Date: 8 June 2021

ASX Code: MAN

Capital Structure
Ordinary Shares: 379,399,843
Unlisted Options: 107,450,077 (3c exercise)
Current Share Price: 25c
Market Capitalisation: $94M
Cash: $4.7M (Mar 31 2021)
Debt: Nil

Directors

Patrick Burke
Non-Executive Chairman

James Allchurch
Managing Director

Lloyd Flint
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Ni-rich Ultramafic Prospects Coincident with EM Anomalies Identified

Highlights

- **Two highly prospective Ni-rich ultramafic bodies, not identified by existing government mapping, have been identified at the Jimperding Project**
- **Rock chip results at the new Tolarno North prospect of 0.31% Ni, 503ppm Cu and 20ppb Pt confirms prospectivity for potential PGE-Ni-Cu massive sulphide mineralisation**
- **Both newly discovered prospects, Tolarno North and Tolarno South, are coincident with EM anomalies identified by the recently conducted VTEM™ Max airborne electromagnetic survey, further enhancing their prospectivity**

Mandrake Managing Director James Allchurch commented:

"The discovery of two ultramafic bodies at the Jimperding Project with highly anomalous Ni, Cu and Pt values coincident with EM conductors is an exciting development.

The Company now has a pipeline of prospective Julimar-style Ni-Cu-PGE prospects with drilling at the most advanced prospect, Newleyine, commencing 14 June 2021".

Mandrake Resources Limited (ASX: MAN) ("Mandrake" or the "Company") is pleased to advise of the completion of detailed geological mapping and sampling across the entire ~142km^2 Jimperding Project, located in the Jimperding Metamorphic Belt, 70km north east of Perth, Western Australia.

The Jimperding Project lies approximately 30km east of Chalice Mining Limited's (Chalice) Julimar PGE-Ni-Cu discovery.

The regional geological field assessment was informed by the Versatile Time-Domain Electromagnetic (VTEM™ Max) airborne electromagnetic (AEM) survey recently conducted by Mandrake as well as Geological Survey of Western Australia (GSWA) geological mapping and historical datasets. Deficiencies were identified in the 1:250,000 scale GSWA mapping of the area which appears to have heavily relied on air-photo interpretation in less accessible parts of the project area.

A hand-held Olympus Vanta portable XRF (pXRF) was used to screen rock and soils with a total of 174 samples screened across the project. Of the screened rocks, 22 were submitted to the laboratory for assay (Table 1). Approximately 2,500 geology waypoints were recorded.

Two stand-out prospects, Tolarno North and Tolarno South, were immediately identified with further analysis of the results of the mapping and sampling programme still ongoing. Both of these prospects are located on property owned by the same landowner with discussions underway to facilitate access to conduct a more detailed assessment.

Mandrake notes that no previous work has been conducted at the Tolarno North and South Prospects.

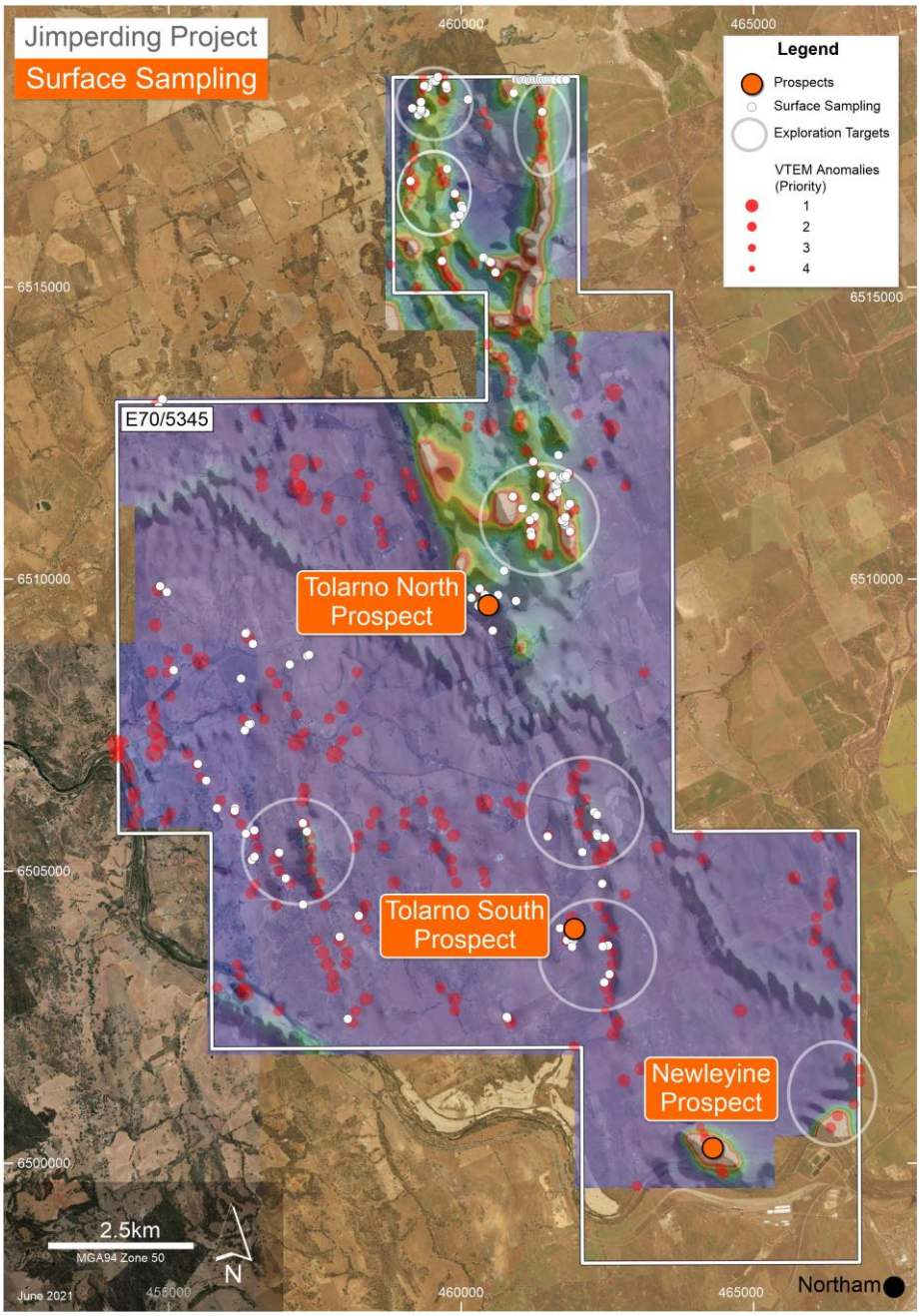

Figure 1 - Jimperding Project Surface pXRF Sampling Locations

Tolarno North Prospect

Field inspection of a VTEM anomaly located in a paddock revealed the existence of a roughly 900m-long by 200m-wide soil-covered zone with intermittent outcropping, subcropping and float ultramafic rock. Strongly ferruginised weathered schist adjacent to the EM anomaly was submitted for assay and recorded 0.31% Ni, 503ppm Cu and 20ppb Pt.

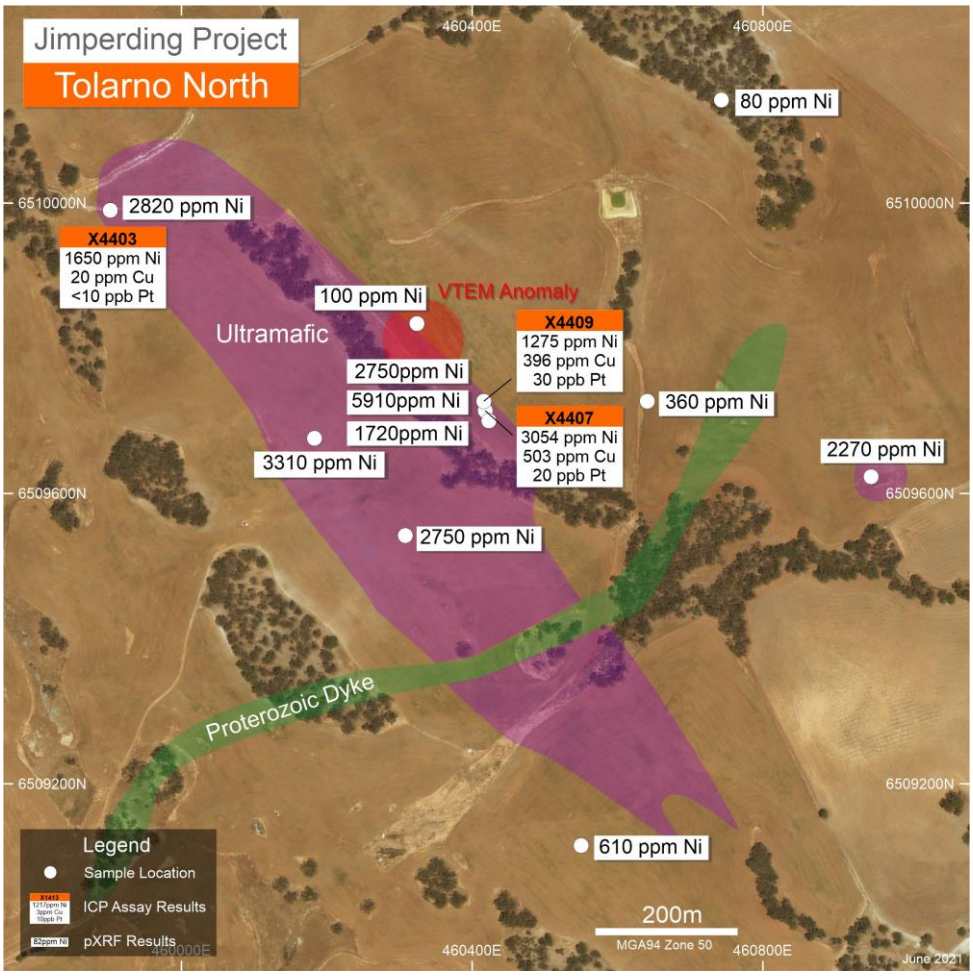

Figure 2 – Tolarno North Prospect – Inferred Ultramafic Extent and Surface Sampling Results

The serpentinised peridotites comprising the majority of the ultramafic rock typically returned values of 0.1% - 0.3% Ni. Ultramafic rock chip sample X4409 was submitted to the laboratory for analysis and returned 0.13% Ni, 396ppm Cu and 30 ppb Pt.

Whilst the true extent of the ultramafic intrusive is unclear, the initial geochemical signature and coincident EM anomalism indicates the potential prospectivity of Tolarno North for PGE-Ni-Cu mineralisation.

Further work is warranted at Tolarno North and is likely to include more detailed mapping and sampling together with ground EM and potentially an air core programme to better characterize the geochemistry and generate drill targets.

Ultramafic outcrop at Tolarno North

Tolarno South Prospect

In the course of investigating three distinct VTEM anomalies and a historic mine shaft believed to have been worked for gold, Mandrake identified an area of approximately 700m x 200m where ultramafic and amphibolite float were found. No source of the EM anomalies were found and no outcrop located. It is noted that colluvium across the area is derived from a quartzite ridge hosting the historic shaft which will likely obscure any outcrop or meaningful soil geochemistry.

One sample of ultramafic float was sent to the lab for assay and returned 0.12% Ni and 10ppb Pt.

Tolarno South warrants further work as the EM anomalies remain unresolved proximal to a potentially favourable host/source rock for PGE-Ni-Cu mineralisation.

Further work would likely include ground EM and an air core programme to better characterize the geochemistry. Mandrake notes that the Tolarno South paddock will not be cropped this year which will make it more amenable to drilling in the short term.

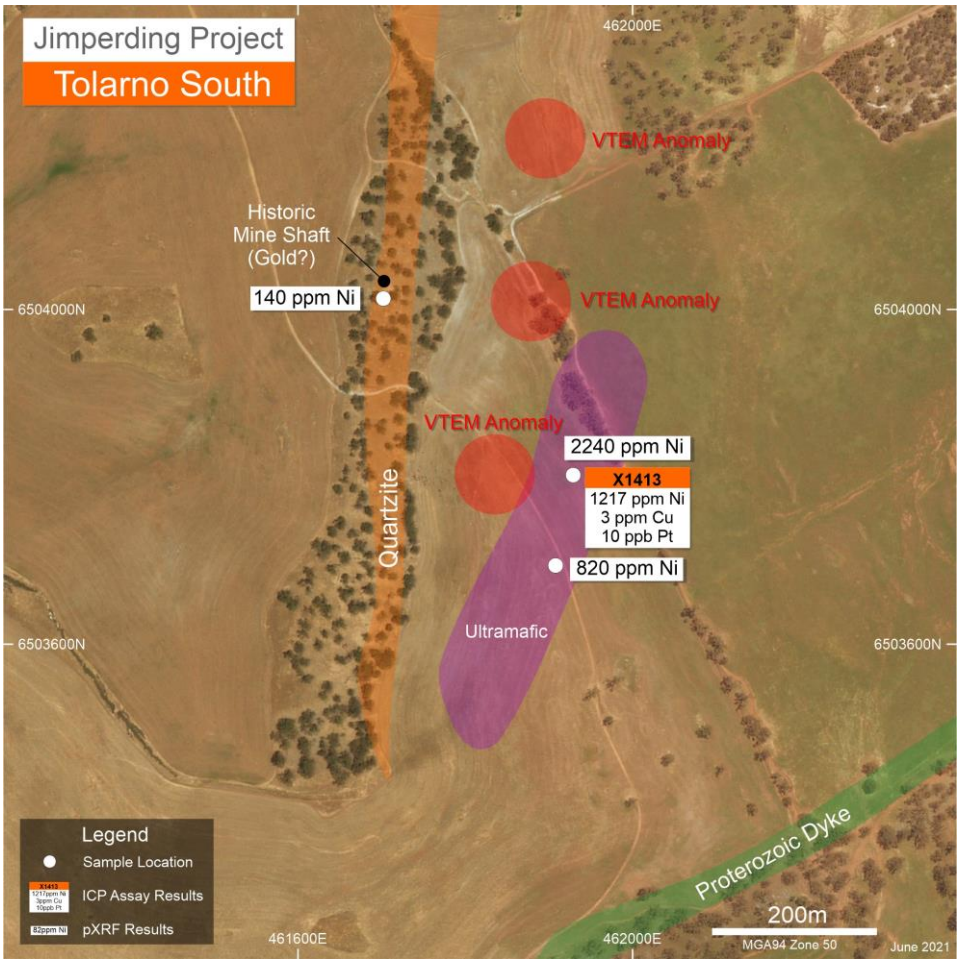

Figure 3 – Tolarno South Prospect – Inferred Ultramafic Extent and Surface Sampling Results

This announcement has been authorized by the board of directors of Mandrake.

About Mandrake Resources

Mandrake is a junior exploration company established with the purpose of exploring and developing gold, nickel, copper and PGE opportunities. The Company controls 100% of a 140km^2 exploration licence prospective for PGE-Ni-Cu in the exciting Jimperding Metamorphic Belt, 70km NE of Perth.

Mandrake also owns a mineral exploration project located in the prolific Pine Creek Orogen of the Northern Territory prospective for gold, silver and base metals.

For further information visit www.mandrakeresources.com.au

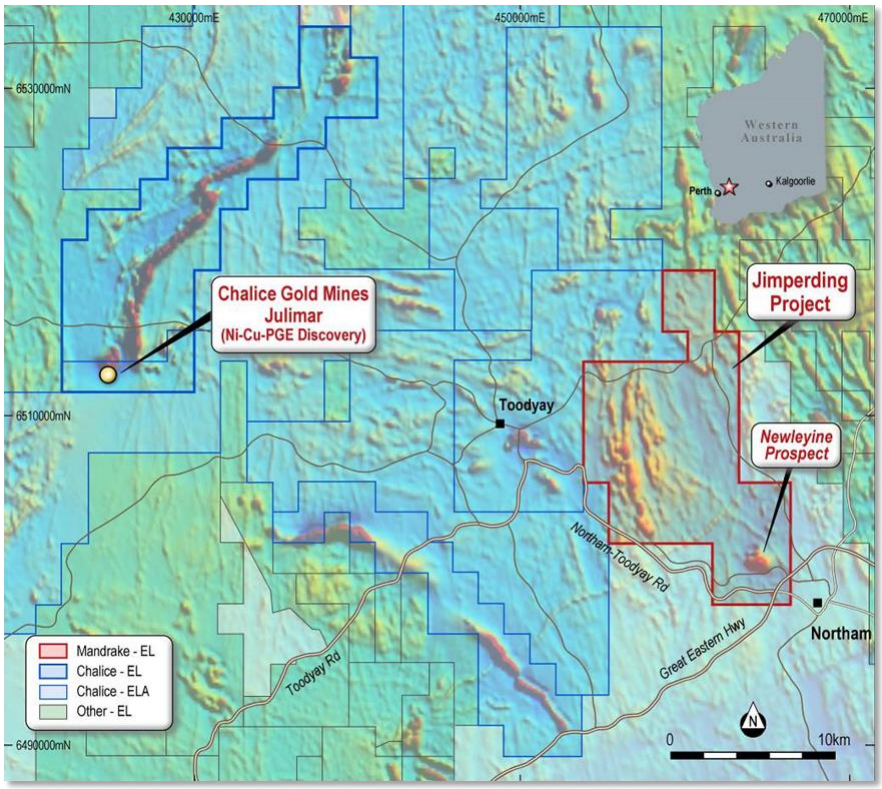

Figure 4 - Regional aeromagnetics – Jimperding Project

Competent Persons Statement

The technical information in this announcement complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr James Allchurch, Managing Director of Mandrake Resources. Mr Allchurch is a Member of the Australian Institute of Geoscientists. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Allchurch consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Table 1: Jimperding project regional rock chip sample assay results

Sample ID	Easting*	Northing*	Cu (ppm)	Ni (ppm)	Pt (ppm)	Pd (ppm)	Pt + Pd (ppm)	Outcrop/Float	Summary Description
X1405	459985	6516241	49	8	0.01	<0.01	0.01	Outcrop	Quartz vein 0.2m wide
X1407	459916	6516082	19	2	<0.01	<0.01	<0.01	Outcrop	Ferruginous metasediment
X1408	459891	6516075	370	3	0.03	0.03	0.06	Outcrop	Lateritic iron stone
X1413	461929	6503802	3	1217	0.01	<0.01	0.01	Float	Peroditite ultramafic, foliated, from farmers pile
X1415	460801	6502472	352	302	0.01	<0.01	0.01	Float	Massive hematite rock
X2408	456467	6505691	6	235	<0.01	<0.01	<0.01	Float	Ultramafic, epidotised,coarse grained
X2413	457299	6505816	766	277	0.01	0.01	0.02	Outcrop	Lateritic iron stone
X3013	461845	6511808	259	9	0.01	0.02	0.03	Float	Quartz-hematite-limonite rock
X3038	459442	6518432	103	15	0.01	<0.01	0.01	Outcrop	Metasediment, gossanous band 10cm thick
X3113	461353	6518588	12	9	<0.01	<0.01	<0.01	Float	Vein quartz from Wongamine gold mine, dump near shaft
X3125	459330	6518018	74	10	0.01	0.02	0.03	Outcrop	Ferruginous metasediment
X3128	459322	6518178	158	6	0.01	0.03	0.04	Outcrop	1m thick ferruginous metasediment
X3405	461702	6504013	79	46	0.01	0.02	0.03	Float	Mafic amphibolite schist, from dump near shaft
X4403	459902	6509990	20	1650	<0.01	<0.01	<0.01	Outcrop	Peridotite-ultramafic
X4407	460418	6509714	503	3054	0.02	<0.01	0.02	Outcrop	Ferruginous schist
X4409	460416	6509727	396	1275	0.03	<0.01	0.03	Outcrop	Ferruginised ultramafic
X4414	460743	6510142	41	19	0.01	<0.01	0.01	Outcrop	Ironstone
X4418	456304	6507405	123	45	0.01	<0.01	0.01	Outcrop	Ultramafic, epidotised amphibolite
X4507	460515	6515430	139	42	0.01	<0.01	0.01	Outcrop	Ferruginous metasediment
X4608	456332	6509081	23	175	0.01	<0.01	0.01	Outcrop	Tremolitic ultramafic
X4613	454853	6509876	3	5	<0.01	<0.01	<0.01	Outcrop	Bucky vein-quartz, 1m wide
X4708	462474	6505563	184	66	0.01	<0.01	0.01	Outcrop	Hematitic iron formation

* - Coordinates are in GDA94 MGA Zone 50
ND - Results below detection

Table 2: Jimperding project regional rock chip/soil pXRF results – raw data

Sample	Description	East	North	Ni %	Cu %
X1406	Fe msed	459916	6516082	<LOD	0.00458
X1407	Fe msed	459916	6516082	<LOD	0.00475
X1408	Fe if	459891	6516075	<LOD	0.02791
X1409	Bnd fe msed pits ex sulf?	459888	6516217	<LOD	0.02417
X1410	Hem lam msed	462524	6503716	<LOD	<LOD
X1411	Qz mu sch	462432	6503698	0.00321	<LOD
X1412	Soil	461820	6503808	0.00545	0.01453
X1413	Boulder um fol pile	461929	6503802	0.22352	<LOD
X1414	Fg um bdr pile	461908	6503694	0.08188	<LOD
X1415	Massive hem rk flt	460801	6502472	0.16505	0.12327
X1416	Massive hem lm flt	460790	6502492	0.15725	0.03505
X1417	Lm klqz sch	462548	6503224	<LOD	0.02878
X1418	Fel sch dip70t025	462459	6503084	0.009	0.00258
X1419	Soil	461974	6503800	0.00983	0.00527
X1420	Soil	461950	6503800	0.00335	0.00208
X1421	Soil	461927	6503798	0.00415	0.00344
X1421a	Soil	461900	6503800	0.00663	0.00975
X1422	Soil	461875	6503799	0.00502	0.01373
X1423	Soil	461850	6503799	0.00626	0.01283
X1424	Soil	461826	6503801	0.00577	0.01802
X1425	Soil	461800	6503800	0.00238	0.00416
X1426	Soil	461775	6503800	0.00152	0.00299
X2405	Mam mafic gneis flt=oat	455827	6506070	0.00825	0.00869
X2406	Mafic amphibolite, cg	456137	6506070	<LOD	0.02392
X2407	Silica-fp-ep-fuchs rock, porphyritic	456131	6506027	<LOD	<LOD
X2407b	Mafic amphibolite, cg	456322	6505634	0.03474	0.00355
X2408	Float, Um, epidotised,cg	456467	6505691	0.24194	<LOD
K2410	Migmatite gneis	456423	6505181	0.00285	<LOD
X2411	Ferruginous rock, after mafic	456893	6505307	<LOD	<LOD
X2412	Float. Um tremolitic	456471	6505239	0.12429	0.00156
X2413	Festone	457299	6505816	<LOD	0.20156
X2414	Oc 1m ferfest	457368	6505670	<LOD	0.01832
X3404	4m band maf gn biqz dip60t092	458256	6504226	0.00274	0.00379
X3405	Mam sch dump shaft	461702	6504013	0.01359	0.00677
X4403	Oc um	459902	6509990	0.28188	<LOD
X4404	Oc um	460183	6509676	0.33141	0.00314
X4405	Oc um	460308	6509542	0.27503	<LOD
X4406	Maf sch	460641	6509727	0.0365	0.02096
X4407	Fer lm sch	460418	6509714	0.59104	0.0802
X4408	Um sch	460423	6509700	0.17208	0.00388

Sample	Description	East	North	Ni %	Cu %
X4409	Fer um	460416	6509727	0.27508	0.0698
X4410	Fer sch qz lam	460324	6509834	0.00976	0.09493
X4412	Dbr feMn rk	460550	6509115	0.06104	<LOD
X4413	Um serp dip68t040	460949	6509623	0.22686	<LOD
X4414	Ironstone	460743	6510142	0.00819	0.00359
X4415	Epidotized um/mam	456365	6507509	<LOD	<LOD
X4416	Weathered um/mam	456402	6507516	<LOD	0.0043
X4417	Fresh um/mam	456377	6507505	<LOD	0.00328
X4418	Clear Hill um	456304	6507405	0.01016	0.02907
X4419	Pd	455500	6506831	0.02207	0.00942
X4420	Fg fe rich rock chilled pd	455643	6506544	<LOD	0.00297
X4504	Lat msed Hem	459680	6515453	<LOD	0.02922
X4505	Fer msed	460387	6515512	<LOD	<LOD
X4506	Oc fer msed In ck	460489	6515450	<LOD	0.0051
X4507	Fer msed vuggy lm and qz bds	460515	6515430	<LOD	0.11806
X4508	Klqzmu sch	460597	6515256	0.01049	<LOD
X4509	Serp peridotite	454905	6513073	0.1598	<LOD
X4510	Cg um serp	454891	6513084	0.19736	<LOD
X4511	Um contact dip55t134, weathered	454828	6512952	0.04364	<LOD
X4512	Lam qz gn dip45t065	454711	6512714	0.01695	0.01012
X4513	Mamgn	454714	6512719	0.01635	0.00492
X4514	Um separate dyke, weathered	454763	6512827	0.22938	<LOD
X4515	Weathered schist	454764	6512830	0.10304	0.00249
X4516	If cobble	455087	6508435	0.12557	<LOD
X4603	Um flt some ep, fol,Wh	456241	6508294	0.00849	0.01512
X4604	Mam hb>>fp on pile fr	457074	6508533	0.04279	0.00225
X4605	Maf- um flt	457373	6508682	0.06863	0.00695
X4606	Mam gabb	457407	6508699	<LOD	0.00265
X4607	Mam hb>>>fp	456443	6508888	0.02466	0.01909
X4608	Trm um flt Wk weath	456332	6509081	0.11519	<LOD
X4609	Mam 55t105	456317	6509067	<LOD	0.0084
X4610	Micaceous mafic float	454976	6509769	0.02442	<LOD
X4611	Oc maf um 20m w pot	454969	6509775	0.00573	<LOD
X4613	Buck qz 1m wide	454853	6509876	<LOD	<LOD
X4703	Fer mafic rk micaceous	462288	6506003	0.0165	0.00287
X4704	Hem qzt sed	462337	6505957	<LOD	0.00526
X4705	Pd flt trace po-cp	461489	6505585	0.00631	0.00772
X4706	Oc ox micaceous amphibolite	462330	6505633	0.00721	0.00566
X4707	Chloritic mafic sch flt	462344	6505596	0.02889	<LOD
X4708	Hematitic Iron formation	462474	6505563	<LOD	0.03787
X4709	Um ser peridotite oc	462085	6505318	0.30369	<LOD

Sample	Description	East	North	Ni %	Cu %
X4710	Mam	462425	6504776	0.11714	<LOD
X4711	Tremlitic mam flt; -15cm thick layer	458067	6502458	0.12425	<LOD
X4712	Ferruginous mottled zone, over kaolin rock		457929	6503866	<LOD
X4803	fer mz maf sch 40t067	457005	6504867	<LOD	<LOD
X4804	Maf fg Pd?	457303	6504419	<LOD	<LOD
29 1	Soil	461078	6511216	0.00799	<LOD
30 2	rk if	461567	6511411	<LOD	<LOD
30 3	rk Laterite	461286	6511412	0.00846	0.00511
30 4	rk if/Laterite	461056	6511207	<LOD	0.01741
30 5	rkFe mo sed	461056	6511207	<LOD	<LOD
30 6	rk Mb bdr	461056	6511207	0.01368	<LOD
30 7	rk mz seds?	461056	6511207	0.00171	<LOD
30 8	rk Feschist	461272	6511070	<LOD	<LOD
30 9	Soil	461187	6511007	0.00422	0.00129
30 10	rk Laterite	461199	6510811	0.00628	<LOD
30 11	so-Lateritic	461210	6510742	0.01212	<LOD
X3003	If	461661	6511509	<LOD	0.03839
X3004	If	461659	6511487	<LOD	0.02409
X3005	Ldc pis	461617	6511604	0.00429	0.00306
X3006	If minor	461643	6511617	<LOD	0.01023
X3007	If qz bnd	461673	6511691	<LOD	0.00579
X3008	Fe sch	461681	6511688	<LOD	<LOD
X3009	Lam msed kl	461705	6511711	0.00831	<LOD
X3010	Sandy lam msed	461762	6511735	<LOD	0.00351
X3011	Fe snd msed qz vns	461804	6511725	0.00759	0.00295
X3012	Xso	461844	6511808	0.0025	0.00755
X3013	Flt qzhmlm	461845	6511808	<LOD	0.09679
X3014	Flt feqzrk	461846	6511819	<LOD	0.00374
X3015	Flt m vn qz	461837	6511819	<LOD	<LOD
X3016	Qmic sch	461758	6511759	<LOD	<LOD
X3017	Qvn 30cm lam 48t124	461806	6511770	<LOD	<LOD
X3018	Lam fe msed qz bnds	461578	6511769	<LOD	0.0191
X3019	Ldc	461376	6511804	0.00361	0.00527
X3020	Lso	461243	6512015	0.00499	<LOD
X3021	Lfe	461674	6512123	<LOD	0.0182
X3023	Ldc a18	460895	6511413	0.00412	<LOD
X3024	Dark br soil	461871	6510815	0.01127	0.01009
X3025	Hem if 20t131	461783	6510924	<LOD	<LOD
X3026	Qzt vuggy 40t116	461775	6510946	<LOD	<LOD
X3027	Qzt 40t086	461775	6510973	<LOD	0.03774
X3028	Fe qz 40t100	461779	6510980	<LOD	0.02176

Sample	Description	East	North	Ni %	Cu %
X3029	So flt mb if qzt	461735	6511005	0.01399	0.01499
X3030	If qzt he	461794	6511059	<LOD	0.00741
X3031	If lat	461836	6511253	<LOD	0.0071
X3032	If lat	461869	6511290	<LOD	0.0228
X3032a	If lat	461869	6511290	<LOD	0.00832
X3032b	If lat	461869	6511290	<LOD	<LOD
X3036	Cg qz mu tou bdr	460126	6518223	<LOD	<LOD
X3037	Gossanousband 10cm	459442	6518432	<LOD	<LOD
X3037a	Gossanousband 10cm	459442	6518432	<LOD	0.03154
X3037b	Gossanousband 10cm	459442	6518432	<LOD	0.01652
X3040	Unk qhm	459376	6518456	<LOD	<LOD
X3040b	Unk qhm	459376	6518456	<LOD	<LOD
X3042	Fe goss msed	459528	6518532	<LOD	0.00838
X3043	Kl am? 43t130	459574	6518537	0.00345	<LOD
X3044	Msed 50t125	459612	6518607	0.01226	0.01043
X3045	Soil	459763	6518408	0.00656	0.00947
X3046	Mam fr	459749	6518467	0.00819	<LOD
x3103	Oc felsic migm 45t138 qzkl	460910	6518333	<LOD	<LOD
X3104	Soil	460949	6518567	0.00224	0.00321
X3105	Soil	461000	6518566	0.00309	0.00331
X3106	Rk fe mz	461018	6518547	<LOD	0.00987
X3107	Soil	461065	6518560	<LOD	0.00152
X3108	Soil	461102	6518558	<LOD	0.00227
X3109	So snd	461151	6518544	<LOD	<LOD
X3110	So fe mo qzkl	461206	6518558	0.0018	0.00166
X3111	So qzkl rub	461250	6518556	0.00367	0.00307
X3112	So qzkl rub	461299	6518556	<LOD	0.00127
X3113	Qz dump wongamine shaft	461353	6518588	<LOD	<LOD
X3114	So qzkl rub	461353	6518554	0.00222	<LOD
X3115	So break of slope	461400	6518555	<LOD	0.00199
X3116	Soil	461451	6518554	<LOD	0.00321
X3117	Soil	461501	6518560	0.00209	0.00604
X3118	Soil	461552	6518559	0.00129	0.00281
X3119	Soil	461604	6518551	0.00121	0.004
X3120	Soil	461701	6518557	0.0026	0.00403
X3121	Soil	461800	6518557	<LOD	0.00167
X3122	So lat & Pd flt	461399	6518010	0.00384	<LOD
X3123	Oc fe sed 85t255	459276	6517958	<LOD	0.01616
X3124	Qz fe sed	459402	6517989	<LOD	<LOD
X3125	Fe msed oc dip70t294	459330	6518018	<LOD	0.02675
X3126	Qzt oc dip60t298	459322	6518026	<LOD	0.00262

Sample	Description	East	North	Ni %	Cu %
X3127	Pd oc	459322	6518057	0.01001	0.004
X3128	1m lf hem/fer msed	459322	6518178	<LOD	0.02369
X3129	Fe msed dip88t294	459171	6518071	<LOD	0.01818
X3130	So lg	459141	6516823	0.00434	<LOD
X3131	Lam msed dip79t093	459769	6517032	<LOD	<LOD
X3133	Sandy l	459901	6516605	<LOD	<LOD
X1403	L alqz	460012	6516405	0.00584	0.00527
X1404	Lam msed qz 75t250 Qz bands	460034	6516350	0.00563	<LOD
X1405	Qv .2X2 25t218	459985	6516241	0.00651	0.00905
X1406	Fe msed	459916	6516082	<LOD	<LOD

* - Coordinates are in GDA94 MGA Zone 50
<LOD - Results below detection

• JORC Code, 2012 Edition – Table 1 report template

• Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• 22 rock chips collected during field inspection. • Rock chips collected from outcrops with a geological hammer. Occasional float samples collected for rock characterization. • Outcrops represent resistant and exposed portions of local geology.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Not applicable – surface rock chip samples.
Drill sample	• *Method of recording and assessing core and chip sample*	• Not applicable – surface rock chip samples.

Criteria	JORC Code explanation	Commentary
recovery	*recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Short geological description recorded of each sample collected. • Dip, strike and geometry recorded for any stratigraphic, structural or vein feature associated with the sample location.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The samples were sent to an accredited laboratory for sample preparation and analysis. All samples were sorted, dried, crushed and pulverized to -75um to produce a homogeneous 50g subsample for analysis. A grind quality target of 95% passing -75um was established. • Quality control procedures included the collection of portable XRF readings from each sample. • Nagrom' internal QAQC procedures included insertion of certified standards, blanks and check replicates.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading*	• The analytical technique used aqua regia digest with ICP finish. • The aqua regia digest analytical technique is considered a total assay for most minerals, excluding some silicates and refractory minerals. It is considered a total assay for the target elements Au, Ag, Pt, Pd, Cu, Ni, Co.

Criteria	JORC Code explanation	Commentary
	times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• The company used industry standard techniques for sampling and used an independent laboratory. • Primary geological and sampling data were recorded digitally.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Rock chip samples were located using hand held GPS with accuracy of +-3m. • The grid system used is MGA GDA94 Zone 50
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Spacing is variable and based on outcrop location and degree of exposure. • Samples were collected at non-regular intervals according to observations at the time in the field. • No sample compositing has been applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Samples were collected according to geological observations at the time in the field
Sample security	• *The measures taken to ensure sample security.*	• Samples were placed in tied calico bags with unique sample numbers. Once delivered from the field the samples were housed in secure premises prior to

Criteria	JORC Code explanation	Commentary
		laboratory submission by Mandrake personnel via courier. • The assay laboratory confirms that all samples have been received and that no damage has occurred during transport. • Results data was emailed to the Mandrake MD.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits/reviews have been undertaken to date.

• Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Rock chip samples collected from exploration licence EL 70/5345 of which Mandrake is 100% beneficial owner • Land access and purchase agreement executed for Newleyine farm only. No access agreement yet in place for Tolarno North and Tolarno South.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Rock chip sampling undertaken by BHP in the mid-1990s. • Various geophysical surveys and sporadic surface sampling undertaken by junior mining companies.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Ultramafic intrusive associated with a banded iron formation. Ni-Cu-PGE mineralisation in ultramafics and various laterites. Archaean Jimperding Metamorphic Belt.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above*	• Not applicable – surface rock chip samples.

Criteria	JORC Code explanation	Commentary
	sea level in metres) of the drill hole collar o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No length weighting or cut-off grades have been applied. • No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not applicable – surface rock chips.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Not applicable.
Balanced	• *Where comprehensive reporting of all Exploration Results is*	• All results reported in Table 1.

Criteria	JORC Code explanation	Commentary
reporting	*not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All meaningful information provided.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further work, dependent on access being granted, would likely include ground-based EM survey(s) and/or geochemical sampling (likely air core drilling).