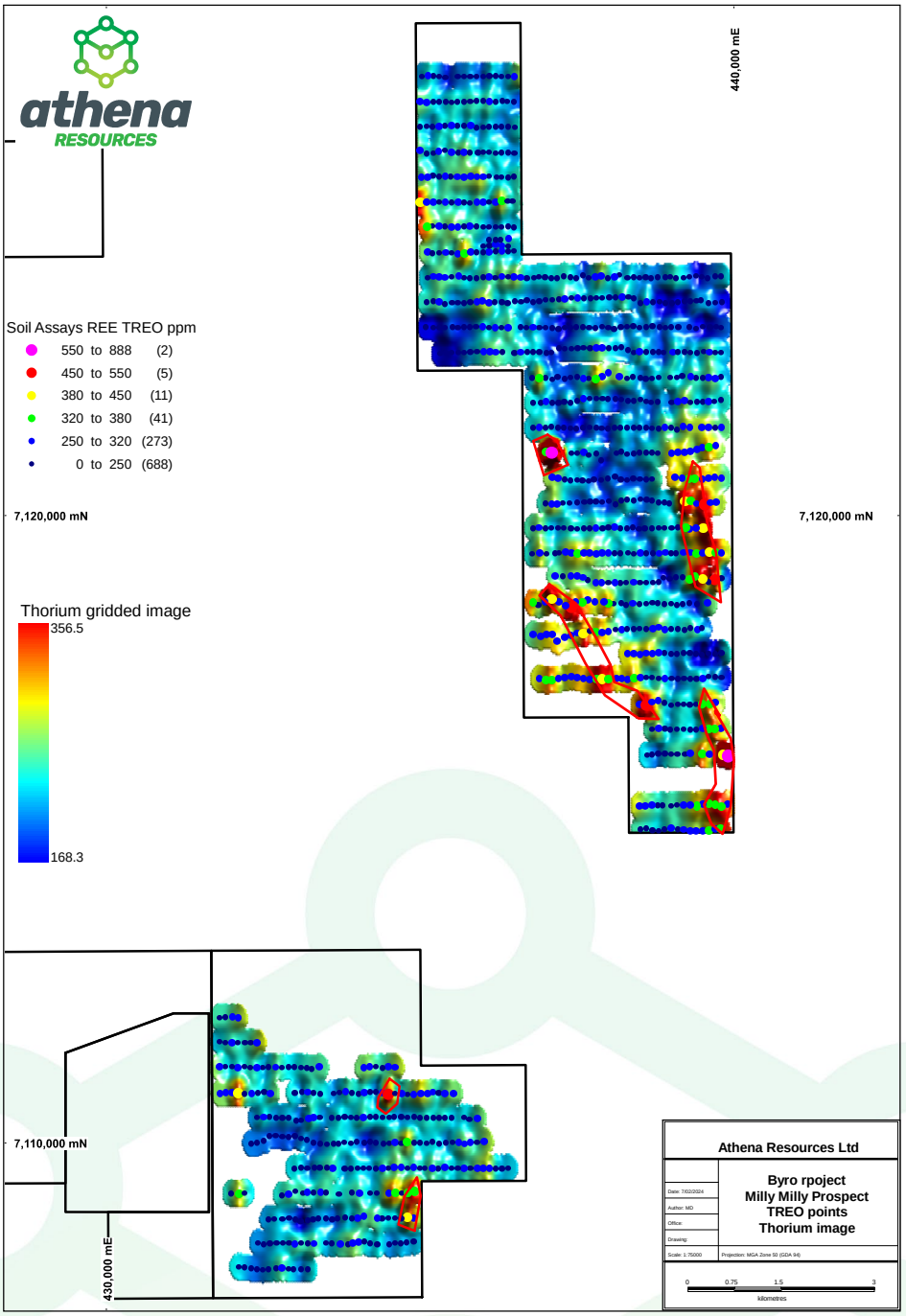

Figure 2: Milly Milly soil assays. TREO on Thorium gridded image.

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To further development of these newly identified targets Athena has designed detailed geological mapping, rock chip sampling, and infill soil sampling for this area scheduled for completion during the June Quarter. This will provide improved resolution of anomalies and delineation of potential targets for drill testing.

Total Rare Earth Oxide Calculation

Total Rare Earths Oxides (TREO) is the sum of the oxides of the light rare earth elements lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), and samarium (Sm) and the heavy rare earth elements europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb), lutetium (Lu), and yttrium (Y).

- TREO is the sum of all the rare earth oxides.
- HREO is the sum of the oxides of the heavy rare earth elements: Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu and Y. The HREO are less common than the LREO and are generally of higher value.
- LREO is the sum of the oxides of the light rare earth elements: La, Ce, Pr and Nd.
- MREO is a set of oxides that are referred to as the Magnetic Rare Earth Oxides. They are Nd, Pr, Dy, Tb, Gd, Ho and Sm. These are generally considered to be of higher value than the non-MREO.
- NdPr is neodymium and praseodymium.

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Table 1: Milly Milly soil sampling significant assay results (TREO>350ppm)

Sample	East (m)	North (m)	TREO ppm	LREO ppm	HREO ppm	MREO ppm	NdPr ppm	HREO/ TREO %	MREO/ TREO	NdPr/ TREO	Y2O3/ TREO
23MM0393	437100	7121000	**888**	804	84	329	285	9	37	32	3.7
23MM0701	439901	7116164	**689**	610	80	267	233	12	39	34	5.3
23MM0670	438598	7116977	**522**	414	108	199	161	21	38	31	10.6
23MM0580	437405	7118533	490	432	58	176	152	12	36	31	5.5
23MM0466	439534	7120179	472	414	59	175	149	12	37	32	5.5
23MM0478	439695	7118984	462	417	45	180	156	10	39	34	3.4
23MM0806	434490	7110771	451	402	49	156	135	11	35	30	4.7
23MM0583	437094	7118671	444	386	58	155	132	13	35	30	6.0
23MM0556	439506	7119803	430	375	55	163	141	13	38	33	6.0
23MM0700	439822	7116188	422	368	54	161	138	13	38	33	5.9
23MM0463	439218	7120226	419	369	50	155	132	12	37	31	5.1
23MM0786	432099	7110796	414	364	50	143	121	12	34	29	5.3
23MM0480	439504	7118991	408	355	53	144	122	13	35	30	6.0
23MM0959	434796	7108812	401	345	56	148	124	14	37	31	6.3
23MM0595	437598	7118119	400	345	55	146	124	14	36	31	6.3
23MM0087	435000	7125000	390	340	49	149	129	13	38	33	6.0
23MM0553	439613	7119423	382	332	50	141	121	13	37	32	6.4
23MM0655	437893	7117397	381	333	47	142	122	12	37	32	5.5
23MM0654	437815	7117392	380	335	44	135	116	12	36	30	5.0
23MM0934	434807	7109201	380	329	50	134	114	13	35	30	6.2
23MM0574	438002	7118604	379	330	48	139	119	13	37	31	5.8
23MM0703	439799	7115360	377	327	50	144	123	13	38	33	6.1
23MM0554	439705	7119406	372	322	50	143	122	13	38	33	6.3
23MM0327	436896	7122196	370	311	59	133	112	16	36	30	7.8
23MM0656	437994	7117395	370	324	46	132	112	13	36	30	5.6
23MM0481	439380	7119024	367	312	55	141	119	15	38	33	7.3
23MM0704	439700	7115389	363	314	49	138	118	14	38	33	6.3
23MM0683	439697	7116607	359	316	42	130	112	12	36	31	5.3
23MM0318	437793	7122183	359	298	61	139	117	17	39	33	8.7
23MM0932	434610	7109201	353	304	49	130	111	14	37	32	6.7
23MM0698	439500	7116200	352	295	57	136	115	16	39	33	7.8
23MM0473	439377	7120587	351	298	53	131	109	15	37	31	7.0
23MM0578	437580	7118625	350	302	48	132	111	14	38	32	5.9

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Metallurgical Testwork

During the Quarter, January – March 2024 there was no new metallurgical testwork. The focus was on reviewing the magnetic separation testwork results from FE1, both DTR & LIMS, for inclusion in the Scoping Study. DTR results for Byro South, Narryer, and Whistlejack Prospects were also reviewed.

Hydrometallurgical testwork on high grade magnetite concentrates commenced during April 2024.

Scoping Study

The FE1 Scoping Study is now complete and is under review with the ASX. Release to the market is anticipated for the coming week.

Links to relevant Exploration Announcements during the Quarter

13/02/2024	Rare Earth Element and Nickel-Copper Anomalies a Byro

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Corporate Activity for the Quarter

Management and Board

No changes were made to the Board of Directors of senior management during the quarter. External consultants were retained as required for specific skills and activities.

Other Corporate

During the quarter meetings were held with several companies to discuss potential offtake agreements and/or collaborations.

Shares and Options

No Shares or Options have been issued during the quarter.

Convertible Notes

On 29 February 2024 Athena entered into a binding agreement with Fenix Resources whereby Fenix agreed to subscribe for up to 100 Convertible Notes in Athena with a collective face value of $1,000,000 convertible at $0.002 per share.

On 7 March 2024 Athena issued 32 convertible notes for a consideration of $320,000.

A General Meeting has been called for 23 May 2024 to ratify the issue of 32 convertible notes and to approve the further placement of 68 convertible notes.

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Exploration expenditure

	This quarter	Financial Year to Date	Calendar Year to Date
Information Systems	28,000	72,500	28,000
Travel	9,500	22,500	9,500
Field Camp	10,500	22,500	10,500
Surface Exploration	83,000	182,000	83,000
Geophysics and Remote Sensing	0	0	0
Ground Surveys	40,500	81,000	40,500
RC Drilling	1,000	2,000	1,000
Diamond Drilling	500	4,500	500
Metallurgy and Project Management	254,000	472,500	254,000
Tenement administration	6,500	41,000	6,500
Rent and Rates	85,500	170,000	85,500
	519,000	1,070,500	519,000

This expenditure is reported on an accrual basis.

Related Party Payments

During the period under review payments were made to related parties as follows:

During the period under review payments of fees and arrears were made to related parties in the sum of $179,350 as follows:

Director	Services provided	b/fwd $	Payable $	Paid $
Ed Edwards	Directors Fees	-	15,000	15,000
Ed Edwards	Management	-	30,000	30,000
Hau Wan Wai	Directors Fees (NED)	-	15,000	15,000
Peter Newcomb	Consultancy invoiced	1,925	74,275	69,150
Terry Weston	Consultancy invoiced	13,500	54,450	52,200
		15,425	188,725	179,350

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Payables outstanding to related parties at the end of the quarter amounted to $24,800.

This expenditure is reported on a payments basis excluding GST.

Links to relevant Corporate Announcements during the Quarter:

Announced on	ASX Title and Hyperlink to ASX site
01/03/2024	FEX: Fenix funding support for Athena Resources
01/03/2024	Convertible Note Funding

In addition to these specific announcements, the December Quarterly Activities Report and Quarterly Appendix 5B Cash Flow Report were lodged on 31 January 2024 and the audited Half Yearly Report and Accounts were lodged on 14 March 2024.

All Company announcements are available here:

This announcement was authorised by the Board.

Yours faithfully

Ed Edwards
Managing Director

CAUTIONARY NOTES AND DISCLOSURES

Disclosures

All data and Information of material nature referred to within this Report with reference to the Byro FE1 ore body have previously been reported on the ASX platform to meet the guidelines of the relevant JORC compliance reporting format at the time of data acquisition.

Cautionary Notes and Forward Looking Statements

This announcement contains certain statements that may constitute "forward looking statements". Such statements are only predictions and are subject to inherent risks and uncertainties, which could cause actual values, results, performance achievements to differ materially from those expressed, implied or projected in any forward looking statements.

The Byro South, Whistlejack and the Mt Narryer ore bodies have had extensive drilling and metallurgical studies, drilling to date at the ore bodies supports aspects of the forward looking statement above. The quantity and grade reported for Byro South, Whistlejack and the Mt Narryer ore bodies are conceptual in nature. There has been insufficient exploration to define a mineral resource for each of the ore bodies. Further exploration is warranted to improve understanding and reduce uncertainty.

JORC Code Compliance Statement

Some of the information contained in this announcement is historic data that have not been updated to meet the 2012 JORC Code guidelines. Some information referred to in the announcement was prepared and first disclosed under the JORC Code 2004 edition. It has not been updated since to comply with the JORC Code 2012 edition on the basis that the information has not materially changed since it was last reported.

Competent Persons Disclosure

Mr Martin Dormer is an employee of Athena Resources and currently holds securities in the company. Mr Terry Weston is a Director of Athena Resources and currently holds securities in the company

Competent Person Statement – Martin Dormer - Geology

The geological information included in the report is based on information compiled by Mr Martin Dormer, a consultant to Athena Resources Limited. Mr Dormer is a Member of the Australasian Institute of Mining and Metallurgy (Member ID 304615), and the Australian Institute of Geoscientists (Member ID 7370). Mr Dormer has sufficient relevant experience in the styles of mineralisation and deposit type under consideration, and to the activity which he is undertaking, to qualify as a Competent Person as defined in "The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition)".

Mr Dormer consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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INTERESTS IN MINING TENEMENTS

Athena Resources Limited 100%	Tenement Type
Byro Exploration	E – Exploration License
E09/1507	
E09/1552	
E09/1637	
E09/1781	
E09/1938	
Byro Project Mining	M - Mining Lease
M09/166	
M09/168	
Byro Project Water	
L09/112	L – Miscellaneous Licence

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