

NEW LITHIUM TARGETS IDENTIFIED AT SOUTHERN CROSS

Highlights:

- Exploration at Golden Horse has identified new lithium targets with multiple elevated lithium soil anomalies at its Ennuin North prospect.
- The soils form part of a largely untested lithium corridor extending over 37km from its Radio North project to Ennuin North.
- The soil geochemistry also produced significant gold anomalism (peak assay 724 ppb Au) at the Scorpio prospect at Ennuin North.
- A review of historic core from Trough Well (8km south of Ennuin North), confirms fractionated pegmatites.
- A review of existing geophysical data identified multiple new lithium target areas requiring field validation.
- Infill soil sampling to commence shortly, to better define future drill targets.

Golden Minerals Limited, (TSXV: GHML) ("Golden Horse", the "Company" or "GHM") is pleased to report highly encouraging results from recent lithium exploration activity, including lithium soil geochemistry at the Ennuin North prospect, a review of geophysical data with a focus on lithium potential and a review of historic drill core from the Trough Well prospect at the Southern Cross North project, located in Western Australia.

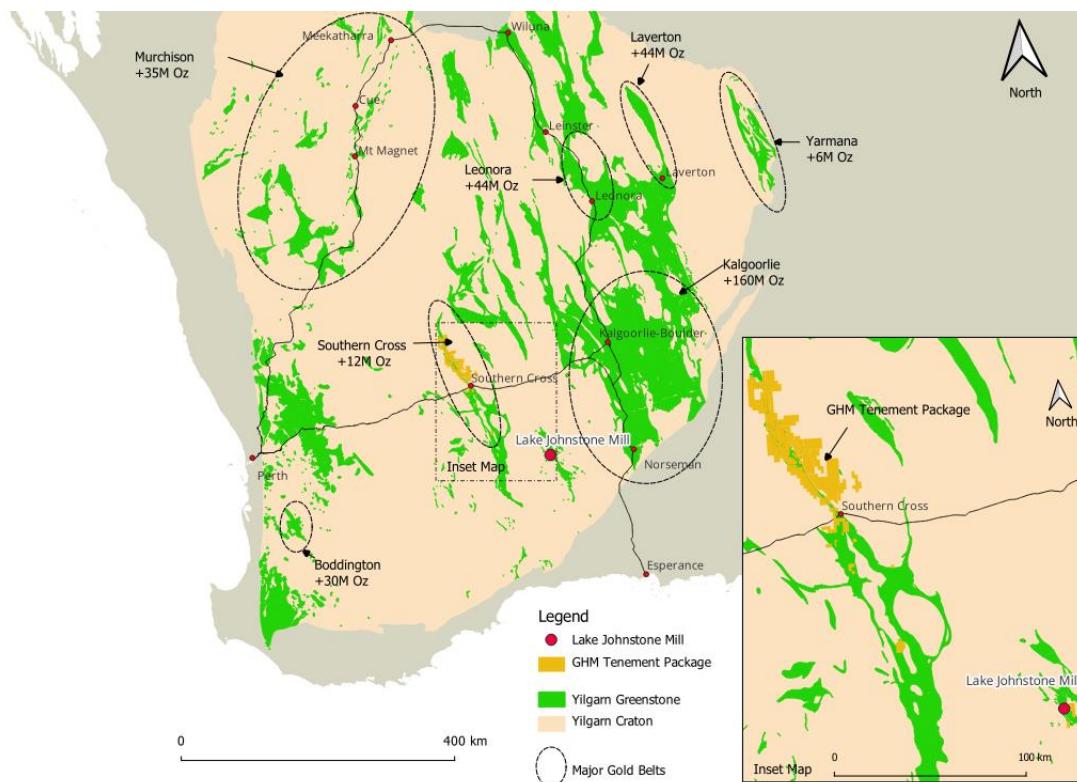


Figure 1: GHM Project Location Plan. Tenements include both live and pending.

Graeme Sloan, Chairman and Interim CEO of Golden Horse commented:

"When coupled with our previous announcement (refer TSX-V announcement 13 March 2024), the Ennuin North results clearly demonstrate the lithium potential of the entire northern portion of our land package. Lithium anomalism has now been identified in multiple locations over a 37km distance. The success in identifying lithium anomalism at each of our first three targets within the large Southern Cross greenstone belt which has had very little lithium exploration, reinforces our belief that the area is fertile for many more potential targets. This is further validated by a review of the geophysical data which reinforces the untested potential of the area.

“Our exploration team is focused on rapidly assessing and identifying all the priority targets over the large land holding, with drill testing anticipated later in 2024.

"I look forward to updating the market as Golden Horse's lithium milestones are reached, along with regular updates of progress on the Company's gold projects."

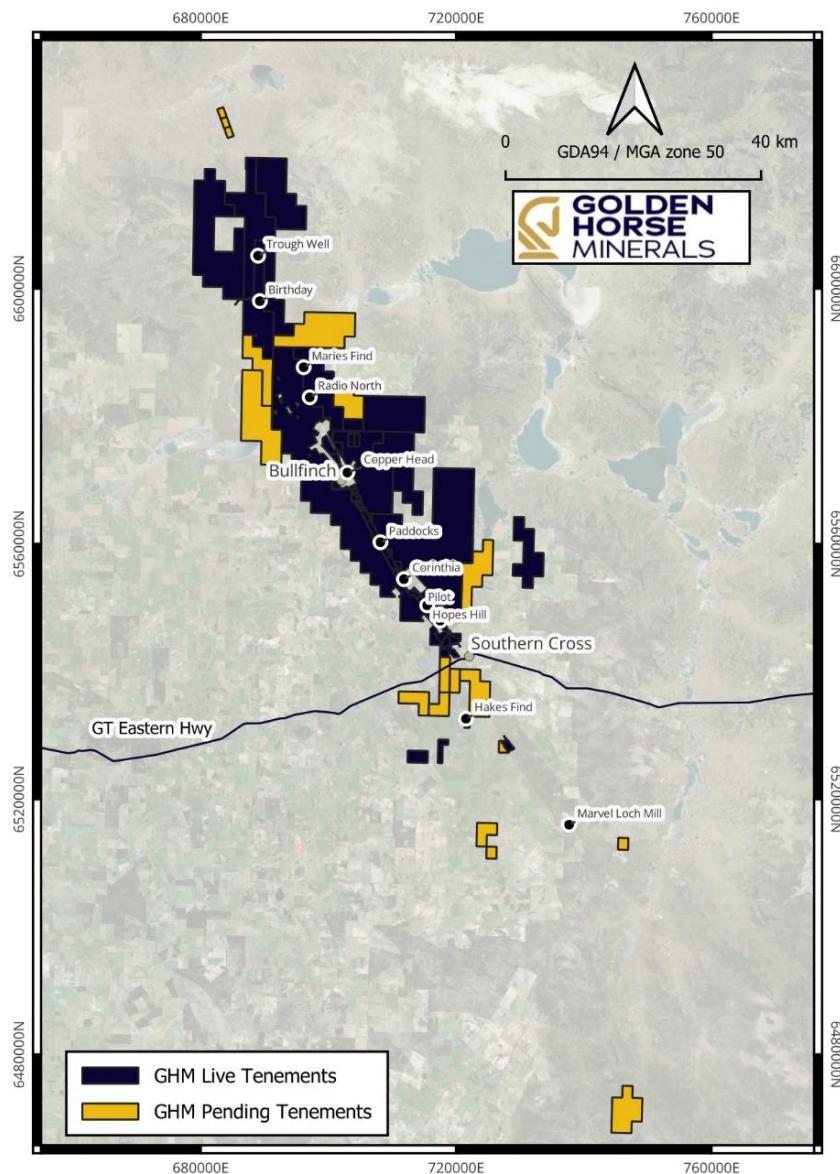


Figure 2: Golden Horse Southern Cross Project.

Ennuin North Soil Sampling

A first pass programme of 240 soil samples (~200g screened to minus 2mm) were collected at Ennuin North (Figure 3) using hand tools from 10-20cm depth, at an 80m spacing along 400m spaced NE-SW lines. Sampling was completed in January 2024 by contractor group, Terra Search Pty Ltd.

The soil samples were delivered to Labwest Minerals Analysis Pty Ltd (Labwest) in Malaga WA for sample preparation and chemical analysis using the Ultrafine™ assay technique developed by the CSIRO to better detect subtle anomalies under transported cover. Samples were assayed using an ICPMS finish for 53 elements including lithium and associated elements. The results for lithium and other key elements for all the 240 soil samples are presented in Appendix 1, and the +60ppm Li results and associated elements are presented in Table 1.

The lithium results clearly show widespread anomalism (with 11 results over 60ppm Li – peak result 87.7ppm) and numerous results with anomalous caesium (peak result 58.4ppm). Results over 60ppm lithium are considered highly significant in this geological setting. The geology and structural setting are also positive with a significant thickness of greenstone in a structurally complex zone with nearby granite domes, characteristics often associated with WA pegmatite intrusions.

Table 1.: Ennuin North Soil Geochemistry, Li > 60 ppm.

Sample	East	North	Au	Be	Cs	Li	Nb	Rb	Sn	Ta
EN0021	686503	6613750	2.8	2.58	18.5	87.7	1.21	91.5	7.59	0.006
EN0096	686855	6612958	12.6	3.12	7.19	69.9	0.92	51.4	2.78	0.009
EN0174	687375	6612313	3.2	5.22	37.1	69.4	0.76	155	2.5	0.006
EN0022	686559	6613808	1.5	2.76	12.5	64.3	2.26	108	5.72	0.031
EN0183	687872	6612831	2.9	1.6	4.58	64	0.83	43.3	2.26	0.004
EN0097	686908	6613005	18.2	2.78	5.98	62	0.53	49.4	2.01	0.003
EN0028	686892	6614147	1.8	2.89	6.61	61.4	3.73	68.2	6.33	0.02
EN0012	686000	6613248	27.5	1.85	23.9	61.3	0.45	86	1.71	0.006
EN0024	686669	6613915	2	2.8	13.1	61	0.85	56.1	4.28	0.01
EN0040	687568	6614819	3.3	3.71	4.25	60.7	0.55	72.1	2.29	0.005
EN0098	686970	6613068	21	2.81	8.27	60	0.84	69.5	2.49	0.004
Notes:	All units are ppm except Au in ppb									
	Grid System GDA 94 Zone 50									

The initial soil sampling programme at Ennuin North was completed with a relatively wide spaced sample spacing and was aimed at a first pass assessment of the lithium potential in an area with typically subdued outcrop and patchy alluvial cover. The results are considered highly encouraging and Golden Horse intends to undertake more detailed geological field mapping along with further soil sampling to both infill the current areas of Li anomalism with closer spaced samples and extend the coverage through the Ennuin North area. The most significant lithium anomalism was identified at the northmost soil sampling line; hence the coverage will be extended to the north as a priority.

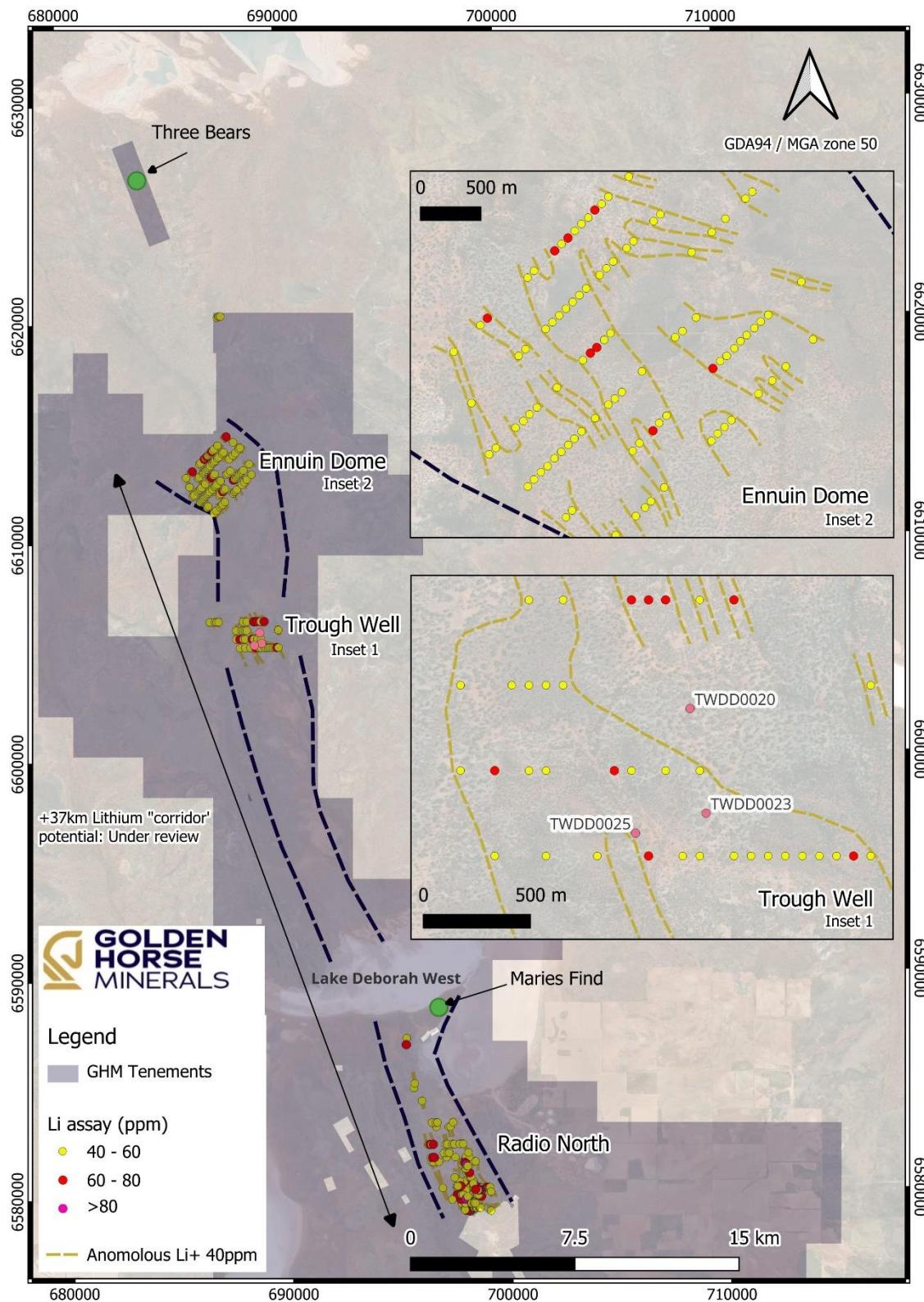


Figure 3: Lithium soil sampling results at Trough Well and Ennuin North.

The soil geochemistry at Ennuin North also produced significant gold anomalism (peak assay 724 ppb Au) over the previously identified Scorpio Prospect¹ (Figure 3). Five successive, 80m spaced samples produced anomalous values averaging 266ppb Au approximately perpendicular to the interpreted NW-SE strike of the previously defined Scorpio anomaly. Centred on historic workings and subject to several campaigns of mainly shallow drilling, the Scorpio Prospect data will be reviewed and prioritised along with GHM's numerous gold targets along the Southern Cross Greenstone belt.

Trough Well Historical Core Analysis

In 2011/12 Western Areas drilled a number of deep diamond core holes (some with RC pre-collars) to test geophysical derived nickel targets². The recorded core logs were reviewed by Golden Horse and a number of intervals logged as pegmatite were identified. The pegmatites extended up to 5m in length downhole, (refer to Figure 3 for hole locations).

The core was located in a bush storage area, near the Trough Well deposit. Most of the core was in excellent condition although some stacks of core trays were damaged. See Appendix 2 for hole details and Table 2 for the sampled intervals.

Trays, from holes TWDD0020, TWDD0023 and TWDD0025, were re-located to Perth and the core was selectively sampled after being sawn in half. Half core samples were taken at geological intervals and the samples delivered to Portable Spectral Services in Perth for Raman and pXRF analysis.

Table 2: Historical ‘TW’ series holes sample intervals.

Hole No.	Samp No	From	To	Length	Recovered cm	% Recovery	Geology
TWDD020	TW020-1	354.14	356	1.86	48	26%	Pegmatite
TWDD020	TW020-2	356	357	1	40	40%	Altered granite
TWDD020	TW020-3	357	357.3	0.3	30	100%	Pegmatite
TWDD020	TW020-4				50		Spilled core - pegmatite fragments recovered
TWDD023	TW023-1	232.3	233.3	1	100	100%	Highly altered granite
TWDD023	TW023-2	233.3	234.3	1	100	100%	Moderately altered granite - peg veins
TWDD023	TW023-3	234.3	235.3	1	100	100%	Moderately altered granite - peg veins
TWDD023	TW023-4	235.3	236.3	1	100	100%	Moderately altered granite - peg veins
TWDD025	TW025-1	300.65	301.65	1	100	100%	Altered granite
TWDD025	TW025-2	301.65	302.6	0.95	95	100%	Pegmatite
TWDD025	TW025-3	302.6	303.6	1	100	100%	Altered granite
Notes	Pegmatite originally logged in TW020 from 354.14-360.4m (WAMEX A97403)						
	The tray containing core after 356m was partially damaged and pegmatite core samples recovered from the ground						
	hence results from sample TW020-4 were not considered						

The pXRF and Raman analysis completed by Portable Spectral Services (PSS) entailed:

- pXRF point data for 26 elements being collected at nominal 10 cm intervals along the core; and
- a Raman spectrometer being used on points in the drill core that were perceived to have potential for spodumene mineralisation or other lithium associated minerals.

Hence the data represent a series of point data – not an average content for any lithium or other elements or in minerals present (e.g. spodumene). The selective calculated K/Rb ratios, with values <30, along with the key LCT pegmatite associated elements are shown in Table 3 with all pXRF data shown in Appendix 3. Limitations in pXRF analysis mean elements with low atomic weights (e.g. lithium and beryllium) cannot be measured with this technology.

¹ WAMEX Report A131609. 2022 Enterprise Metals Ltd – Partial Surrender Report, Bullfinch North, Dermot Ryan.

² WAMEX Report 97403. 2012 Western Areas Ltd – Bullfinch Project, Annual Technical Report, Nickel, P Dereverman.

The Raman analysis (35-point readings) did not detect any spodumene or other Li rich minerals. In all readings, albite (feldspar) and quartz were identified.

The K/Br ratio is a measure of potential LCT pegmatites fractionation. Typically, low ratios (<20) are considered to indicate that the fractionation is strong, and that the pegmatite has potential to develop significant accumulations of lithium minerals. Hence, the absence of Li minerals being identified in the Raman spectroscopy is not considered to reduce the potential prospectivity of the pegmatites in the area given the encouraging fractionation. The positive soil geochemistry (peak value 104ppm Li) in the area reported previously (refer TSX-V announcement 13 March 2024 - TSXV: Golden Horse Identifies Lithium Anomaly at Southern Cross North Project) shows there are surface expressions of lithium anomalism at Trough Well and the pXRF work indicates that pegmatites are prospective owing to the fractionation. Pegmatite outcrop has also been identified through historic surface mapping at Trough Well³.

Table 3: Selected pXRF results from TWDD holes along with calculated K/Rb ratios.

File #	Sample	K/Rb	K	Ga	Rb	Nb	Sn	Cs	Ta
68	TW025-3_4	10	1296	x	128	3	x	x	x
62	TW025-2_5	10	3665	47	360	x	x	43	x
12	TW020-4_2	13	2970	23	236	8	x	x	x
69	TW025-3_5	13	1450	x	111	7	x	x	x
9	TW020-3_2	14	634	21	46	13	x	x	12
13	TW020-4_3	16	2873	22	179	7	x	x	x
39	TW023-3_7	16	15862	x	981	x	x	52	x
31	TW023_2_6	16	4382	x	271	x	x	26	x
11	TW020-4_1	17	1910	22	111	7	16	x	x
51	TW025-1_4	18	2363	x	128	3	x	x	x
28	TW023_2_3	19	3206	x	167	x	x	26	x
10	TW020-3_3	21	18494	27	885	x	x	x	x
3	TW020-1_1	23	1688	43	73	29	24	x	18
59	TW025-2_2	23	3856	21	165	10	27	x	x
5	TW020-1_3	24	1271	22	53	26	18	x	12
6	TW020-2_1	24	2435	28	100	30	28	44	x
52	TW025-1_5	25	1483	x	60	3	x	x	x
27	TW023_2_2	25	20523	32	810	x	x	43	x
4	TW020-1_2	27	1397	26	51	19	24	x	x
58	TW025-2_1	28	16951	49	601	x	27	36	21
60	TW025-2_3	29	2001	49	69	x	x	x	21
14	TW020-4_4	29	1917	x	66	4	x	x	x
Notes:		x – below detection							

GHM will further analyse all the historical data along with new field mapping and follow up geochemical sampling to identify near surface anomalism for drill testing.

Geophysical Data Review

Geophysical Consultant Group Resource Potentials Pty Ltd (“Respot”) was engaged in January 2024 to undertake a high-level review of the lithium potential of GHM’s tenure. The aim was to identify obvious lithium targets that could be identified through existing geophysical and geological data.

Respot completed a compilation and review of open-file and government geophysical survey data and undertook processing and imagery creation. Various filters were applied to generate a suite of georeferenced magnetic, radiometric, digital elevation and ground gravity images. Respot also reviewed all the available soil geochemistry and drill data to assist in prioritising targets. The output was a series of targets that require ground truthing and assessing. The main targeting tools used were

³ WAMEX Report 97403. 2012 Western Areas Ltd – Bullfinch Project, Annual Technical Report, Nickel, P Dereverman.

distance from surrounding granites, demagnification zones (as evident at the Mt Holland lithium project to the south), anomalous potassium radiometric data (high K often associated with LCT pegmatite intrusions) and the gravity gradient (indicative of thickness of greenstone), used in conjunction with the existing geological and drilling data.

The review identified clusters of targets around GHM's three initial targets (Radio North, Trough Well and Ennuin North) but also additional new areas (Figure 4). The new areas include one 4km west of the Radio North prospect and another immediately south of Bullfinch. These areas will be prioritised and reviewed as part of our ongoing lithium exploration plan.

Many of the pegmatites identified along the belt to date have a low relief surface expression and hence require on-ground coverage and soils programs to locate. This supports GHM's belief that further pegmatite zones will be located using field mapping and a comprehensive soil geochemical coverage.

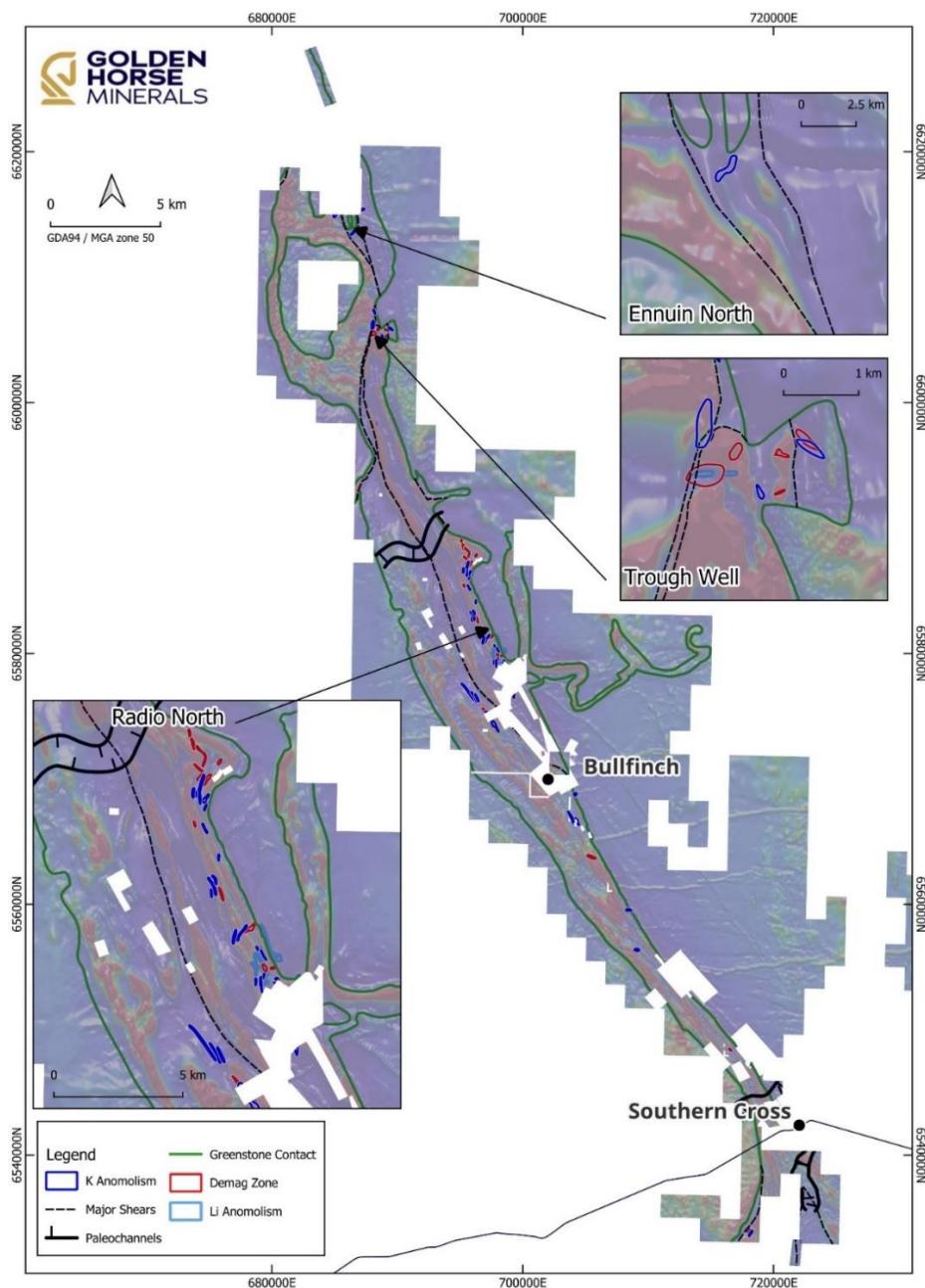


Figure 4: Targets defined by Geophysical Data Review for Field Validation.



Future Work

With positive soil geochemistry results extending from GHM's Radio North Prospect in the south to Ennuin North, GHM has identified a 37km long corridor with prospective greenstone geology with identified pegmatite intrusions and with encouraging lithium geochemical anomalism at Radio North, Trough Well and now Ennuin North. The geophysical data supports the prospectivity of these targets and also has been used to identify new potential pegmatite target zones. The pXRF results from Trough Well suggest that pegmatites with a prospective fractionation (that is typically identified in lithium deposits) are present – further adding to the story.

Outside these three prospects, the corridor has not been assessed for lithium mineralisation and the Company perceives significant potential to define new high priority lithium targets in a number of locations along the tenement holding. Many of the pegmatites identified along the belt to date have a low relief surface expression and hence require significant on-ground coverage to be located. This factor also supports GHM's belief that further pegmatite zones will be located using field mapping and a comprehensive soil geochemical coverage. The recent geophysical data review will also aid in more efficient targeting in the early stages.

The very encouraging geochemistry results (from all of GHM's soil sampling programmes to date) provide a clear direction for further work to define lithium drill targets. The results are supported by the recent geophysical review and the analysis of the historical core from Trough Well. Further soil sampling and field validation at the identified targets is anticipated to commence in June. Regional soil sampling programmes, aimed at defining new drill targets along GMH's 37km long prospective lithium belt north of Bullfinch is also planned.

For and on behalf of the Board

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Competent Person's Statement

Mr Jonathan Lea, a member of the Australian Institute of Mining and Metallurgy (AusIMM) and an independent Qualified Person as defined by National Instrument 43-101, is responsible for the preparation of the technical content regarding the Southern Cross Project contained in this document. Mr. Lea is a non-executive director and shareholder of Golden Horse Minerals and has reviewed and approved the technical disclosure in this news release.

QA/QC procedures for the reported soil sampling include Certified Reference Materials and/or LabWest Minerals Analysis Pty Ltd in-house controls, blanks and replicates are analysed with each batch of samples at Labwest Minerals Analysis Pty Ltd 10 Hod Way, Malaga WA 6090. Procedures for the reported pXRF and Raman analysis include Certified Reference Materials and/or Portable Spectral Services in-house controls, blanks and replicates are analysed with each batch of samples at Portable Spectral Services Level 1/9 Colin St, West Perth WA 6005.

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APPENDIX 1 – Ennuin North Soil Geochemistry Results

Sample	East	North	Au	Be	Cs	Li	Nb	Rb	Sn	Ta
EN0001	685384	6612632	1.5	2.04	4.39	22.0	0.33	66.3	1.56	0.007
EN0002	685439	6612690	10.5	2.81	3.70	25.3	0.36	43.7	1.46	0.010
EN0003	685493	6612742	11.0	4.97	5.43	24.5	0.56	38.1	1.23	0.006
EN0004	685549	6612801	14.0	6.25	5.57	31.4	0.61	41.0	1.17	0.008
EN0005	685607	6612857	12.8	1.68	5.72	31.0	0.34	45.5	1.75	0.005
EN0006	685671	6612909	5.8	1.68	8.51	32.6	0.58	29.2	2.33	0.004
EN0007	685720	6612969	7.1	1.31	8.91	48.6	0.56	33.5	2.52	0.003
EN0008	685778	6613019	12.6	0.95	4.93	25.5	0.37	24.8	1.10	0.005
EN0009	685835	6613082	4.6	0.59	5.67	31.6	0.28	28.6	1.14	0.003
EN0010	685889	6613136	7.8	0.54	4.81	18.8	0.26	19.1	0.81	0.002
EN0011	685941	6613190	23.1	1.10	8.18	51.0	0.32	11.6	1.58	0.004
EN0012	686000	6613248	27.5	1.85	23.90	61.3	0.45	86.0	1.71	0.006
EN0013	686055	6613302	23.9	1.42	18.00	36.4	0.36	62.5	1.21	0.005
EN0014	686109	6613360	10.2	0.82	13.70	34.8	0.32	52.2	0.99	0.006
EN0015	686166	6613413	8.3	0.45	4.65	24.8	0.50	25.7	0.51	0.004
EN0016	686220	6613469	8.3	0.94	12.40	33.5	0.52	53.1	0.77	0.006
EN0017	686274	6613528	6.1	0.78	7.03	29.7	0.37	42.9	0.84	0.005
EN0018	686334	6613585	5.0	1.50	14.00	48.3	0.58	85.6	1.28	0.005
EN0019	686387	6613642	17.9	2.98	36.60	54.7	0.55	111.0	2.89	0.006
EN0020	686445	6613695	7.7	1.55	19.30	21.3	0.32	74.1	4.34	0.002
EN0021	686503	6613750	2.8	2.58	18.50	87.7	1.21	91.5	7.59	0.006
EN0022	686559	6613808	1.5	2.76	12.50	64.3	2.26	108.0	5.72	0.031
EN0023	686615	6613865	2.7	2.55	13.20	42.7	1.02	70.2	2.88	0.007
EN0024	686669	6613915	2.0	2.80	13.10	61.0	0.85	56.1	4.28	0.010
EN0025	686725	6613974	2.4	3.83	19.20	43.8	4.26	109.0	6.70	0.065
EN0026	686781	6614031	3.3	3.12	8.56	59.5	1.12	56.4	4.60	0.012
EN0027	686837	6614084	5.1	2.25	4.70	50.5	0.88	30.8	6.36	0.013
EN0028	686892	6614147	1.8	2.89	6.61	61.4	3.73	68.2	6.33	0.020
EN0029	686948	6614198	1.3	2.24	4.11	49.6	2.41	56.3	6.27	0.028
EN0030	687004	6614257	1.9	4.95	3.05	43.6	3.51	30.9	7.34	0.027
EN0031	687061	6614307	1.5	2.05	3.75	32.8	4.76	55.1	6.66	0.012
EN0032	687115	6614366	1.4	1.29	4.17	23.4	4.55	49.9	6.05	0.024
EN0033	687174	6614424	1.1	2.49	5.13	43.1	3.34	91.6	4.80	0.018
EN0034	687229	6614478	3.2	1.57	4.04	28.8	1.62	46.4	3.36	0.010
EN0035	687285	6614539	2.6	2.07	3.60	39.4	0.68	73.8	3.11	0.003
EN0036	687341	6614593	2.2	2.24	4.00	31.6	0.48	90.9	3.36	0.005
EN0037	687399	6614649	3.0	2.59	3.55	35.5	0.81	63.7	2.80	0.006
EN0038	687452	6614703	2.3	2.39	3.33	35.7	0.74	68.0	2.47	0.009
EN0039	687512	6614758	2.7	3.21	3.78	48.6	0.72	69.5	2.29	0.005
EN0040	687568	6614819	3.3	3.71	4.25	60.7	0.55	72.1	2.29	0.005
EN0041	685700	6612375	1.8	1.38	2.86	28.1	0.45	33.8	1.79	0.002
EN0042	685756	6612431	5.0	0.99	3.23	30.6	0.47	35.6	2.00	X
EN0043	685812	6612487	12.5	1.30	3.13	30.9	0.35	30.8	1.91	0.001
EN0044	685868	6612543	5.5	2.62	3.11	41.6	0.74	41.4	2.10	0.004
EN0045	685924	6612599	11.9	3.10	3.63	39.6	0.39	61.4	1.94	0.006
EN0046	685980	6612655	18.2	1.91	5.63	32.6	0.59	65.0	1.78	0.004
EN0047	686036	6612711	30.9	1.48	5.88	30.1	0.58	55.5	1.49	0.005
EN0048	686092	6612767	44.4	1.32	7.03	24.8	0.35	55.7	1.41	0.006
EN0049	686148	6612823	43.7	1.62	7.16	22.4	0.39	43.7	1.21	0.004
EN0050	686204	6612879	33.4	1.90	8.05	34.2	0.41	55.6	1.88	0.005
EN0051	686260	6612935	9.4	2.21	10.20	46.4	0.44	84.4	3.80	0.004
EN0052	686316	6612991	12.2	2.60	11.40	56.4	0.35	78.4	3.85	0.005
EN0053	686372	6613047	10.2	1.58	6.50	33.1	0.29	59.5	2.24	0.010
EN0054	686428	6613103	15.9	2.53	5.55	38.2	0.55	50.4	2.40	0.004
EN0055	686484	6613159	38.9	5.04	5.74	45.3	0.53	33.2	2.40	0.004
EN0056	686540	6613215	13.4	2.19	4.89	55.4	0.41	39.9	3.42	0.002
EN0057	686596	6613271	5.0	1.70	5.61	48.0	0.57	49.7	3.28	0.004
EN0058	686652	6613327	4.6	1.19	5.48	44.1	0.85	53.3	3.49	0.001
EN0059	686708	6613383	3.8	1.83	5.33	50.4	0.70	46.2	3.37	0.002
EN0060	686764	6613439	11.3	1.86	5.60	47.6	0.75	48.5	3.33	0.003
EN0061	686820	6613495	7.0	2.59	5.13	58.2	0.65	46.0	3.10	0.004

EN0062	686876	6613551	2.7	1.49	4.79	29.6	0.41	46.5	2.89	0.007
EN0063	686932	6613607	1.3	2.52	7.98	48.1	0.55	80.0	3.97	0.013
EN0064	686988	6613663	2.4	2.13	4.59	41.6	1.13	64.4	4.37	0.021
EN0065	687044	6613719	2.1	2.65	4.83	55.2	1.57	72.1	4.25	0.022
EN0066	687100	6613775	2.1	1.95	4.12	38.6	0.79	65.0	2.73	0.013
EN0067	687156	6613831	1.6	2.53	4.25	52.3	0.74	64.3	2.56	0.006
EN0068	687212	6613887	2.3	2.23	4.33	48.0	0.56	64.5	2.07	0.005
EN0069	687268	6613943	2.2	1.89	4.79	39.8	0.41	55.1	1.64	0.004
EN0070	687324	6613999	1.9	1.69	4.68	29.3	0.35	58.3	1.40	0.005
EN0071	687380	6614055	4.0	3.43	4.62	43.2	0.92	88.0	1.87	0.008
EN0072	687436	6614111	4.6	3.62	4.07	42.2	0.79	75.5	1.77	0.008
EN0073	687492	6614167	5.2	4.01	3.03	31.1	0.44	39.5	1.38	0.003
EN0074	687548	6614223	4.2	0.90	2.83	21.1	0.31	22.1	1.50	0.002
EN0075	687604	6614279	4.0	1.23	3.34	22.8	0.63	24.8	1.82	0.002
EN0076	687660	6614335	X	0.86	2.61	20.0	0.34	23.1	1.11	0.002
EN0077	687716	6614391	2.3	0.83	3.33	18.6	0.25	27.5	1.23	0.001
EN0078	687772	6614447	14.6	0.54	3.72	16.2	0.49	24.5	1.64	0.002
EN0079	687828	6614503	7.3	0.76	2.91	20.4	0.33	20.0	1.79	0.002
EN0080	687884	6614559	52.1	1.19	4.10	43.2	0.57	32.7	2.19	0.004
EN0081	686015	6612117	13.5	2.94	4.27	42.4	0.46	69.9	1.60	0.006
EN0082	686070	6612170	7.7	2.65	4.37	40.6	0.80	70.0	1.77	0.006
EN0083	686130	6612230	17.3	1.79	3.31	22.9	0.52	51.3	1.02	0.007
EN0084	686181	6612285	6.4	1.96	4.17	35.6	0.75	61.3	1.66	0.004
EN0085	686234	6612339	4.6	2.49	5.47	44.8	1.15	68.9	2.11	0.008
EN0086	686298	6612394	2.3	2.36	5.51	41.5	1.38	71.7	2.59	0.011
EN0087	686350	6612450	5.4	2.28	5.35	43.3	1.06	72.6	2.34	0.010
EN0088	686411	6612506	4.4	2.23	5.53	43.4	0.68	64.2	2.54	0.012
EN0089	686465	6612559	2.7	1.62	4.97	31.9	1.44	51.0	2.43	0.011
EN0090	686522	6612623	2.1	1.63	6.28	35.9	0.84	64.1	3.20	0.036
EN0091	686577	6612672	2.0	2.04	5.85	41.6	0.85	64.1	3.08	0.017
EN0092	686625	6612731	2.7	1.76	5.15	34.9	0.99	53.8	2.42	0.009
EN0093	686686	6612790	5.5	1.76	5.74	37.0	1.04	53.1	2.48	0.008
EN0094	686744	6612849	10.7	1.90	6.30	39.8	1.27	61.7	2.54	0.007
EN0095	686794	6612899	12.9	2.43	7.29	54.9	0.42	74.5	2.26	0.010
EN0096	686855	6612958	12.6	3.12	7.19	69.9	0.92	51.4	2.78	0.009
EN0097	686908	6613005	18.2	2.78	5.98	62.0	0.53	49.4	2.01	0.003
EN0098	686970	6613068	21.0	2.81	8.27	60.0	0.84	69.5	2.49	0.004
EN0099	687022	6613123	50.6	1.52	6.74	41.2	0.91	51.4	2.72	0.003
EN0100	687083	6613178	12.4	0.91	6.17	30.4	0.72	45.7	2.64	0.002
EN0101	687135	6613235	8.3	0.80	6.48	23.6	0.27	48.7	3.20	0.012
EN0102	687191	6613291	3.6	1.28	7.69	38.3	0.90	53.3	3.02	0.003
EN0103	687247	6613347	7.2	1.21	7.17	34.2	1.03	58.6	2.84	0.003
EN0104	687303	6613403	4.1	1.06	7.07	32.4	0.81	56.0	2.67	0.002
EN0105	687359	6613459	2.1	1.08	5.99	30.4	0.89	51.8	2.75	0.003
EN0106	687415	6613515	3.2	1.11	5.56	34.9	0.87	45.6	2.67	0.003
EN0107	687471	6613571	2.8	1.18	5.55	37.0	0.86	42.5	2.97	0.004
EN0108	687527	6613627	0.9	1.85	7.13	34.6	0.56	48.7	2.00	0.004
EN0109	687583	6613683	1.3	1.41	4.87	37.2	0.52	34.3	2.08	0.004
EN0110	687639	6613739	4.8	0.64	3.86	17.7	0.62	24.0	1.81	0.001
EN0111	687695	6613795	2.7	1.56	4.58	40.6	0.77	37.2	2.56	0.002
EN0112	687751	6613851	2.8	0.75	2.24	17.5	0.49	18.2	1.47	0.002
EN0113	687807	6613907	1.4	1.05	3.19	28.2	0.39	27.5	1.61	0.002
EN0114	687863	6613963	1.1	1.52	4.89	45.9	0.56	37.5	1.88	0.004
EN0115	687919	6614019	2.1	1.13	3.40	39.8	0.38	36.6	1.51	0.002
EN0116	687975	6614075	2.2	1.57	3.76	50.1	0.47	36.5	1.98	0.003
EN0117	688031	6614131	2.0	0.65	2.51	22.0	0.33	18.5	1.42	X
EN0118	688087	6614187	2.5	1.11	2.65	35.0	0.42	24.4	1.55	0.002
EN0119	688143	6614243	2.3	1.42	3.42	57.8	0.42	46.4	1.76	0.003
EN0120	688199	6614299	5.3	1.82	3.93	53.5	0.53	70.6	1.95	0.004
EN0121	686336	6611850	5.0	1.99	7.30	40.9	1.11	63.8	2.93	0.013
EN0122	686387	6611908	4.9	2.17	7.90	40.8	1.34	68.3	2.70	0.007
EN0123	686444	6611969	7.2	2.61	8.22	46.9	0.95	72.3	2.45	0.005
EN0124	686500	6612019	6.6	2.71	6.87	46.4	0.78	80.5	2.04	0.006
EN0125	686557	6612084	4.9	2.84	7.43	51.8	0.52	82.3	2.03	0.005

EN0126	686613	6612138	9.5	3.01	8.71	54.7	0.51	80.4	1.97	0.004
EN0127	686671	6612195	9.3	2.64	9.55	54.8	0.50	72.1	2.02	0.004
EN0128	686722	6612247	12.4	2.71	9.28	57.2	0.59	69.9	1.70	0.003
EN0129	686781	6612307	17.4	1.88	11.20	40.2	0.54	68.7	1.50	0.008
EN0130	686832	6612356	43.3	1.45	7.86	24.0	0.51	48.3	1.10	0.005
EN0131	686894	6612417	16.0	2.49	11.00	41.8	0.60	73.2	1.89	0.005
EN0132	686946	6612472	16.9	2.24	13.60	37.8	0.60	74.7	1.73	0.004
EN0133	687004	6612530	24.8	2.26	18.60	40.8	0.52	86.0	1.77	0.005
EN0134	687058	6612580	19.7	2.71	21.00	51.2	0.42	94.6	2.13	0.006
EN0135	687117	6612634	58.2	2.78	21.00	58.8	0.55	76.6	2.41	0.004
EN0136	687176	6612694	187.4	1.54	5.77	27.6	0.41	52.4	1.13	0.004
EN0137	687230	6612755	723.7	2.16	8.71	39.1	0.66	66.1	2.73	0.004
EN0138	687283	6612807	315.3	5.14	11.10	56.5	0.71	71.7	7.92	0.004
EN0139	687336	6612859	45.8	1.27	6.36	23.0	0.41	45.1	4.45	0.001
EN0140	687388	6612922	6.2	1.23	5.51	32.6	0.74	46.1	3.16	0.002
EN0141	687453	6612971	6.0	0.59	4.47	19.7	0.68	38.1	2.85	0.001
EN0142	687503	6613028	4.7	0.56	4.18	20.3	0.70	32.1	2.83	0.001
EN0143	687559	6613090	3.3	2.06	4.32	52.1	0.48	83.7	2.51	0.003
EN0144	687620	6613141	3.3	1.85	4.07	42.2	0.53	50.5	2.74	0.004
EN0145	687675	6613199	1.5	1.65	3.99	36.5	0.51	39.2	2.71	0.002
EN0146	687732	6613253	2.0	1.86	4.25	42.0	0.50	46.8	2.78	0.002
EN0147	687789	6613307	8.4	1.42	3.84	19.3	0.35	46.1	1.84	0.004
EN0148	687853	6613372	1.6	0.93	1.51	16.4	0.18	13.3	1.38	X
EN0149	687900	6613426	1.8	0.33	1.18	4.4	0.15	13.6	1.18	X
EN0150	687951	6613478	4.0	0.62	3.04	14.6	0.45	28.9	2.26	0.002
EN0151	688007	6613537	0.9	1.15	5.20	25.0	0.27	39.9	1.31	0.001
EN0152	688067	6613591	1.8	1.35	2.96	29.2	0.27	49.9	1.53	0.002
EN0153	688123	6613644	1.8	0.64	1.51	15.0	0.34	18.7	1.17	0.003
EN0154	688178	6613700	3.3	0.43	1.46	6.1	0.19	13.2	1.12	0.001
EN0155	688235	6613761	5.7	0.72	1.92	11.1	0.31	18.1	1.48	0.001
EN0156	688286	6613818	6.5	0.63	3.53	20.0	0.75	40.7	2.68	0.002
EN0157	688335	6613875	3.4	1.06	3.55	26.9	0.61	33.5	2.46	0.004
EN0158	688401	6613929	4.8	0.45	3.50	19.7	0.57	35.7	2.17	X
EN0159	688459	6613974	3.3	1.00	4.14	29.4	0.71	44.2	2.56	0.002
EN0160	688518	6614042	4.8	0.65	3.85	21.7	0.49	47.7	2.47	0.002
EN0161	688652	6611594	5.3	3.26	8.88	50.8	0.47	115.0	1.97	0.005
EN0162	686703	6611651	8.9	2.94	8.68	45.0	0.55	97.7	1.77	0.004
EN0163	686757	6611709	7.4	2.34	9.30	37.2	0.41	93.5	1.61	0.006
EN0164	686816	6611763	9.5	2.23	10.60	29.3	0.34	100.0	1.61	0.005
EN0165	686880	6611823	8.4	1.77	10.30	28.0	0.38	82.8	1.37	0.004
EN0166	686929	6611873	13.3	1.63	10.70	22.6	0.38	78.0	1.29	0.004
EN0167	686983	6611928	5.9	1.77	12.00	24.8	0.40	92.4	1.55	0.004
EN0168	687040	6611988	4.5	1.49	11.20	23.3	0.42	74.4	1.26	0.004
EN0169	687096	6612047	2.5	2.76	14.70	39.5	0.43	100.0	1.92	0.004
EN0170	687154	6612102	4.5	1.99	17.00	26.2	0.37	104.0	1.46	0.004
EN0171	687206	6612146	4.3	2.89	23.20	43.0	0.49	128.0	1.71	0.006
EN0172	687262	6612210	7.5	2.29	16.60	41.1	0.74	79.7	1.48	0.005
EN0173	687314	6612262	9.9	2.07	25.30	31.1	0.39	95.4	1.54	0.004
EN0174	687375	6612313	3.2	5.22	37.10	69.4	0.76	155.0	2.50	0.006
EN0175	687426	6612378	1.6	3.37	32.40	46.2	0.60	128.0	1.56	0.004
EN0176	687488	6612438	5.2	1.30	29.80	43.2	0.61	70.1	0.82	0.006
EN0177	687537	6612489	7.5	3.42	25.20	38.6	0.70	81.2	1.21	0.006
EN0178	687594	6612543	1.7	2.74	11.10	20.4	1.33	57.2	1.25	0.010
EN0179	687655	6612603	2.1	3.23	11.00	21.3	0.69	60.0	1.34	0.007
EN0180	687711	6612661	1.4	4.26	6.38	29.8	0.70	57.2	1.73	0.006
EN0181	687762	6612715	1.7	0.86	4.01	12.1	0.70	25.9	1.17	0.001
EN0182	687822	6612769	2.7	0.82	3.81	21.0	0.69	25.2	1.73	0.002
EN0183	687872	6612831	2.9	1.60	4.58	64.0	0.83	43.3	2.26	0.004
EN0184	687932	6612892	5.7	1.12	3.19	45.5	0.62	33.1	1.63	0.002
EN0185	687987	6612935	4.6	2.58	37.80	50.8	1.05	125.0	1.48	0.004
EN0186	688050	6612998	5.0	3.79	58.40	59.5	0.92	196.0	1.95	0.008
EN0187	688101	6613057	5.1	2.41	53.00	43.3	0.46	143.0	1.70	0.003
EN0188	688152	6613107	5.8	1.28	29.20	46.5	0.68	89.4	1.14	0.012
EN0189	688216	6613166	11.1	0.62	27.80	56.4	0.49	56.2	0.53	0.003

EN0190	688269	6613220	4.3	0.83	21.40	44.9	0.39	61.0	0.86	0.004
EN0191	688331	6613275	5.2	1.68	4.41	41.2	0.59	32.9	2.18	0.010
EN0192	688386	6613327	3.4	0.56	1.22	12.9	0.48	9.2	0.88	0.001
EN0193	688437	6613386	3.6	1.03	1.70	18.6	0.38	27.0	1.03	0.004
EN0194	688495	6613443	1.6	1.10	3.15	18.9	0.45	37.2	1.20	0.004
EN0195	688554	6613503	16.2	0.64	1.35	15.4	0.44	13.1	1.04	0.001
EN0196	688606	6613551	3.0	1.49	4.55	42.8	0.62	37.7	2.49	0.008
EN0197	688665	6613619	3.6	0.81	4.63	26.0	0.91	35.0	2.42	0.004
EN0198	688716	6613668	1.5	1.19	4.77	34.1	0.78	49.7	2.27	0.004
EN0199	688771	6613731	2.1	1.47	5.18	37.2	0.97	49.2	2.43	0.004
EN0200	688831	6613782	1.7	1.55	4.55	39.6	0.76	54.9	2.06	0.003
EN0201	686960	6611336	17.4	2.00	8.54	41.2	0.52	65.0	1.54	0.006
EN0202	687012	6611390	21.8	1.16	9.64	25.8	0.17	49.7	1.20	0.012
EN0203	687065	6611446	32.5	2.61	10.00	47.8	0.61	63.7	1.51	0.005
EN0204	687128	6611500	32.4	2.24	9.42	35.1	0.67	58.0	1.42	0.005
EN0205	687184	6611556	18.7	2.75	8.15	33.1	0.88	66.7	1.80	0.005
EN0206	687233	6611604	24.2	3.60	7.53	44.2	1.09	80.0	2.38	0.005
EN0207	687309	6611675	7.1	1.81	7.99	44.2	1.40	31.8	2.87	0.003
EN0208	687357	6611727	8.4	2.31	7.12	45.6	1.22	33.4	2.88	0.003
EN0209	687405	6611779	9.6	1.52	4.81	33.3	1.01	23.3	2.22	0.002
EN0210	687468	6611842	11.1	1.74	6.31	43.7	0.82	43.5	1.64	0.003
EN0211	687521	6611895	4.3	1.36	21.40	28.6	0.43	52.5	0.91	0.008
EN0212	687577	6611952	14.8	2.19	23.00	37.8	0.76	73.1	1.11	0.008
EN0213	687634	6612005	8.9	1.74	16.70	34.8	0.39	45.8	0.68	0.007
EN0214	687692	6612059	3.3	2.18	14.90	35.0	0.40	76.0	1.47	0.005
EN0215	687749	6612119	5.6	2.21	19.90	35.7	0.66	94.7	1.31	0.006
EN0216	687794	6612178	2.7	1.87	16.10	38.4	0.62	96.0	1.40	0.004
EN0217	687861	6612229	2.9	3.66	17.60	46.4	0.93	102.0	2.26	0.006
EN0218	687912	6612289	4.8	2.97	31.40	52.7	0.65	118.0	1.91	0.005
EN0219	687968	6612344	2.4	1.99	13.80	46.4	0.70	66.5	1.36	0.005
EN0220	688026	6612401	3.2	2.38	19.30	42.3	0.97	99.9	1.70	0.005
EN0221	688082	6612461	4.4	2.59	10.50	23.9	0.78	79.8	2.15	0.004
EN0222	688140	6612508	2.5	4.36	3.52	29.4	0.56	39.5	2.21	0.005
EN0223	688191	6612564	3.7	1.91	5.05	24.0	0.42	41.9	1.83	0.001
EN0224	688250	6612620	5.5	2.08	4.27	50.0	0.35	21.5	2.20	0.001
EN0225	688308	6612675	6.3	1.35	3.09	28.1	0.49	44.1	1.31	0.003
EN0226	688365	6612730	1.6	1.48	2.93	41.0	0.60	35.6	1.70	0.003
EN0227	688417	6612794	1.8	1.85	6.09	35.2	0.69	55.5	1.87	0.002
EN0228	688477	6612847	2.5	1.25	3.47	44.0	0.66	39.8	1.93	0.001
EN0229	688532	6612901	2.7	1.39	3.35	38.0	0.65	39.4	1.91	0.001
EN0230	688588	6612954	5.6	1.08	2.74	22.9	0.47	42.5	1.63	0.003
EN0231	688642	6613016	7.1	1.49	3.64	37.8	0.84	31.0	2.29	0.001
EN0232	688703	6613072	7.1	1.92	3.88	41.4	1.14	33.7	2.35	0.003
EN0233	688755	6613125	5.9	1.59	3.53	33.7	0.83	35.6	2.11	0.004
EN0234	688816	6613182	6.4	1.04	4.01	31.9	0.94	33.5	2.38	0.002
EN0235	688868	6613234	6.8	0.67	3.48	15.7	0.65	34.5	1.98	0.001
EN0236	688936	6613300	1.4	1.23	3.34	26.0	0.73	54.2	1.54	0.002
EN0237	688981	6613350	3.5	0.91	4.11	25.3	0.88	40.8	2.25	0.001
EN0238	689033	6613405	2.0	0.86	4.07	25.7	0.91	48.2	2.43	0.002
EN0239	689092	6613460	2.6	0.94	4.35	31.5	0.50	52.0	2.41	0.008
EN0240	689148	6613517	3.3	1.21	4.29	39.9	0.49	55.4	2.52	0.004
Notes: All units are ppm except Au in ppb										
Grid System GDA 94 Zone 50										
X - below detection										

APPENDIX 2 - Trough Well Historical Drill Hole Details

Prospect	Hole No.	Easting	Northing	RL	Total Depth	RC Depth	Core Depth	Azimuth	Dip	Year Drilled
Trough Well	TWDD0017	688927	6605687	437	424	361	63	81	-65	2012
Trough Well	TWDD0018	688731	6604863	436	136	51	85	81	-65	202
Trough Well	TWDD0019	688931	6605533	438	442	396	46	81	-65	2012
Trough Well	TWDD0020	688954	6605841	433	436	346	90	81	-65	2012
Trough Well	TWDD0023	689029	6605350	433	245	43	202	153	-63	2012
Trough Well	TWDD0024	688880	6605384	435	844	0	844	90	-60	2011/2012
Trough Well	TWDD0025	688699	6605257	423	485	0	485	90	-60	2012
Trough Well	TWDD0026	689655	6605354	428	475	0	475	270	-60	2012
Trough Well	TWDD0027	689092	6605245	429	147	0	147	81	-60	2012
Trough Well	TWDD0028	688917	6606124	435	538	0	538	90	-60	2012
Trough Well	TWDD0029	688928	6606001	435	460	0	460	90	-60	2012
Notes:	Coords in MGA 94 Zone 50									
	Drilled by Western Areas Ltd - ref WAMEX A97403									

APPENDIX 3 - pXRF Data from TWDD Drill Holes

File #	Sample	K/Rb	K	Ga	Rb	Nb	Sn	Cs	Ta
3	TW020-1_1	23	1688	43	73	29	24	x	18
4	TW020-1_2	27	1397	26	51	19	24	x	x
5	TW020-1_3	24	1271	22	53	26	18	x	12
6	TW020-2_1	24	2435	28	100	30	28	44	x
7	TW020-2_2	41	15899	22	390	16	15	x	x
8	TW020-3_1		258	x	x	x	21	x	x
9	TW020-3_2	14	634	21	46	13	x	x	12
10	TW020-3_3	21	18494	27	885	x	x	x	x
11	TW020-4_1	17	1910	22	111	7	16	x	x
12	TW020-4_2	13	2970	23	236	8	x	x	x
13	TW020-4_3	16	2873	22	179	7	x	x	x
14	TW020-4_4	29	1917	x	66	4	x	x	x
15	TW020-4_5	33	898	x	27	x	x	x	x
16	TW023_1_1	98	20871	x	212	x	x	x	x
17	TW023_1_2	160	55109	x	345	x	x	x	x
18	TW023_1_3	82	36268	x	441	x	x	x	x
19	TW023_1_4	105	1046	21	10	5	x	x	x
20	TW023_1_5	148	46928	x	318	x	x	39	x
21	TW023_1_6	147	45696	x	310	x	x	x	x
22	TW023_1_7	70	3059	x	44	4	x	x	x
23	TW023_1_8	64	10435	x	162	x	x	x	x
24	TW023_1_9	109	10992	x	101	x	x	x	x
25	TW023_2_1	111	21373	x	193	8	x	46	x
27	TW023_2_2	25	20523	32	810	x	x	43	x
28	TW023_2_3	19	3206	x	167	x	x	26	x
29	TW023_2_4	41	6590	x	162	x	x	x	x
30	TW023_2_5	36	10173	18	284	6	x	x	x
31	TW023_2_6	16	4382	x	271	x	x	26	x
32	TW023_2_7	39	11013	17	284	x	x	x	x
33	TW023-3_1	132	27231	17	206	5	21	x	x
34	TW023-3_2	143	25551	x	179	x	14	x	x
35	TW023-3_3	52	26386	x	507	x	x	42	x
36	TW023-3_4	170	58050	x	341	x	x	x	x
37	TW023-3_5	67	11379	x	170	x	19	47	x
38	TW023-3_6	100	26114	x	261	x	x	x	x
39	TW023-3_7	16	15862	x	981	x	x	52	x
40	TW023-3_8	73	12345	x	170	x	x	x	x
41	TW023-4_1	101	27984	x	277	x	x	x	x
42	TW023-4_2	117	35799	x	307	x	x	x	x
43	TW023-4_3	141	104775	x	744	x	x	48	x
44	TW023-4_4	154	55742	x	361	x	x	x	x
45	TW023-4_5	115	63286	x	552	x	x	x	x
46	TW023-4_6	111	11552	19	104	x	14	x	x
47	TW023-4_7	56	11146	x	200	x	x	x	x
48	TW025-1_1	40	1917	x	48	4	x	x	x
49	TW025-1_2	70	18841	x	268	x	25	x	x
50	TW025-1_3	33	11938	x	366	8	x	x	x
51	TW025-1_4	18	2363	x	128	3	x	x	x
52	TW025-1_5	25	1483	x	60	3	x	x	x
53	TW025-1_6	32	1961	17	62	7	23	47	x
54	TW025-1_7	55	4261	x	77	x	24	x	x
58	TW025-2_1	28	16951	49	601	x	27	36	21
59	TW025-2_2	23	3856	21	165	10	27	x	x
60	TW025-2_3	29	2001	49	69	x	x	x	21
61	TW025-2_4	64	3150	40	49	x	x	x	18
62	TW025-2_5	10	3665	47	360	x	x	43	x
63	TW025-2_6	38	1551	29	41	x	19	41	22
64	TW025-2_7	34	58240	29	1715	5	13	75	x
65	TW025-3_1	45	3964	17	89	4	23		13
66	TW025-3_2	42	20296	x	482	4	x	59	x
67	TW025-3_3	46	2274	x	49	13	29	x	x
68	TW025-3_4	10	1296	x	128	3	x	x	x
69	TW025-3_5	13	1450	x	111	7	x	x	x
70	TW025-3_6	76	15304	x	201	6	24	x	
71	TW025-3_7	34	1787	x	53	28	x	x	x
72	TW025-3_8	50	2161	x	43	13	18	x	x
Notes		All units are in ppb							
		X - below detection							