

ASX:LEG

12 May 2011

ASX Announcement

## ASSAYS AND DRILLING CONFIRM MAGNETITE QUALITY AT CAMEROON PROJECT

- **Diamond drill assays return 98m @ 28.8% Fe and 33.78m @ 29.6% Fe.**
- **Both intersections compare favourably with the previous metallurgical test sample, which returned a concentrate of 70.8% Fe with low impurities.**
- **Melombo North drillholes intersect 94.85m and 58.42m of magnetite gneiss.**

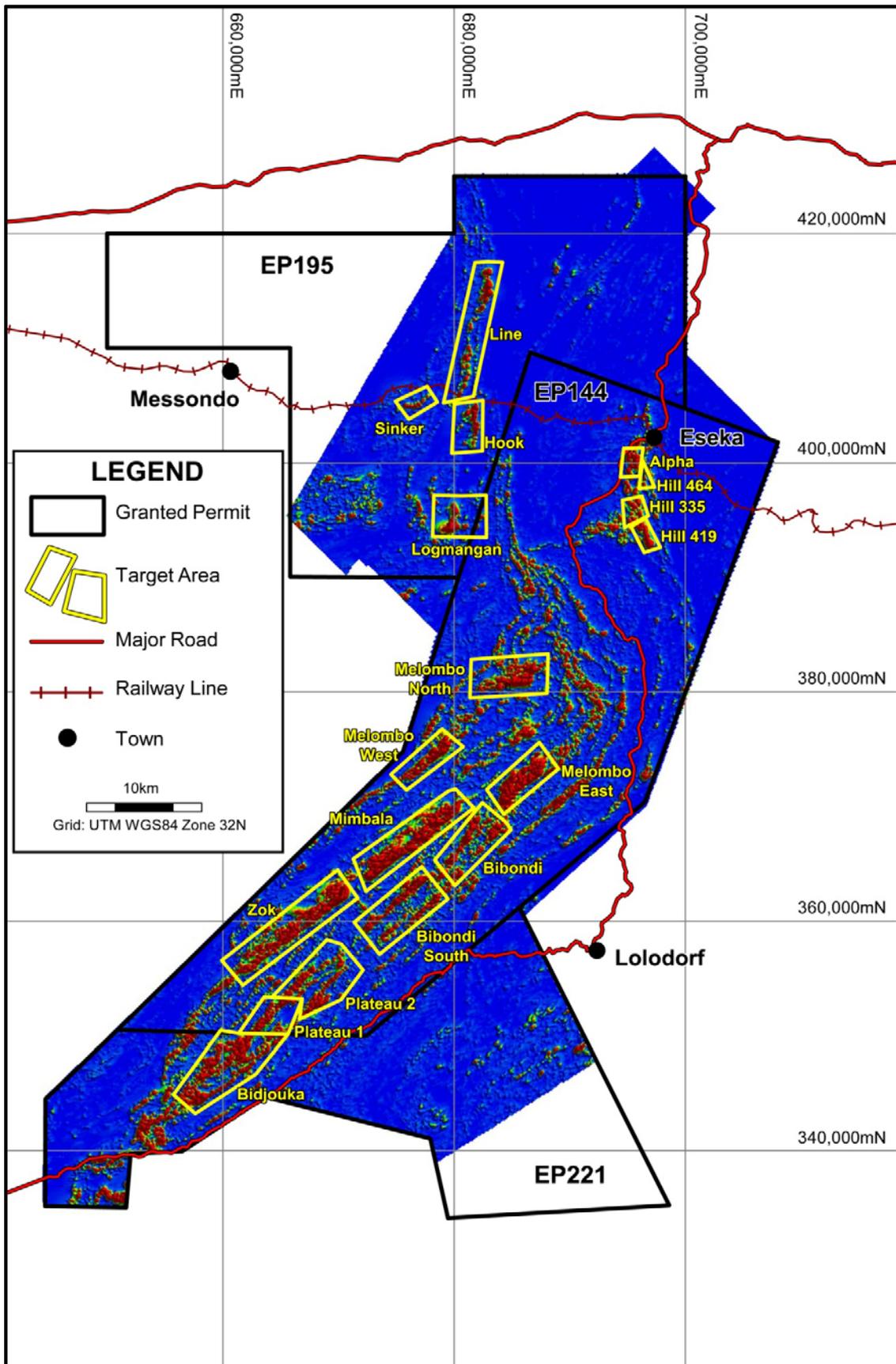
Legend Mining Ltd (“Legend”) is pleased to announce positive confirmatory assay results from two diamond drillholes (NESD011 and 022) from the Alpha and Hill 419 targets at the Company’s Ngovayang Project, West Africa, see Figure 1. A ten hole drilling programme has also recently been completed at the Melombo North target, where downhole intersections of magnetite gneiss up to 94.85m were made. A comprehensive technical discussion of the assays and drilling is included in the body of this report.

Legend Managing Director Mr Mark Wilson said “These assay results reconfirm that the magnetite found so far produces a high grade, low impurity concentrate at a relatively coarse grind. The fact we have empirical evidence that the Niton readings consistently undercall the assay values and that further good intercepts of magnetite have been found in the first pass reconnaissance drilling at Melombo North are all positive signs for the project.”

Legend’s 2011 drill programme is designed to cover multiple targets at the Ngovayang project. The drill rigs have now been mobilised to the Melombo West target, whilst drill pad preparation and access works are progressing at Melombo East and Plateau 1 and 2 respectively, see Figure 1.



**Polished magnetite gneiss core sample from drillhole NESD011**



**FIGURE 1: Ngovayang Project – Target Areas over Aeromagnetic Image (Analytical Signal of Total Magnetic Intensity)**

## Technical Discussion

### Hill 419 & Alpha Drill Results

As reported to the ASX on 14 March 2011, significant thicknesses of magnetite gneiss were intersected in the Eseka region at the Alpha and Hill 419 prospects, see Figure 2. Holes NESD011 (Alpha) and NESD022 (Hill 419) were assayed in their entirety at nominal 4m intervals, or to geological boundaries, and analysed for a full iron ore suite. The best intersections from both drillholes are summarised in Table 1 below.

Hole	From	To	Interval	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI%
NESD011	21.32	55.1	33.78	29.6	49.5	3.9	0.09	0.7
NESD022	0	98	98	28.8	48.5	4.6	0.10	1.0

Assay Method Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P by fusion XRF – OMAC Laboratory, Ireland.

LOI – Loss on Ignition at 1,000°C determined gravimetrically.

Full assay results for the two intersections are provided in Appendix 1. The individual iron assay results in Appendix 1 are encouraging, as they highlight the relatively homogeneous nature of the magnetite gneiss with respect to iron and magnetite content for both intersections.

Comparisons of laboratory XRF assays and Niton XRF analyser readings for the magnetite gneiss intervals in holes NESD011 and NESD022 are summarised below in Table 2.

Hole	From	To	Lab Fe%	Niton Fe%	Variance %
NESD011	21.32	55.1	29.6	24.1	-18.6
NESD022	0	98	28.8	22.2	-22.9

The results indicate that for magnetite gneiss the Niton XRF analyser underestimates the iron content by approximately 20%. (about 6% Fe content). It has also been noted that this “underestimate” reduces as the iron content increases, commonly reflecting a change from disseminated magnetite to a more massive form of iron.

As part of evaluating the magnetite gneiss host, Legend undertook preliminary metallurgical testwork on a representative 4m composite interval (46-50m) in NESD011 from the Alpha prospect (ASX announcement 14 March 2011). Results were encouraging with a high quality iron concentrate containing low impurities produced, and a coarse grind size indicated. The key results from this testwork are summarised below in Table 3.

Hole	From	To	Interval	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI%
NESD011	46	50	4	70.8	1.42	0.20	0.006	-3.30

Assay Method Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P by fusion XRF – Amdel Limited, Perth.

LOI – Loss on Ignition at 1,000°C determined gravimetrically.

The geological and geochemical character of the entire magnetite gneiss unit intersected in NESD011 and NESD022 is considered comparable to that of the metallurgical sample. This knowledge will now be used to assist the evaluation of future drilling at prospects in the southern region of the Ngovayang Project.

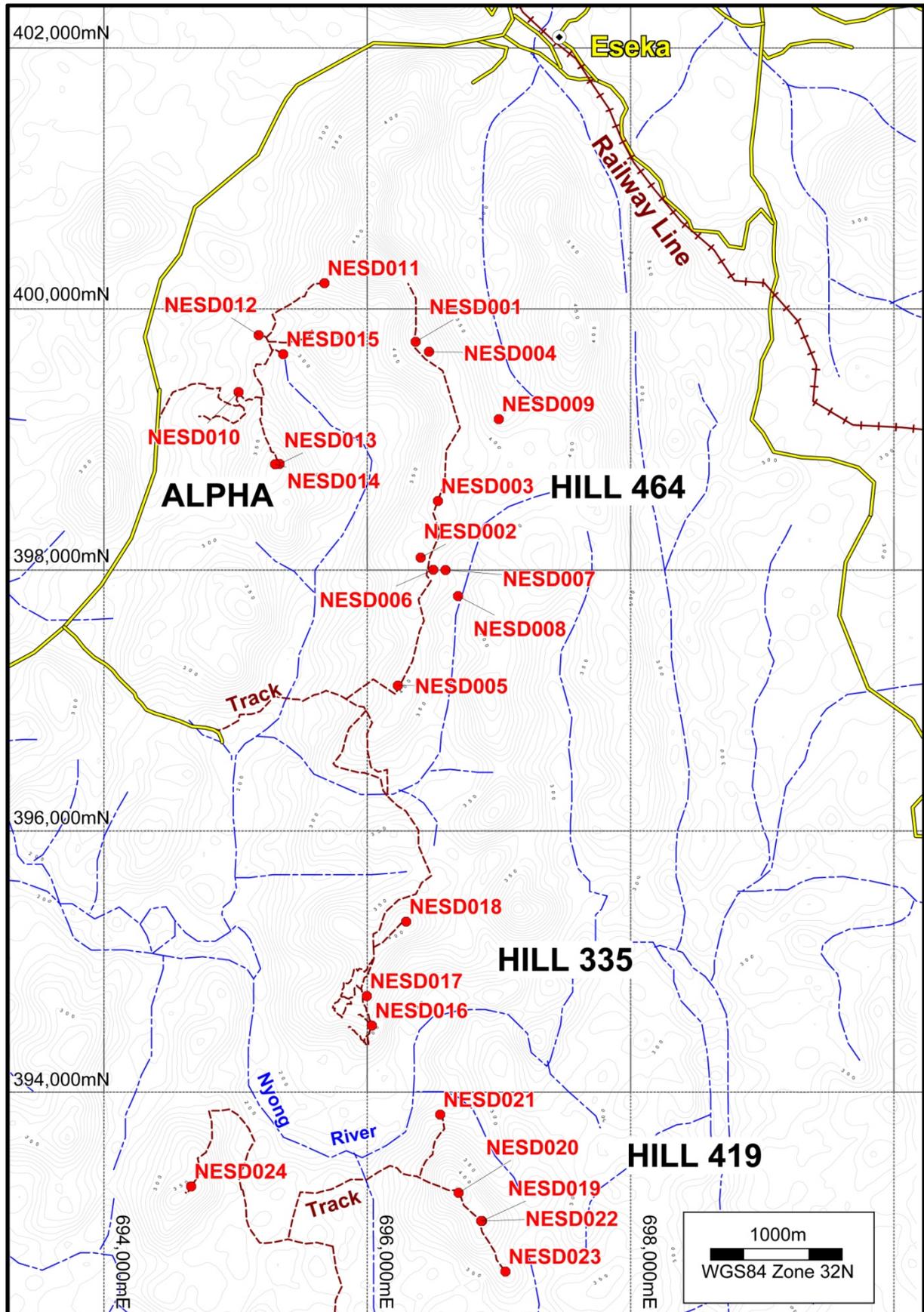


FIGURE 2: Eseka Region Diamond Drillhole Location over Topography

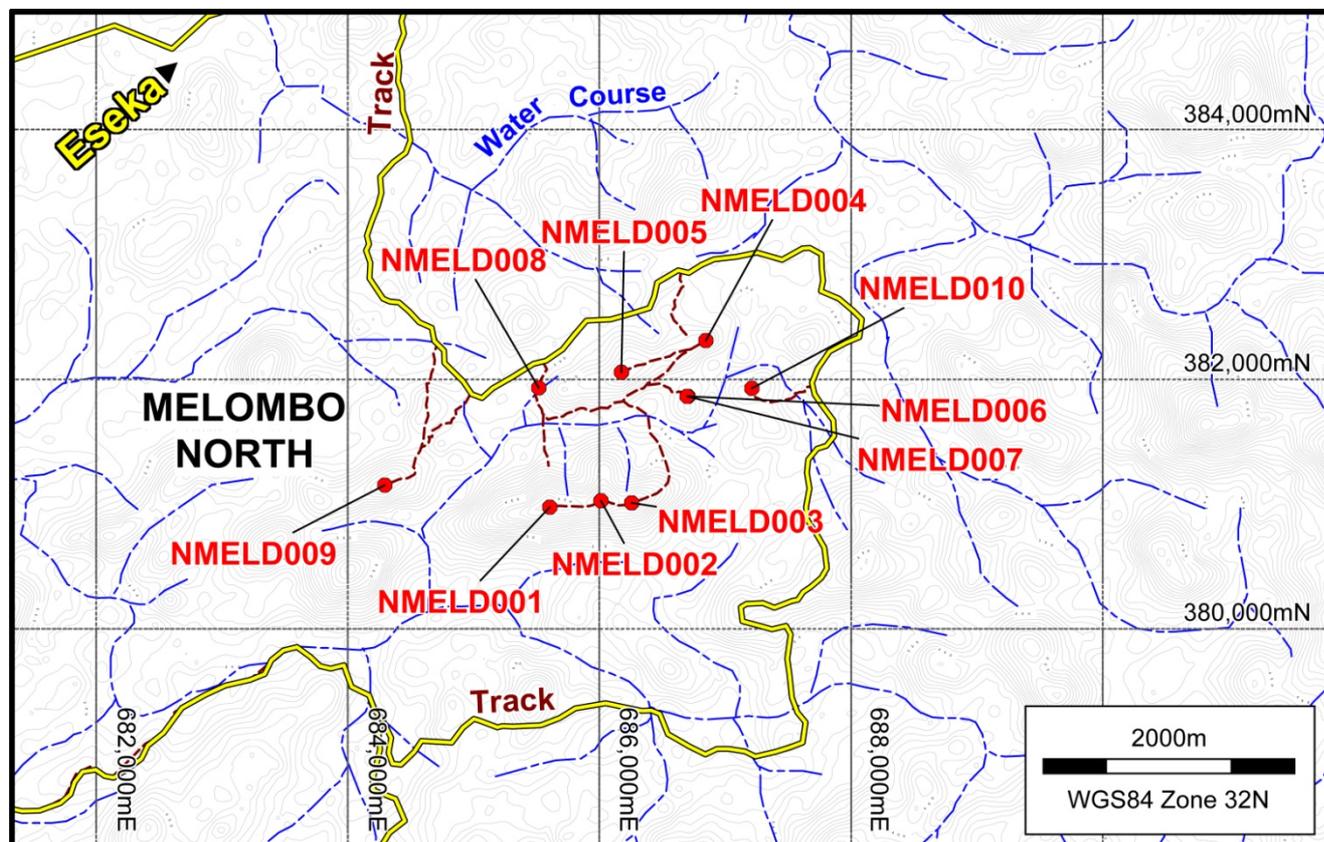
**Melombo North Drilling Programme**

Following the completion of drilling in the Eseka region at Hill 419 in March, the drilling rig was mobilised to Melombo North to test several coincident magnetic and topographic highs. The Melombo North drilling has now been completed and comprised a total of 10 diamond drillholes, (NMELD001-010) for 946.01m. Details of the drilling are provided below in Table 4 and shown on Figure 3.

<b>Table 4: Diamond Drillhole Details – Melombo North</b>				
<b>Hole ID</b>	<b>Easting</b>	<b>Northing</b>	<b>Dip/Azimuth</b>	<b>Final Depth</b>
NMELD001	685606	380977	-90/000	81.86
NMELD002	686012	381026	-90/000	148.38
NMELD003	686255	381008	-90/000	58.52
NMELD004	686846	382311	-90/000	83.88
NMELD005	686176	382055	-90/000	74.98
NMELD006	686703	381865	-90/000	38.82
NMELD007	686696	381864	-90/000	117.63
NMELD008	685517	381930	-90/000	137.98
NMELD009	684293	381153	-90/000	131.98
NMELD010	687213	381927	-90/000	71.98
<b>Total</b>				<b>946.01</b>

Drilling utilised an Ingetrol man portable diamond drilling rig – HQ and NQ core sizes.

Co-ordinates: Universal Transverse Mercator WGS84, Zone 32, Northern Hemisphere.



**FIGURE 3: Melombo North Diamond Drillhole Location over Topography**

Magnetite gneiss of significant thicknesses were intersected in two holes at Melombo North, NMELD002 (94.85m) and NMELD007 (58.42m). Laboratory assays are not available for these holes, however average iron values from the Niton XRF analyser were 17.6% Fe and 22.8% Fe respectively.

Based on the comparison of laboratory XRF assays versus Niton XRF readings for magnetite gneiss discussed above, the average Niton values in holes NMELD002 (17.6% Fe) and NMELD007 (22.8% Fe) are considered likely to be under reporting and may actually range between 23-29%. These intervals have been submitted for laboratory analysis.

The Melombo North drilling has identified potentially significant thicknesses of magnetite gneiss, however due to the structural disruption evidenced in the magnetic signature and by fractured/broken ground, the continuity of the unit is unknown. Nine of the ten drillholes intersected "magnetic" rocks of varying intensity and thickness explaining the large magnetic response of the prospect. Magnetic modelling is being undertaken to assist interpretation and ultimately whether there is potential for sufficient tonnages of magnetite gneiss to be viable for mining.

*The information in this announcement that relates to Exploration Results has been compiled by Mr Derek Waterfield, a Member of the Australian Institute of Geoscientists and a consultant to Legend Mining Limited. Mr Waterfield has sufficient relevant experience in the styles of mineralisation and types of deposit under consideration, and in the activity he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code), and consents to the inclusion of the information in the form and context in which it appears.*

Visit [www.legendmining.com.au](http://www.legendmining.com.au) for further information and announcements.

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**Appendix 1: Assay Results from NESD001 and NESD022**

Hole	From	To	Interval	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	P%	LOI%
NESD011	0	4.62	4.62	15.7	16.1	47.7	0.027	9.92
NESD011	4.62	7.2	2.58	11.5	12.8	56.6	0.018	8.48
NESD011	7.2	11.2	4	25.9	10.3	45.5	0.040	6.78
NESD011	11.2	15.16	3.96	21.6	18.4	39.8	0.044	10.68
NESD011	15.16	18.16	3	16.3	22.3	41.1	0.022	12.95
NESD011	18.16	21.32	3.16	18.6	19.4	41.3	0.044	12.00
NESD011	21.32	25	3.68	<b>34.9</b>	3.8	44.4	0.066	2.35
NESD011	25	29	4	<b>25.2</b>	6.9	51.1	0.071	4.22
NESD011	29	31.5	2.5	<b>30.9</b>	2.3	49.8	0.093	-0.01
NESD011	31.5	34	2.5	<b>28.2</b>	4.5	49.5	0.093	-0.01
NESD011	34	38	4	<b>29.2</b>	3.8	50.1	0.106	-0.01
NESD011	38	42	4	<b>28.8</b>	3.4	51.0	0.097	-0.01
NESD011	42	46	4	<b>30.0</b>	3.1	49.8	0.111	-0.01
NESD011	46	50	4	<b>29.4</b>	3.3	50.4	0.097	-0.01
NESD011	50	55.1	5.1	<b>29.6</b>	3.5	49.5	0.080	-0.01
NESD011	55.1	60	4.9	7.7	13.1	65.7	0.035	0.62
NESD011	60	64	4	4.4	14.7	66.0	0.035	0.87
NESD011	64	68	4	1.0	16.3	72.1	0.013	0.95
NESD011	68	71.92	3.92	1.0	16.9	71.1	0.018	0.92
NESD022	0	4	4	<b>23.9</b>	12.0	45.8	0.058	7.29
NESD022	4	8	4	<b>32.1</b>	6.3	43.7	0.080	4.05
NESD022	8	12	4	<b>34.9</b>	2.9	44.3	0.088	2.20
NESD022	12	16	4	<b>34.4</b>	2.8	45.6	0.097	1.94
NESD022	16	20	4	<b>35.3</b>	3.3	43.8	0.102	1.89
NESD022	20	23.12	3.12	<b>36.1</b>	3.5	41.4	0.106	1.70
NESD022	23.12	28	4.88	<b>34.9</b>	2.8	43.3	0.084	1.20
NESD022	28	32	4	<b>32.1</b>	2.9	47.4	0.080	1.42
NESD022	32	36	4	<b>32.4</b>	2.3	46.7	0.075	0.56
NESD022	36	40	4	<b>29.0</b>	3.4	48.4	0.111	0.84
NESD022	40	44	4	<b>28.5</b>	3.6	48.0	0.133	0.00
NESD022	44	46.6	2.6	<b>23.9</b>	5.0	52.9	0.080	-0.01
NESD022	46.6	50	3.4	<b>31.0</b>	3.0	47.7	0.124	-0.01
NESD022	50	54	4	<b>21.6</b>	6.4	56.5	0.106	-0.01
NESD022	54	58	4	<b>27.4</b>	4.3	51.6	0.102	-0.01
NESD022	58	62	4	<b>25.5</b>	5.1	50.9	0.102	-0.01
NESD022	62	66	4	<b>19.7</b>	9.2	52.3	0.058	0.65
NESD022	66	70	4	<b>25.7</b>	4.6	52.3	0.093	-0.01
NESD022	70	74	4	<b>23.9</b>	6.0	51.6	0.075	-0.01
NESD022	74	78	4	<b>27.9</b>	4.0	50.5	0.115	-0.01
NESD022	78	82	4	<b>22.6</b>	6.3	53.4	0.115	-0.01
NESD022	82	86	4	<b>24.8</b>	4.8	52.8	0.128	0.04
NESD022	86	90	4	<b>30.3</b>	3.3	47.2	0.119	-0.01
NESD022	90	94	4	<b>32.5</b>	2.7	45.1	0.137	-0.01
NESD022	94	98	4	<b>28.2</b>	4.1	50.4	0.084	-0.01
NESD022	98	102.12	4.12	14.8	9.0	61.8	0.049	0.00
NESD022	102.12	106	3.88	8.8	13.5	52.9	0.080	0.89
NESD022	106	110	4	8.8	14.3	58.5	0.066	0.36
NESD022	110	114	4	11.4	13.4	54.6	0.173	0.02
NESD022	114	118	4	8.6	14.3	56.7	0.093	0.98
NESD022	118	122	4	7.4	14.6	58.7	0.062	1.06
NESD022	122	126	4	7.6	15.0	56.2	0.111	1.20
NESD022	126	128.88	2.88	1.0	14.4	73.9	0.009	1.10

 Assay Method: Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P by fusion XRF – OMAC Laboratory, Ireland.

LOI – Loss on Ignition at 1,000°C determined gravimetrically.