



8 December 2010

## ASX Announcement

### NORNICO-Greenvale Ni-Co Project (Qld) Drilling Results & Project Update

- Greenvale Phase 2 Drilling Program completed
- Updated resource estimate due by Christmas
- Phase Two drilling Comprised 362 holes (GVM-418 to 779) for 7,693m
- Results received for holes GVM-418 to GVM-625, (results from holes GVM 518 to 625 this report)
- Remainder of assay results for 155 holes due by 14<sup>th</sup> December
- Metallurgical and Beneficiation testwork ongoing

Metallica Minerals Limited (ASX: "MLM") is pleased to announce the completion of the Phase 2 drilling program at the former Greenvale Nickel Mine at the southern end of the Company's wholly owned NORNICO nickel-cobalt and scandium project in north Queensland.

A total of 362 Reverse Circulation (RC) and Aircore holes were completed on the Greenvale deposit for a total of 7,693m between September and December 2010.

These holes were aimed at identifying additional nickel-cobalt resources outside the existing Greenvale resource boundaries at The Edge, Powder Magazine and The Power Line areas and to define resources at Moonscape and other areas of potential high grade nickel laterite mineralisation within the Greenvale pit limits. Drill hole locations for the Phase 2 program are presented on **Figure 2**.

All the drill holes have been surveyed. Satellite imagery to obtain more detailed topographic information has been commissioned. To date, assay results have been received for holes GVM-418 to GVM-625, with results for the remaining 155 holes expected next week.

Work has commenced on updating the Greenvale resource using the new Phase 2 drill data which has been received to date and it is expected that this work will be finalised prior to the Christmas break, after which, pit design and mining studies will commence.

Metallurgical and beneficiation testwork is ongoing and results from this work are due early in the New Year.



Drill hole results for holes GVM418 to 517 have been announced in a previous ASX Release dated the 9<sup>th</sup> of November 2010, highlights from holes GVM-518 to 625 are presented below.

### The Power Line:

GVM 544, 7m @ 1.25% Ni and 0.22% Co (1.69% NiEq) from 0m  
 GVM 600, 14m @ 1.15% Ni and 0.47% Co (2.19% NiEq) from 0m  
 GVM 618, 6m @ 1.28% Ni and 0.14% Co (1.56% NiEq) from 7m  
 GVM 620, 11m @ 1.55% Ni and 0.11% Co (1.77% NiEq) from 32m  
 GVM 625, 14m @ 1.32% Ni and 0.04% Co (1.40% NiEq) from 33m

### The Edge

GVM 556, 2m @ 2.25% Ni and 0.38% Co (3.01% NiEq) from 11m  
 GVM 565, 11m @ 1.49% Ni and 0.08% Co (1.65% NiEq) from 35m  
 GVM 574, 5m @ 1.62% Ni and 0.12% Co (1.86% NiEq) from 43m  
 GVM 582, 5m @ 1.46% Ni and 0.08% Co (1.62% NiEq) from 21m  
 GVM 585, 5m @ 1.46% Ni and 0.15% Co (1.76% NiEq) from 33m  
 GVM 586, 11m @ 1.48% Ni and 0.13% Co (1.74% NiEq) from 10m

### Moonscape

GVM 519, 4m @ 2.59% Ni and 0.03% Co (2.65% NiEq) from 2m  
 GVM 524, 7m @ 1.57% Ni and 0.02% Co (1.61% NiEq) from 0m  
 GVM 528, 9m @ 1.56% Ni and 0.18% Co (1.92% NiEq) from 6m  
 GVM 529, 5m @ 2.50% Ni and 0.02% Co (2.54% NiEq) from 6m

### The Trench

GVM 591, 8m @ 1.66% Ni and 0.03% Co (1.72% NiEq) from 14m  
 GVM 595, 6m @ 1.42% Ni and 0.16% Co (1.74% NiEq) from 11m

Compared to NORNICO'S Lucknow and Kokomo Ni-Co-Sc deposits, the scandium (Sc) content of the Greenvale nickel laterite ores is relatively low. The Greenvale scandium values are typically between 10-80 g/t Sc and average around 40g/t Sc in the Greenvale Ni-Co ore zones.

A complete list of drill hole results for holes GVM-518 to 625 is provided in **Table 3** at the back of this report and the location of all of the holes drilled at Greenvale by Metallica is included as **Figures 2 and 3**.

The Greenvale Mine operated for 18 years from 1974 to 1992, mining ore from a 3 km<sup>2</sup> area, and produced 40 million tonnes (Mt) of nickel laterite ore grading 1.56% Ni and 0.12% Co. Metallica is focusing its current exploration on Greenvale's remnant high grade mineralisation by drilling out known zones of remnant ore and also exploring within the mine area for new zones (partly explaining why a number of drill



hole results in this campaign did not generate significant results (NSR) (Refer Table 3).

The Greenvale Ni-Co Laterite project is located approximately 240km from Townsville in north Queensland and forms part of Metallica's NORNICO Project, see **Figure 1**.

The existing Greenvale Indicated and Inferred Resource (September 2010) stands at 4.5Mt @ 1.12% Ni and 0.08% Co (1.28% NiEq) with a higher grade zone of 1.43Mt at 1.39% Ni and 0.11% Co (1.61 % NiEq<sup>1</sup>). See **Tables 1 and 2** for the breakdown of the resource categories.

## Future Work

New work planned for Greenvale to March 2011 includes:

- Final Greenvale Drill Results (Holes GVM 625 to GVM 779) – expected mid December
- Greenvale and Lucknow resource update – expected late December
- Ongoing Metallurgical and Beneficiation testwork
- Satellite imagery and preparation of topographic model and plans of Greenvale and Lucknow areas
- Progressing mining lease permitting
- Landowner and TLO meetings
- Wet Season environmental baseline studies
- Completion of the revised NORNICO stage 1 Scoping Study (Mark II)



<sup>1</sup> The NiEq value equates to Ni+2Co, this is based on a Nickel values of \$9/lb and a Co value of \$18 / lb, scandium (Sc) has **not** been used in the equivalency equation NiEq equates to

**Figure 1: Location Map*****RC Drilling at the Power Line – Greenvale Mine Site***

For further information

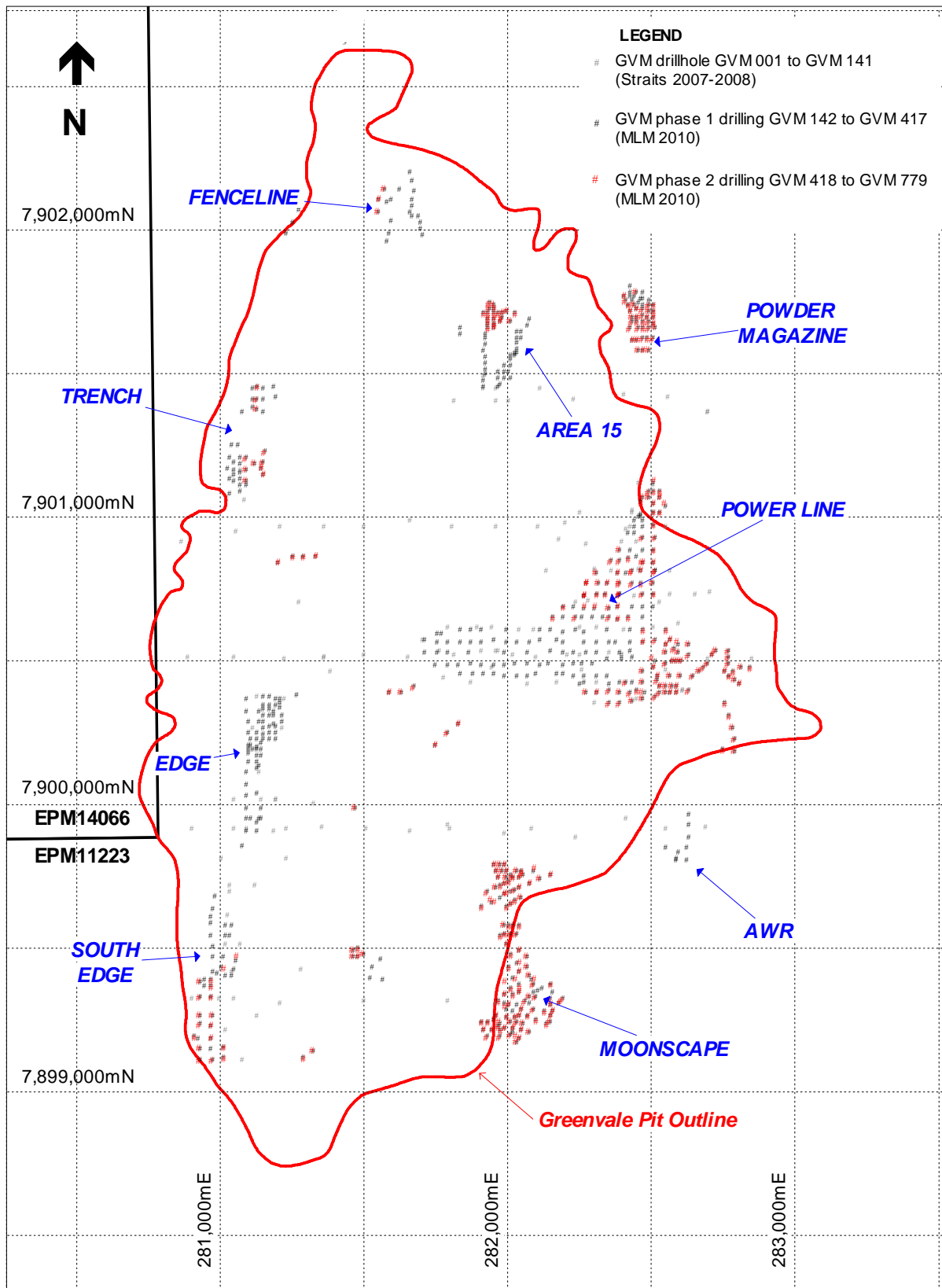
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*Technical information and exploration results contained in this report has been compiled by Metallica Minerals Ltd full time employees Andrew Gillies in the position of Managing Director and Metallica Minerals Ltd Exploration Manager, Mr Pat Smith MSc. B.Sc (Hons). Mr Gillies and Mr Smith are members of the Australasian Institute of Mining and Metallurgy and have relevant experience to the mineralisation being reported on to qualify as Competent Persons as defined by the Australasian Code for Reporting of Minerals Resources and Reserves. Mr Gillies and Mr Smith consent to the inclusion in this report of the matters based on the information in the form and context in which it appears*



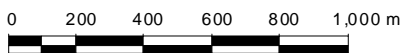
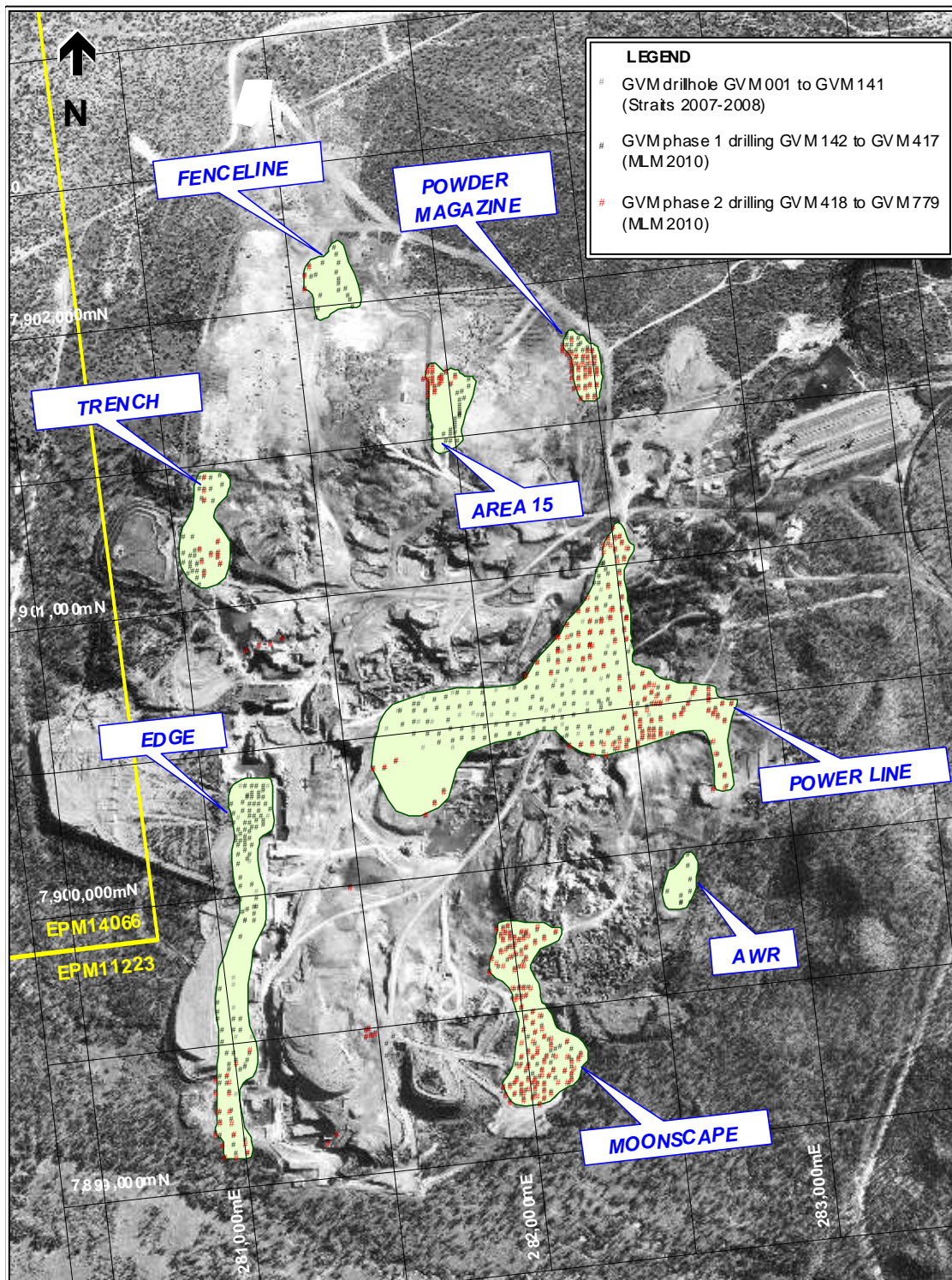
Figure 2: Greenvale Mine Site – Drill Hole Locations



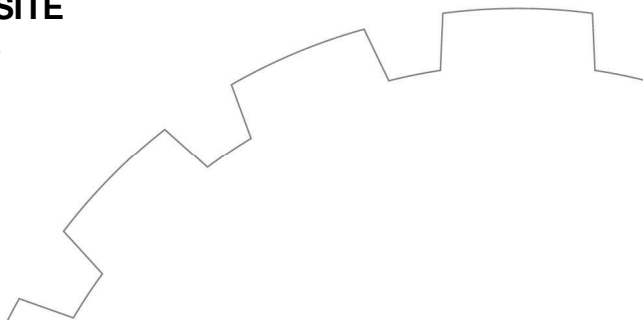
**GREENVALE NICKEL MINE SITE  
DRILLHOLE LOCATIONS**



Figure 3: Historical Air Photo of the Greenvale Mie Site showing current drilling



**GREENVALE NICKEL MINE SITE  
DRILLHOLE LOCATIONS**



**TABLE 1: GREENVALE Ni-Co RESOURCE**

(September 2010, Using a **0.70% NiEq COG**)

CLASSIFICATION	Mt	Ni %	Co %	NiEq %	Fe %	Sc g/t
Indicated	3.2	1.16	0.08	1.31	22.0	35
Inferred	1.3	1.03	0.09	1.21	23.0	39
<b>Total</b>	<b>4.5</b>	<b>1.12</b>	<b>0.08</b>	<b>1.28</b>	<b>23.0</b>	<b>36</b>

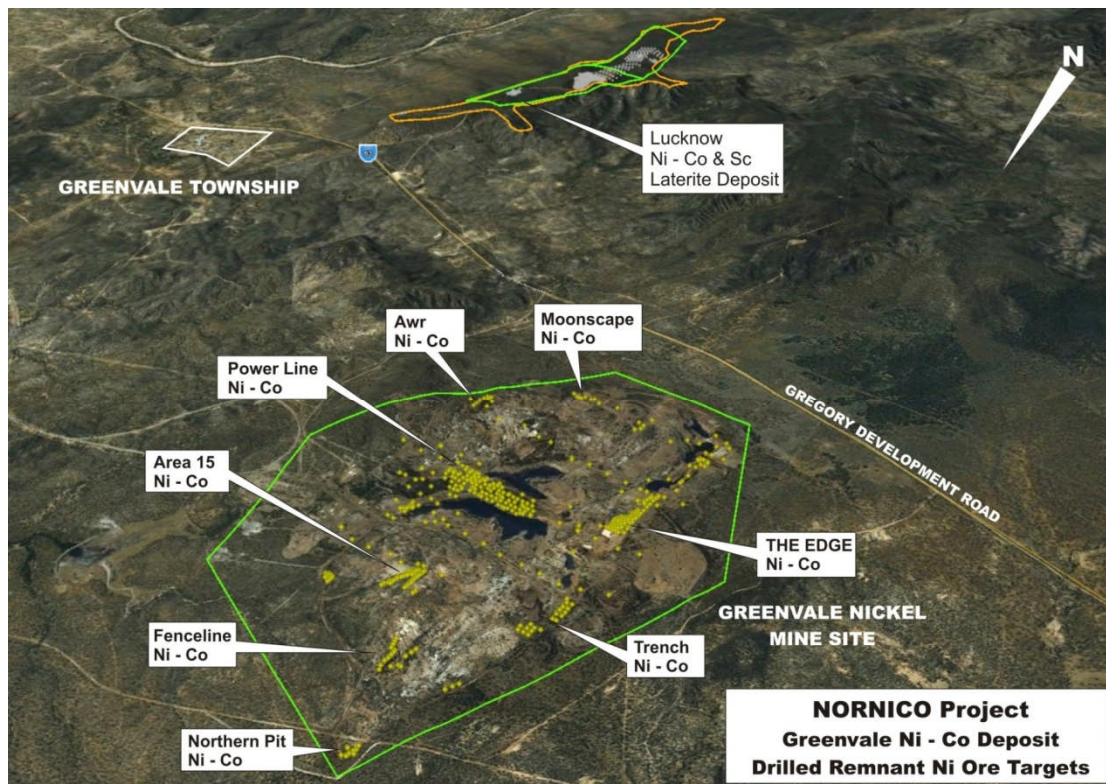
The above resource conforms to JORC guidelines for the reporting of mineral resources. The resources have been classed as either Indicated or Inferred based on geological continuity, sample intervals and drill hole spacing. Parts of the resource may be classed as Measured once additional bulk density data has been obtained. The Indicated resource is sufficient for preliminary pit design and scheduling. The Mineral resource estimate is appropriate for a selective open pit mining scenario, but does not account for mining dilution or mining losses.

**TABLE 2: GREENVALE Ni-Co RESOURCE**

(September 2010, Using a **1.40% NiEq COG**)

CLASSIFICATION	Mt	Ni %	Co %	NiEq %	Fe %	Sc g/t
Indicated	1.10	1.42	0.11	1.63	22.0	33
Inferred	0.33	1.23	0.15	1.52	24.0	40
<b>Total</b>	<b>1.43</b>	<b>1.39</b>	<b>0.11</b>	<b>1.61</b>	<b>22.0</b>	<b>34</b>

**Figure 4: Ariel View of the Greenvale Ni-Co Deposit**



**Table 3: Greenvale Drill Results, GVM 518 to GVM625**

Hole Number	Easting	Northing	Depth	From	To	Intercept	Ni (%)	Co (%)	Sc (ppm)	Fe (%)	Mg (%)	NiEq %
GVM-518	282001	7899696	11	NSR								
<b>GVM-519</b>	<b>282032</b>	<b>7899713</b>	<b>12</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>2.59</b>	<b>0.03</b>	<b>14</b>	<b>8.75</b>	<b>4.93</b>	<b>2.65</b>
GVM-520	282039	7899675	9	NSR								
GVM-521	282055	7899687	9	NSR								
GVM-522	282024	7899663	15	3	11	8	1.14	0.07	13	7.70	5.25	1.28
GVM-523	282010	7899656	9	NSR								
<b>GVM-524</b>	<b>282030</b>	<b>7899589</b>	<b>15</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>1.57</b>	<b>0.02</b>	<b>14</b>	<b>8.58</b>	<b>6.23</b>	<b>1.61</b>
GVM-525	282049	7899589	9	NSR								
GVM-526	282014	7899589	18	2	12	10	1.08	0.05	11	6.62	3.97	1.18
GVM-527	281997	7899589	12	NSR								
<b>GVM-528</b>	<b>281987</b>	<b>7899729</b>	<b>18</b>	<b>6</b>	<b>15</b>	<b>9</b>	<b>1.56</b>	<b>0.18</b>	<b>27</b>	<b>16.46</b>	<b>6.40</b>	<b>1.92</b>
<b>GVM-529</b>	<b>282015</b>	<b>7899741</b>	<b>18</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>1.46</b>	<b>0.04</b>	<b>30</b>	<b>21.37</b>	<b>4.40</b>	<b>1.54</b>
<b>inc:</b>				<b>6</b>	<b>11</b>	<b>5</b>	<b>2.50</b>	<b>0.02</b>	<b>20</b>	<b>11.68</b>	<b>6.11</b>	<b>2.54</b>
GVM-530	282803	7900199	10	2	6	4	1.23	0.02	15	11.62	3.83	1.27
GVM-531	282761	7900200	15	NSR								
GVM-532	282802	7900239	12	NSR								
GVM-533	282792	7900276	12	NSR								
GVM-534	282783	7900318	9	NSR								
GVM-535	282768	7900360	12	NSR								
GVM-536	282480	7900377	6	NSR								
GVM-537	282441	7900374	12	2	5	3	1.04	0.06	37	24.00	7.97	1.16
GVM-538	282400	7900365	15	NSR								
GVM-539	282362	7900360	9	NSR								
<b>GVM-540</b>	<b>282479</b>	<b>7900476</b>	<b>12</b>	<b>5</b>	<b>9</b>	<b>4</b>	<b>1.55</b>	<b>0.07</b>	<b>20</b>	<b>13.85</b>	<b>12.48</b>	<b>1.69</b>
GVM-541	282527	7900513	6									
GVM-542	282560	7900537	8	0	4	4	1.05	0.04	15	10.74	15.37	1.13
<b>GVM-543</b>	<b>282606</b>	<b>7900568</b>	<b>9</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>1.07</b>	<b>0.22</b>	<b>29</b>	<b>22.47</b>	<b>7.26</b>	<b>1.51</b>
<b>GVM-544</b>	<b>282603</b>	<b>7900541</b>	<b>12</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>1.25</b>	<b>0.22</b>	<b>20</b>	<b>18.35</b>	<b>9.85</b>	<b>1.69</b>
GVM-545	282587	7900554	15	1	8	7	1.29	0.03	10	10.37	13.66	1.35
GVM-546	282644	7900566	9	NSR								
GVM-547	282481	7900434	6	NSR								
GVM-548	282518	7900486	10	0	3	3	1.04	0.15	35	24.80	7.05	1.34
GVM-549	282559	7900506	9	0	2	2	1.13	0.12	46	30.50	4.49	1.37



Hole Number	Easting	Northing	Depth	From	To	Intercept	Ni (%)	Co (%)	Sc (ppm)	Fe (%)	Mg (%)	NiEq %
GVM-518	282001	7899696	11	NSR								
GVM-551	280983	7899124	27	18	20	2	1.07	0.05	21	17.85	5.03	1.17
GVM-552	280940	7899120	24	NSR								
GVM-553	280939	7899160	24	NSR								
GVM-554	280918	7899203	21	NSR								
GVM-555	280977	7899196	30	NSR								
<b>GVM-556</b>	<b>281023</b>	<b>7899164</b>	<b>24</b>	<b>11</b>	<b>13</b>	<b>2</b>	<b>2.25</b>	<b>0.38</b>	<b>25</b>	<b>18.10</b>	<b>8.24</b>	<b>3.01</b>
GVM-557	280939	7899243	21	NSR								
GVM-558	280941	7899277	24	NSR								
GVM-559	280981	7899276	33	NSR								
GVM-560	280979	7899242	27	NSR								
GVM-561	280978	7899343	24	NSR								
GVM-562	280939	7899344	21	NSR								
GVM-563	281065	7899463	24	NSR								
GVM-564	281016	7899444	51	35	41	6	1.39	0.04	46	18.28	5.43	1.47
<b>GVM-565</b>	<b>280978</b>	<b>7899399</b>	<b>45</b>	<b>25</b>	<b>36</b>	<b>11</b>	<b>1.49</b>	<b>0.08</b>	<b>27</b>	<b>21.07</b>	<b>4.84</b>	<b>1.65</b>
GVM-566	280940	7899392	27	NSR								
<b>GVM-567</b>	<b>280975</b>	<b>7899375</b>	<b>54</b>	<b>35</b>	<b>41</b>	<b>6</b>	<b>1.29</b>	<b>0.14</b>	<b>29</b>	<b>21.79</b>	<b>6.58</b>	<b>1.57</b>
GVM-568	280956	7899377	24	NSR								
GVM-569	280958	7899400	30	NSR								
GVM-570	280981	7899519	33	NSR								
GVM-571	280980	7899555	30	NSR								
GVM-572	281026	7899554	39	NSR								
GVM-573	281031	7899592	27	NSR								
<b>GVM-574</b>	<b>281045</b>	<b>7899554</b>	<b>57</b>	<b>33</b>	<b>36</b>	<b>3</b>	<b>1.13</b>	<b>0.13</b>	<b>48</b>	<b>33.60</b>	<b>2.61</b>	<b>1.39</b>
				<b>43</b>	<b>48</b>	<b>5</b>	<b>1.62</b>	<b>0.12</b>	<b>32</b>	<b>23.04</b>	<b>3.99</b>	<b>1.86</b>
				<b>50</b>	<b>53</b>	<b>3</b>	<b>1.34</b>	<b>0.10</b>	<b>39</b>	<b>27.17</b>	<b>5.71</b>	<b>1.54</b>
GVM-575	281051	7899589	42	19	30	11	1.14	0.08	30	23.25	4.69	1.30
GVM-576	280973	7899597	24	NSR								
GVM577	280977	7899619	30	NSR								
GVM-578	280981	7899651	24	NSR								
GVM-579	280988	7899694	27	NSR								
GVM-580	281085	7899866	33	NSR								
GVM-581	281119	7899960	36	21	23	2	0.68	0.30	41	21.70	3.14	1.28
				23	34	11	1.10	0.05	26	19.83	6.78	1.20



Hole Number	Easting	Northing	Depth	From	To	Intercept	Ni (%)	Co (%)	Sc (ppm)	Fe (%)	Mg (%)	NiEq %
GVM-518	282001	7899696	11	NSR								
<b>GVM-618</b>	<b>282499</b>	<b>7901077</b>	<b>20</b>	<b>7</b>	<b>13</b>	<b>6</b>	<b>1.28</b>	<b>0.13</b>	<b>38</b>	<b>29.70</b>	<b>5.31</b>	<b>1.54</b>
GVM-619	282477	7901081	20	0	6	6	0.94	0.13	48	26.35	5.34	1.20
and				15	17	2	1.44	0.05	32	24.85	6.05	1.54
<b>GVM-620</b>	<b>282280</b>	<b>7900740</b>	<b>47</b>	<b>32</b>	<b>43</b>	<b>11</b>	<b>1.55</b>	<b>0.11</b>	<b>30</b>	<b>19.21</b>	<b>6.09</b>	<b>1.77</b>
GVM-621	282285	7900782	53	33	35	2	1.40	0.09	21	15.30	6.79	1.58
GVM-622	282398	7900743	33	Hole Adandoned								
GVM622A	282398	7900743	49	TBA								
GVM623	282400	7900779	19	34	41	7	0.72	0.14	45	29.54	2.33	1.00
GVM624	282440	7900823	38	30	35	5	0.95	0.15	43	17.25	4.91	1.25
<b>GVM625</b>	<b>282482</b>	<b>7900856</b>	<b>47</b>	<b>33</b>	<b>47</b>	<b>14</b>	<b>1.32</b>	<b>0.04</b>	<b>28</b>	<b>15.14</b>	<b>4.82</b>	<b>1.40</b>

NSR - No intercept > 1% NiEq over 2m

TBA - result to be advised