

20th October 2015

ASX Code: SPI  
SPIOA

Issued Capital:  
471.8M Ordinary Shares

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## SAMPLING PROGRAM CONFIRMS WHITE LION'S CEMENT PRODUCTION POTENTIAL

### HIGHLIGHTS

- Large surface sampling program completed at the White Lion limestone project in Zambia
- Assay results reveal high grade limestone and complimentary cement quality feedstock materials over an extensive area
- Drilling of select limestone and cement feedstock locations to begin early 2016

### White Lion Limestone Project

Spitfire Resources Limited (“Spitfire” or “the Company”) is pleased to announce that it has completed a large surface sampling program at its recently acquired White Lion limestone project in Zambia with the results showing an extensive high-grade limestone exposure with calcium grades of up to 55.3% CaO.

The large-scale surface sampling program consisted of taking 198 rock chip and soil samples at a 500m x 500m spacing across approximately 60 square kilometres. The program was split into two parts and was designed to focus on the areas containing limestone as well as complimentary cement plant blend materials such as alumina, silica and iron.

The White Lion project is located approximately 100km (by sealed road) from the Zambian capital Lusaka and sits on a granted Large Scale Mining Licence which covers a total area of 245 square kilometres.

### The Limestone Program

The limestone section of the sampling program consisted of 109 samples and specifically targeted outcropping limestone. The assays returned excellent results showing a large expanse of high-grade calcium limestone covering an area of approximately 21 square kilometres.

While the majority of the samples were rock chips, some of the sample locations were covered by a shallow alluvial soil cover and here only a soil sample was recovered. However, due to the contiguous nature of the limestone deposition it was recognised that the limestone ran continuously under these areas.

To calculate an average limestone grade, Spitfire used a nominal >40% CaO cut off. The 53 samples grading above the cut off were used for the calculation and are listed below in Table 1.

Key elements observed by the Company included:

- Calcium 51.05% CaO
- Silica 2.88% SiO<sub>2</sub>
- Alumina 0.39% Al<sub>2</sub>O<sub>3</sub>
- Iron 0.40% Fe
- Magnesium Oxide 2.28% MgO

These average results were benchmarked against typical industry standards (ASTM 150)\* for Portland cement which is outlined below.

- Calcium At least 40.2% CaO
- Silica not >16.2% SiO<sub>2</sub>
- Alumina not >4.8% Al<sub>2</sub>O<sub>3</sub>
- Iron not >1.6% Fe<sub>2</sub>O<sub>3</sub>
- Magnesium Oxide not >2.8% MgO

\*ASTM C150 / C150M-15, Standard Specification for Portland cement, ASTM International, 2015.

Consequently, from the work done to date it appears evident that the White Lion project contains high grade limestone potentially suitable for cement manufacturing. Greater knowledge of its chemical composition at depth will be further refined by the drilling program in early 2016.

Due to the excellent consistency of the calcium grade over such a big area Spitfire has set an initial Exploration Target of between 70 and 90 million tonnes with a grade of 45% to 47% CaO.\* This would conceptually be enough limestone to supply a large cement works.

\* Exploration Disclaimer: The exploration target is based on previous sampling by the former owner in addition to the 198 new samples taken from the exploration area as detailed in the text. The exploration target is formulated by calculating a one square kilometre sampled area and conceptualises a limestone depth of 50m, multiplied by a 2.7sg (specific gravity) of the material. Because the potential quantity and grade of this Exploration Target is conceptual in nature, Spitfire notes in accordance with Clause 17 of the JORC Code 2012 that there has been insufficient exploration to define a Mineral Resource estimate. It is uncertain if further exploration will result in the determination of a Mineral Resource.

## The Blend Materials Program

Part two of the sampling program was tasked to locate suitable complimentary cement plant materials such as silica, alumina and iron. Assay results have indicated that these minerals are located within the tenement and will be pathfinders for the drilling program which will expand this knowledge.

From the work done to date, a sizeable area has been discovered which contains blend rock high in silica and aluminum but importantly low in magnesium oxide impurities. The sampling program has also revealed multiple areas on the tenement showing good iron grades. A complete assay listing for the blend materials (non limestone) sampling program is listed in appendix 2.

## Next Round of Work

Spitfire has begun planning work for a drilling program at White Lion to take place in early 2016 following the current wet season. With the sampling completed Spitfire is now well positioned to optimise its drilling program to target the best blend of materials for not just cement production but also for the downstream supply of aggregates, concrete and agricultural lime products. This program will target the highest grade limestone areas to allow for a JORC resource to be formulated. Drilling will consist of both reverse circulation and diamond techniques coupled with associated metallurgical testing.

“The latest round of expanded sampling has confirmed the large size and excellent grade of White Lion,” Spitfire’s Executive Chairman, James Hamilton, said. “While drilling plans are being formulated the Company has begun actively looking at White Lion’s potential to be exploited in the production of downstream construction materials. As that knowledge grows we will continue our communication outreach to players in the construction materials sector.”

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Sample ID	EAST	NORTH	Sample Type	Al2O3	CaO	Cl	Cr2O3	Fe	K2O	MgO	MnO	Na2O	P2O5	SO3	SiO2	TiO2	LOI
57	549000	8325000	Rock	0.02	<b>55.30</b>	0.01	0.00	0.17	0.00	0.38	0.02	0.00	0.04	0.07	0.11	0.00	43.80
30	547500	8324000	Rock	0.09	<b>55.00</b>	0.01	0.00	0.08	0.01	0.32	0.01	0.00	0.04	0.03	0.48	0.00	43.60
69	549000	8325500	Rock	0.01	<b>54.80</b>	0.01	0.00	0.07	0.03	0.75	0.02	0.00	0.03	0.01	0.45	0.01	43.90
145	550500	8328500	Rock	0.16	<b>54.40</b>	0.01	0.00	0.33	0.11	0.52	0.03	0.00	0.03	0.05	0.95	0.00	43.40
142	549000	8328500	Rock	0.09	<b>54.30</b>	0.02	0.00	0.84	0.00	0.63	0.04	0.02	0.07	0.32	0.43	0.01	43.30
68	548500	8325500	Rock	0.02	<b>53.90</b>	0.01	0.00	0.19	0.00	0.93	0.03	0.00	0.05	0.03	1.52	0.01	43.30
29	547000	8324000	Rock	0.19	<b>53.80</b>	0.01	0.00	0.21	0.02	1.23	0.03	0.00	0.03	0.01	0.81	0.02	43.60
143	549500	8328500	Rock	0.09	<b>53.70</b>	0.02	0.00	0.34	0.00	1.85	0.03	0.01	0.01	0.03	0.20	0.01	44.00
43	548000	8324500	Rock	0.08	<b>53.60</b>	0.01	0.00	0.23	0.02	1.09	0.03	0.02	0.05	0.04	1.40	0.00	43.30
122	546500	8328000	Rock	0.08	<b>53.50</b>	0.02	0.00	0.77	0.00	0.43	0.02	0.03	0.06	0.11	1.87	0.01	42.80
56	548500	8325000	Rock	0.47	<b>53.40</b>	0.01	0.00	0.20	0.18	0.78	0.01	0.00	0.05	0.09	2.37	0.03	42.50
88	547500	8326500	Rock	0.17	<b>53.20</b>	0.01	0.00	0.14	0.05	1.60	0.03	0.00	0.02	0.03	1.37	0.01	43.40
31	548000	8324000	Rock	0.52	<b>53.00</b>	0.01	0.00	0.25	0.20	0.88	0.00	0.00	0.06	0.08	2.11	0.03	42.50
137	546500	8328500	Rock	0.46	<b>52.90</b>	0.01	0.00	0.22	0.07	1.25	0.01	0.06	0.05	0.16	1.92	0.03	42.80

Sample ID	EAST	NORTH	Sample Type	Al2O3	CaO	Cl	Cr2O3	Fe	K2O	MgO	MnO	Na2O	P2O5	SO3	SiO2	TiO2	LOI
168	548500	8329500	Rock	0.10	<b>52.90</b>	0.03	0.00	0.75	0.06	1.69	0.03	0.01	0.06	0.24	1.10	0.00	43.10
109	546500	8327500	Rock	0.37	<b>52.80</b>	0.01	0.00	1.06	0.06	0.76	0.05	0.00	0.09	0.18	1.58	0.03	42.70
67	548000	8325500	Rock	0.00	<b>52.70</b>	0.01	0.00	0.09	0.00	1.21	0.03	0.00	0.06	0.01	3.51	0.00	42.60
99	547500	8327000	Rock	0.05	<b>52.60</b>	0.01	0.00	0.46	0.01	1.00	0.02	0.00	0.02	0.01	3.36	0.00	42.50
53	547000	8325000	Rock	0.23	<b>51.90</b>	0.01	0.00	0.19	0.05	2.98	0.03	0.00	0.03	0.03	0.93	0.01	43.90
182	551500	8330000	Rock	0.34	<b>51.90</b>	0.02	0.00	1.57	0.12	1.01	0.05	0.00	0.05	0.81	2.52	0.02	41.50
156	549000	8329000	Rock	0.26	<b>51.80</b>	0.03	0.00	0.31	0.16	2.82	0.02	0.01	0.05	0.02	1.27	0.02	43.40
174	551500	8329500	Rock	0.63	<b>51.80</b>	0.01	0.00	0.75	0.26	1.13	0.04	0.00	0.07	0.04	3.16	0.03	41.50
79	548000	8326000	Rock	0.00	<b>51.60</b>	0.01	0.00	0.23	0.00	0.76	0.03	0.00	0.02	0.09	5.44	0.00	41.60
28	546500	8324000	Rock	0.47	<b>51.50</b>	0.03	0.00	0.42	0.08	2.16	0.02	0.04	0.03	0.19	2.52	0.03	0.00
55	548000	8325000	Rock	0.15	<b>51.40</b>	0.01	0.00	0.14	0.04	3.14	0.02	0.00	0.09	0.02	1.26	0.01	43.80
141	548500	8328500	Rock	0.72	<b>51.00</b>	0.01	0.00	0.33	0.25	2.09	0.03	0.00	0.06	0.12	3.17	0.04	42.10
98	547000	8327000	Rock	0.07	<b>50.80</b>	0.02	0.00	0.30	0.05	3.48	0.02	0.00	0.03	0.15	0.79	0.00	43.90
123	547000	8328000	Rock	0.63	<b>50.80</b>	0.01	0.00	0.30	0.20	2.19	0.05	0.00	0.06	0.14	3.05	0.04	42.40
152	547000	8329000	Rock	0.19	<b>50.60</b>	0.01	0.00	0.47	0.14	3.80	0.03	0.00	0.05	0.09	0.95	0.02	43.60
42	547500	8324500	Rock	0.02	<b>50.50</b>	0.01	0.00	0.12	0.00	4.14	0.03	0.00	0.08	0.03	0.90	0.00	44.10
110	547000	8327500	Rock	0.46	<b>50.40</b>	0.01	0.00	0.25	0.20	3.64	0.02	0.04	0.06	0.07	2.00	0.02	43.00
111	547500	8327500	Rock	0.07	<b>50.40</b>	0.01	0.00	0.18	0.03	4.37	0.03	0.00	0.03	0.03	0.53	0.00	44.40
64	546500	8325500	Rock	0.11	<b>50.30</b>	0.01	0.00	0.16	0.06	4.40	0.03	0.00	0.11	0.02	0.79	0.00	44.20
90	548500	8326500	Rock	0.12	<b>50.30</b>	0.01	0.00	0.17	0.03	3.20	0.03	0.02	0.01	0.04	3.27	0.01	43.00
97	546500	8327000	Rock	0.51	<b>50.30</b>	0.01	0.00	0.33	0.10	2.98	0.02	0.07	0.08	0.07	2.98	0.03	42.70
100	548000	8327000	Rock	0.28	<b>50.30</b>	0.01	0.00	0.21	0.09	3.79	0.04	0.02	0.05	0.05	1.41	0.02	43.70
138	547000	8328500	Rock	0.06	<b>50.20</b>	0.01	0.00	0.16	0.05	4.59	0.02	0.00	0.03	0.02	0.66	0.00	44.10
70	549500	8325500	Rock	0.09	<b>50.10</b>	0.01	0.00	0.49	0.49	0.92	0.02	0.01	0.08	0.05	5.86	0.06	40.50
127	549000	8328000	Rock	0.44	<b>50.00</b>	0.01	0.00	0.49	0.15	0.75	0.02	0.00	0.03	0.21	7.67	0.03	40.10
144	550000	8328500	Rock	1.40	<b>50.00</b>	0.01	0.00	0.54	0.49	0.78	0.02	0.00	0.09	0.08	6.13	0.08	40.20
89	548000	8326500	Rock	0.10	<b>49.90</b>	0.01	0.00	0.29	0.02	3.47	0.03	0.00	0.02	0.04	2.88	0.01	43.20
155	548500	8329000	Rock	0.88	<b>49.90</b>	0.02	0.00	0.78	0.32	2.20	0.06	0.02	0.06	0.14	3.94	0.05	41.60
54	547500	8325000	Rock	0.27	<b>49.80</b>	0.02	0.00	0.14	0.08	1.62	0.03	0.02	0.18	0.03	7.27	0.02	40.60
188	550500	8330500	Rock	0.44	<b>49.50</b>	0.01	0.00	0.32	0.26	3.98	0.00	0.05	0.07	0.39	1.97	0.05	42.70
41	547000	8324500	Rock	0.23	<b>49.30</b>	0.01	0.00	0.19	0.05	3.56	0.02	0.00	0.06	0.02	3.93	0.02	42.70
44	548500	8324500	Rock	0.82	<b>48.80</b>	0.01	0.01	1.26	0.20	0.37	0.03	0.03	0.04	0.06	8.76	0.05	0.00
166	547500	8329500	Rock	0.08	<b>48.60</b>	0.01	0.00	0.21	0.04	5.73	0.03	0.00	0.04	0.03	0.75	0.00	44.40
65	547000	8325500	Rock	0.05	<b>47.40</b>	0.02	0.00	0.23	0.02	5.31	0.03	0.00	0.06	0.01	3.81	0.00	43.10
153	547500	8329000	Rock	0.14	<b>47.30</b>	0.02	0.00	0.53	0.04	6.49	0.04	0.02	0.03	0.05	0.85	0.02	44.50
76	547500	8326000	Rock	1.64	<b>47.20</b>	0.01	0.00	0.78	0.64	1.84	0.04	0.03	0.07	0.06	7.91	0.10	39.20
80	548500	8326000	Rock	0.17	<b>46.90</b>	0.01	0.00	0.36	0.06	6.04	0.04	0.01	0.03	0.08	2.91	0.02	43.60
87	547000	8326500	Rock	2.69	<b>44.50</b>	0.03	0.00	0.66	1.03	2.43	0.02	0.33	0.08	0.27	11.40	0.14	36.00
32	548500	8324000	Rock	3.14	<b>43.10</b>	0.03	0.00	0.68	1.07	1.55	0.04	0.05	0.09	0.19	13.40	0.14	36.10

Table 1: Limestone assay results from White Lion showing samples with greater than >40% CaO. A complete list of limestone samples is in Appendix 1.

## **Geology Background**

### **White Lion Regional Geology**

The regional geology comprises Katangan and Muva Supergroup rocks to the north of the east to west trending Mwembeshi Shear Zone (MSZ); to the south occur Archaean to Paleoproterozoic basement rocks of the Zambezi Fold Belt. The carbonate sediments of interest are considered to be platformal carbonates with subordinate siliciclastic sediments of the Upper Roan Group (R4) of the Katangan Supergroup.

### **White Lion Local Geology**

The Katangan units within the Project have been affected by several tectonic events including early folding associated with northwards verging thrusting, fracturing and faulting related to the MSZ and the closure of the Late-Proterozoic Katanga Basin. The carbonate rocks observed at the project display some evidence of uplift, with an average dip orientation of 65° and striking for the most part along a NE/SW direction. The limestone outcrop shows a width across strike of approximately 1.5kms that equates to an original horizontal depth of 1.36kms due to its current 65 degree average dip angle. Along strike within the tenement totals a length of 9.4kms and swings 120 degrees to the west at the northern end while maintaining a similar dip angle. The limestone observed within the tenement is best described as a well cemented, crystalline massive rock body with remnant platy layering and some inter-bedding of white and grey layers.

### **Competent Person's Statement**

The information in this report relating to exploration results and mineral resources is based on information compiled by Mr. Stuart Peterson, the Company's Consulting Exploration Manager, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Peterson has sufficient experience relevant to the styles of mineralisation mentioned and to the type of activities described to qualify as a competent person as defined in the 2012 Edition of the "Australian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves."

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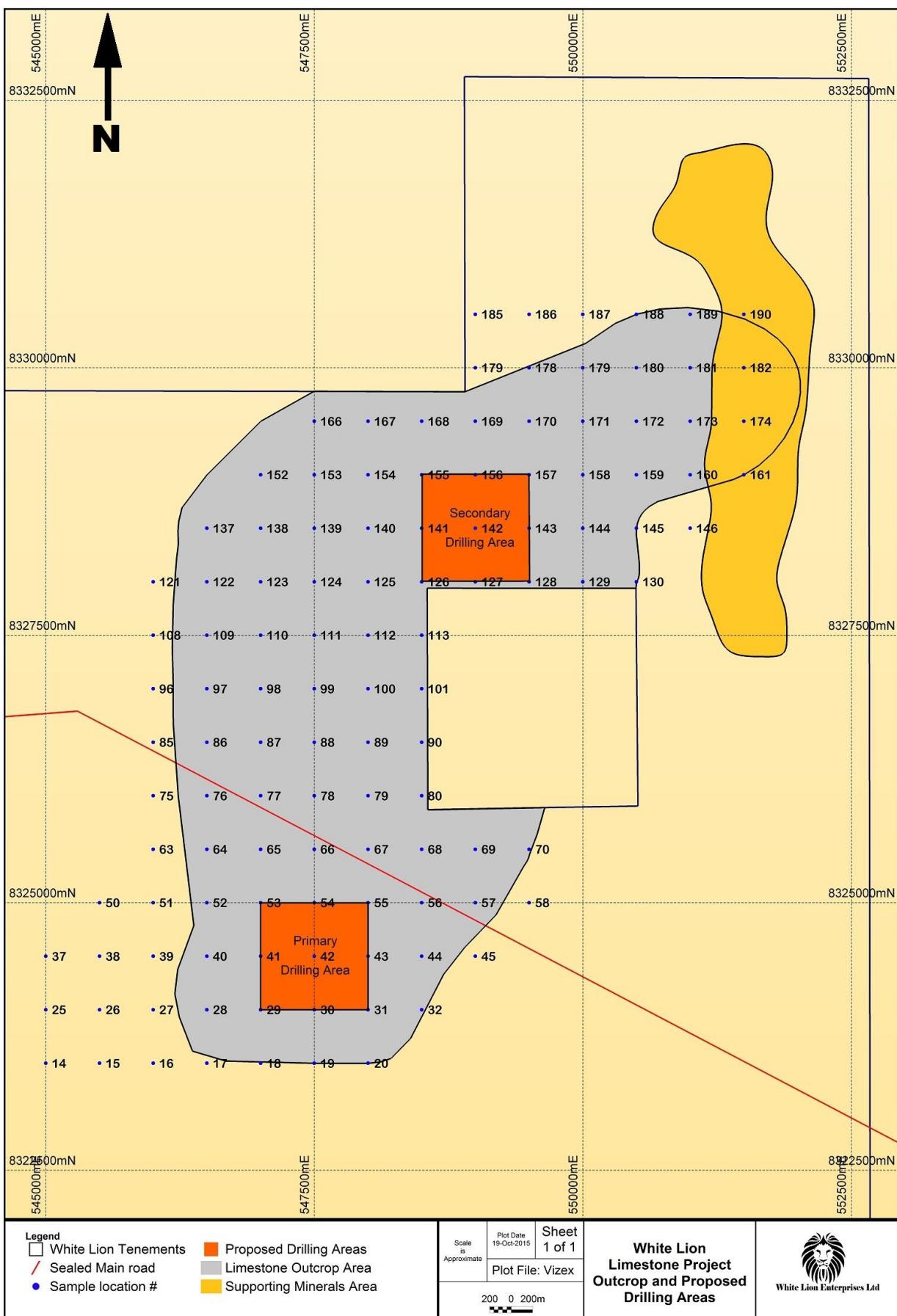


Figure 1: White Lion tenement showing limestone and supporting minerals outline along with the proposed drilling areas.



Figure 2: Limestone outcrop at the White Lion tenement.



Figure 3: The White Lion Zambian team with Spitfire Resources' Exploration Manager, Stuart Peterson.

**Appendix 1: Assay listing from Limestone targeted samples.**

Sample ID	EAST	NORTH	Sample Type	Al2O3	CaO	Cl	Cr2O3	Fe	K2O	MgO	MnO	Na2O	P2O5	SO3	SiO2	TiO2	LOI
14	545000	8323500	Soil	9.68	1.50	0.01	0.01	4.35	0.75	0.60	0.03	0.05	0.07	0.04	65.20	1.20	11.40
15	545500	8323500	Soil	14.90	0.22	0.01	0.01	4.79	0.61	0.57	0.04	0.14	0.07	0.03	74.70	1.33	7.38
16	546000	8323500	Soil	10.00	0.24	0.02	0.02	11.50	0.49	0.91	0.04	1.57	0.12	0.03	67.50	2.35	4.92
17	546500	8323500	Soil	10.20	0.24	0.01	0.01	4.74	1.07	0.90	0.06	0.09	0.06	0.03	76.10	1.11	6.02
18	547000	8323500	Soil	9.36	0.26	0.01	0.01	10.10	0.54	0.70	0.14	0.19	0.11	0.04	66.50	2.37	7.41
19	547500	8323500	Soil	11.70	0.09	0.01	0.01	3.08	1.12	0.39	0.03	0.09	0.04	0.02	84.20	0.75	3.21
20	548000	8323500	Soil	6.70	0.21	0.01	0.01	5.52	1.05	0.56	0.04	0.26	0.06	0.03	75.50	1.09	5.65
25	545000	8324000	Soil	10.60	0.31	0.01	0.01	4.40	0.54	0.53	0.03	0.07	0.06	0.04	74.00	1.78	7.26
26	545500	8324000	Soil	11.00	0.19	0.01	0.02	4.72	1.83	0.67	0.03	0.77	0.06	0.03	74.60	1.06	4.94
27	546000	8324000	Soil	12.00	0.10	0.01	0.01	6.18	0.44	0.29	0.05	0.01	0.07	0.03	73.20	0.99	6.56
28	546500	8324000	Rock	0.47	<b>51.50</b>	0.03	0.00	0.42	0.08	2.16	0.02	0.04	0.03	0.19	2.52	0.03	0.00
29	547000	8324000	Rock	0.19	<b>53.80</b>	0.01	0.00	0.21	0.02	1.23	0.03	0.00	0.03	0.01	0.81	0.02	43.60
30	547500	8324000	Rock	0.09	<b>55.00</b>	0.01	0.00	0.08	0.01	0.32	0.01	0.00	0.04	0.03	0.48	0.00	43.60
31	548000	8324000	Rock	0.52	<b>53.00</b>	0.01	0.00	0.25	0.20	0.88	0.00	0.00	0.06	0.08	2.11	0.03	42.50
32	548500	8324000	Rock	3.14	<b>43.10</b>	0.03	0.00	0.68	1.07	1.55	0.04	0.05	0.09	0.19	13.40	0.14	36.10
37	545000	8324500	Soil	11.60	0.20	0.01	0.02	4.65	0.70	0.45	0.04	0.64	0.07	0.03	73.70	1.30	6.12
38	545500	8324500	Soil	16.00	0.37	0.00	0.02	7.08	0.91	0.59	0.11	0.12	0.11	0.05	61.70	1.37	11.00
39	546000	8324500	Soil	10.60	0.24	0.01	0.02	5.46	1.35	0.76	0.07	0.16	0.07	0.03	73.30	1.03	6.96
40	546500	8324500	Soil	8.64	0.15	0.01	0.02	7.75	0.94	0.54	0.10	0.05	0.06	0.03	75.60	1.40	4.61
41	547000	8324500	Rock	0.23	<b>49.30</b>	0.01	0.00	0.19	0.05	3.56	0.02	0.00	0.06	0.02	3.93	0.02	42.70
42	547500	8324500	Rock	0.02	<b>50.50</b>	0.01	0.00	0.12	0.00	4.14	0.03	0.00	0.08	0.03	0.90	0.00	44.10
43	548000	8324500	Rock	0.08	<b>53.60</b>	0.01	0.00	0.23	0.02	1.09	0.03	0.02	0.05	0.04	1.40	0.00	43.30
44	548500	8324500	Rock	0.82	<b>48.80</b>	0.01	0.01	1.26	0.20	0.37	0.03	0.03	0.04	0.06	8.76	0.05	0.00
51	546000	8325000	Soil	14.20	0.23	0.01	0.02	5.82	0.43	0.50	0.09	0.53	0.08	0.05	68.10	1.95	7.86
52	546500	8325000	Soil	6.31	0.13	0.01	0.01	2.93	0.40	0.30	0.04	0.02	0.05	0.02	84.80	0.93	4.27
53	547000	8325000	Rock	0.23	<b>51.90</b>	0.01	0.00	0.19	0.05	2.98	0.03	0.00	0.03	0.03	0.93	0.01	43.90
54	547500	8325000	Rock	0.27	<b>49.80</b>	0.02	0.00	0.14	0.08	1.62	0.03	0.02	0.18	0.03	7.27	0.02	40.60
55	548000	8325000	Rock	0.15	<b>51.40</b>	0.01	0.00	0.14	0.04	3.14	0.02	0.00	0.09	0.02	1.26	0.01	43.80
56	548500	8325000	Rock	0.47	<b>53.40</b>	0.01	0.00	0.20	0.18	0.78	0.01	0.00	0.05	0.09	2.37	0.03	42.50
57	549000	8325000	Rock	0.02	<b>55.30</b>	0.01	0.00	0.17	0.00	0.38	0.02	0.00	0.04	0.07	0.11	0.00	43.80
58	549500	8325000	Soil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	546000	8325500	Soil	12.20	0.24	0.01	0.02	5.20	0.31	0.53	0.07	2.03	0.06	0.03	71.10	2.25	5.94
64	546500	8325500	Rock	0.11	<b>50.30</b>	0.01	0.00	0.16	0.06	4.40	0.03	0.00	0.11	0.02	0.79	0.00	44.20
65	547000	8325500	Rock	0.05	<b>47.40</b>	0.02	0.00	0.23	0.02	5.31	0.03	0.00	0.06	0.01	3.81	0.00	43.10
66	547500	8325500	Soil	4.21	0.49	0.01	0.01	3.88	0.19	0.17	0.10	0.01	0.07	0.02	85.30	0.63	4.55
67	548000	8325500	Rock	0.00	<b>52.70</b>	0.01	0.00	0.09	0.00	1.21	0.03	0.00	0.06	0.01	3.51	0.00	42.60
68	548500	8325500	Rock	0.02	<b>53.90</b>	0.01	0.00	0.19	0.00	0.93	0.03	0.00	0.05	0.03	1.52	0.01	43.30
69	549000	8325500	Rock	0.01	<b>54.80</b>	0.01	0.00	0.07	0.03	0.75	0.02	0.00	0.03	0.01	0.45	0.01	43.90
70	549500	8325500	Rock	0.09	<b>50.10</b>	0.01	0.00	0.49	0.49	0.92	0.02	0.01	0.08	0.05	5.86	0.06	40.50
75	546000	8326000	Soil	8.87	0.20	0.01	0.02	6.80	0.36	0.51	0.09	0.29	0.10	0.04	74.70	2.05	5.88
76	547500	8326000	Rock	1.64	<b>47.20</b>	0.01	0.00	0.78	0.64	1.84	0.04	0.03	0.07	0.06	7.91	0.10	39.20
77	547000	8326000	Rock	0.40	27.10	0.04	0.00	2.38	0.04	13.80	0.07	0.11	0.11	0.10	17.90	0.03	37.60
78	546500	8326000	Rock	0.27	32.10	0.01	0.00	0.86	0.09	18.50	0.07	0.02	0.11	0.11	2.17	0.02	45.60
79	548000	8326000	Rock	0.00	<b>51.60</b>	0.01	0.00	0.23	0.00	0.76	0.03	0.00	0.02	0.09	5.44	0.00	41.60
80	548500	8326000	Rock	0.17	<b>46.90</b>	0.01	0.00	0.36	0.06	6.04	0.04	0.01	0.03	0.08	2.91	0.02	43.60

Sample ID	EAST	NORTH	Sample Type	Al2O3	CaO	Cl	Cr2O3	Fe	K2O	MgO	MnO	Na2O	P2O5	SO3	SiO2	TiO2	LOI
85	546000	8326500	Soil	9.05	0.17	0.01	0.02	13.20	1.45	0.59	0.08	0.09	0.09	0.03	67.80	2.11	5.17
86	546500	8326500	Rock	0.19	32.40	0.05	0.00	1.06	0.06	18.60	0.06	0.05	0.03	0.01	0.94	0.02	46.50
87	547000	8326500	Rock	2.69	<b>44.50</b>	0.03	0.00	0.66	1.03	2.43	0.02	0.33	0.08	0.27	11.40	0.14	36.00
88	547500	8326500	Rock	0.17	<b>53.20</b>	0.01	0.00	0.14	0.05	1.60	0.03	0.00	0.02	0.03	1.37	0.01	43.40
89	548000	8326500	Rock	0.10	<b>49.90</b>	0.01	0.00	0.29	0.02	3.47	0.03	0.00	0.02	0.04	2.88	0.01	43.20
90	548500	8326500	Rock	0.12	<b>50.30</b>	0.01	0.00	0.17	0.03	3.20	0.03	0.02	0.01	0.04	3.27	0.01	43.00
97	546500	8327000	Rock	0.51	<b>50.30</b>	0.01	0.00	0.33	0.10	2.98	0.02	0.07	0.08	0.07	2.98	0.03	42.70
98	547000	8327000	Rock	0.07	<b>50.80</b>	0.02	0.00	0.30	0.05	3.48	0.02	0.00	0.03	0.15	0.79	0.00	43.90
99	547500	8327000	Rock	0.05	<b>52.60</b>	0.01	0.00	0.46	0.01	1.00	0.02	0.00	0.02	0.01	3.36	0.00	42.50
100	548000	8327000	Rock	0.28	<b>50.30</b>	0.01	0.00	0.21	0.09	3.79	0.04	0.02	0.05	0.05	1.41	0.02	43.70
101	548500	8327000	Soil	13.40	0.27	0.01	0.02	8.98	0.62	0.47	0.18	0.03	0.10	0.03	66.40	1.48	7.45
108	546000	8327500	Rock	1.28	28.40	0.06	0.00	6.96	0.40	15.60	0.17	0.06	0.07	0.06	4.92	0.07	42.00
109	546500	8327500	Rock	0.37	<b>52.80</b>	0.01	0.00	1.06	0.06	0.76	0.05	0.00	0.09	0.18	1.58	0.03	42.70
110	547000	8327500	Rock	0.46	<b>50.40</b>	0.01	0.00	0.25	0.20	3.64	0.02	0.04	0.06	0.07	2.00	0.02	43.00
111	547500	8327500	Rock	0.07	<b>50.40</b>	0.01	0.00	0.18	0.03	4.37	0.03	0.00	0.03	0.03	0.53	0.00	44.40
112	548000	8327500	Soil	12.10	0.26	0.00	0.02	8.27	0.70	0.54	0.10	0.04	0.10	0.03	68.70	0.95	8.19
113	548500	8327500	Soil	7.95	0.10	0.01	0.02	4.49	0.66	0.37	0.06	0.05	0.05	0.02	80.60	0.89	4.16
122	546500	8328000	Rock	0.08	<b>53.50</b>	0.02	0.00	0.77	0.00	0.43	0.02	0.03	0.06	0.11	1.87	0.01	42.80
123	547000	8328000	Rock	0.63	<b>50.80</b>	0.01	0.00	0.30	0.20	2.19	0.05	0.00	0.06	0.14	3.05	0.04	42.40
124	547500	8328000	Soil	8.36	0.09	0.01	0.03	6.33	0.40	0.35	0.08	0.08	0.06	0.03	78.80	0.91	3.99
125	548000	8328000	Soil	9.05	0.16	0.01	0.02	8.44	0.45	0.41	0.08	0.03	0.10	0.03	74.60	0.99	5.21
126	548500	8328000	Soil	17.20	0.26	0.01	0.02	14.90	0.64	0.48	0.16	0.02	0.12	0.04	55.50	1.08	9.82
127	549000	8328000	Rock	0.44	<b>50.00</b>	0.01	0.00	0.49	0.15	0.75	0.02	0.00	0.03	0.21	7.67	0.03	40.10
128	549500	8328000	Soil	10.60	0.12	0.01	0.02	9.65	0.92	0.48	0.09	0.05	0.07	0.04	71.00	0.99	5.71
129	550000	8328000	Soil	16.10	0.07	0.01	0.02	8.51	1.75	0.65	0.07	0.04	0.10	0.03	64.30	0.97	7.37
130	550500	8328000	Soil	8.22	0.10	0.01	0.01	7.18	2.23	0.62	0.02	0.05	0.04	0.03	77.60	0.63	2.77
137	546500	8328500	Rock	0.46	<b>52.90</b>	0.01	0.00	0.22	0.07	1.25	0.01	0.06	0.05	0.16	1.92	0.03	42.80
138	547000	8328500	Rock	0.06	<b>50.20</b>	0.01	0.00	0.16	0.05	4.59	0.02	0.00	0.03	0.02	0.66	0.00	44.10
139	547500	8328500	Rock	4.17	35.00	0.02	0.00	1.88	1.46	4.61	0.06	0.10	0.09	0.01	18.70	0.21	33.50
140	548000	8328500	Soil	11.60	0.14	0.01	0.02	6.70	1.30	0.56	0.09	0.11	0.08	0.03	71.40	1.05	6.27
141	548500	8328500	Rock	0.72	<b>51.00</b>	0.01	0.00	0.33	0.25	2.09	0.03	0.00	0.06	0.12	3.17	0.04	42.10
142	549000	8328500	Rock	0.09	<b>54.30</b>	0.02	0.00	0.84	0.00	0.63	0.04	0.02	0.07	0.32	0.43	0.01	43.30
143	549500	8328500	Rock	0.09	<b>53.70</b>	0.02	0.00	0.34	0.00	1.85	0.03	0.01	0.01	0.03	0.20	0.01	44.00
144	550000	8328500	Rock	1.40	<b>50.00</b>	0.01	0.00	0.54	0.49	0.78	0.02	0.00	0.09	0.08	6.13	0.08	40.20
145	550500	8328500	Rock	0.16	<b>54.40</b>	0.01	0.00	0.33	0.11	0.52	0.03	0.00	0.03	0.05	0.95	0.00	43.40
146	551000	8328500	Soil	9.48	0.10	0.01	0.01	6.76	1.89	0.69	0.06	0.03	0.05	0.04	74.90	0.80	4.71
152	547000	8329000	Rock	0.19	<b>50.60</b>	0.01	0.00	0.47	0.14	3.80	0.03	0.00	0.05	0.09	0.95	0.02	43.60
153	547500	8329000	Rock	0.14	<b>47.30</b>	0.02	0.00	0.53	0.04	6.49	0.04	0.02	0.03	0.05	0.85	0.02	44.50
154	548000	8329000	Soil	8.11	0.13	0.01	0.01	4.96	1.40	0.54	0.05	0.05	0.06	0.03	79.40	0.83	4.18
155	548500	8329000	Rock	0.88	<b>49.90</b>	0.02	0.00	0.78	0.32	2.20	0.06	0.02	0.06	0.14	3.94	0.05	41.60
156	549000	8329000	Rock	0.26	<b>51.80</b>	0.03	0.00	0.31	0.16	2.82	0.02	0.01	0.05	0.02	1.27	0.02	43.40
157	549500	8329000	Soil	8.49	0.12	0.01	0.02	7.65	0.83	0.47	0.09	0.09	0.08	0.02	75.70	1.44	4.92
158	550000	8329000	Soil	10.30	0.12	0.01	0.02	6.98	0.71	0.46	0.07	0.16	0.08	0.03	73.70	0.99	6.01
159	550500	8329000	Soil	9.48	0.08	0.01	0.01	5.50	0.50	0.30	0.05	0.01	0.05	0.03	78.00	0.72	4.94
160	551000	8329000	Soil	10.10	0.10	0.01	0.01	6.63	0.49	0.34	0.06	0.02	0.09	0.03	75.20	0.85	5.73
166	547500	8329500	Rock	0.08	<b>48.60</b>	0.01	0.00	0.21	0.04	5.73	0.03	0.00	0.04	0.03	0.75	0.00	44.40
167	548000	8329500	Rock	1.49	30.00	0.06	0.00	6.41	0.39	13.70	0.15	0.06	0.06	0.01	6.89	0.07	40.70

Sample ID	EAST	NORTH	Sample Type	Al2O3	CaO	Cl	Cr2O3	Fe	K2O	MgO	MnO	Na2O	P2O5	SO3	SiO2	TiO2	LOI
168	548500	8329500	Rock	0.10	<b>52.90</b>	0.03	0.00	0.75	0.06	1.69	0.03	0.01	0.06	0.24	1.10	0.00	43.10
169	549000	8329500	Soil	19.10	0.13	0.02	0.02	9.06	6.56	1.38	0.02	0.11	0.04	0.01	59.50	0.93	3.24
170	549500	8329500	Soil	11.30	0.17	0.01	0.02	9.31	0.91	0.77	0.10	0.05	0.12	0.04	68.70	1.32	7.03
171	550000	8329500	Soil	10.10	0.17	0.01	0.02	10.00	0.47	1.11	0.10	0.45	0.10	0.03	68.60	2.75	5.83
172	550500	8329500	Soil	9.93	0.09	0.01	0.01	6.26	0.69	0.40	0.05	0.08	0.07	0.03	75.90	0.98	5.22
173	551000	8329500	Soil	7.57	0.11	0.01	0.01	4.06	0.68	0.33	0.04	0.03	0.05	0.02	81.90	0.74	4.70
174	551500	8329500	Rock	0.63	<b>51.80</b>	0.01	0.00	0.75	0.26	1.13	0.04	0.00	0.07	0.04	3.16	0.03	41.50
179	550000	8330000	Soil	14.50	0.18	0.02	0.02	9.58	1.41	1.15	0.10	0.24	0.14	0.04	62.60	1.77	7.88
180	550500	8330000	Soil	14.40	0.23	0.02	0.02	15.90	0.53	0.86	0.08	1.40	0.11	0.03	53.80	5.38	7.60
181	551000	8330000	Rock	6.09	33.40	0.01	0.00	0.94	2.29	2.35	0.03	0.03	0.11	0.28	24.50	0.30	29.60
182	551500	8330000	Rock	0.34	<b>51.90</b>	0.02	0.00	1.57	0.12	1.01	0.05	0.00	0.05	0.81	2.52	0.02	41.50
185	549000	8330500	Soil	7.90	0.11	0.01	0.01	5.91	1.27	0.55	0.05	0.17	0.06	0.03	78.50	1.16	4.28
186	549500	8330500	Soil	14.30	0.10	0.01	0.02	10.00	1.78	0.75	0.08	0.07	0.08	0.03	65.40	1.46	5.82
187	550000	8330500	Soil	8.09	0.12	0.01	0.02	8.97	0.63	0.77	0.06	0.15	0.10	0.04	73.50	2.64	4.57
188	550500	8330500	Rock	0.44	<b>49.50</b>	0.01	0.00	0.32	0.26	3.98	0.00	0.05	0.07	0.39	1.97	0.05	42.70
189	551000	8330500	Rock	0.09	29.30	0.01	0.00	0.34	0.03	20.30	0.03	0.00	0.04	0.01	4.65	0.00	45.30
190	551500	8330500	Soil	14.50	0.30	0.01	0.03	3.43	4.26	0.55	0.04	0.11	0.12	0.05	71.60	1.63	2.95

#### Appendix 2: Assay results from Non Limestone targeted samples.

ID	EAST	NORTH	Sample Type	Al2O3	CaO	Cl	Cr2O3	Fe	K2O	LOI	MgO	MnO	Na2O	P2O5	SO3	SiO2	TiO2
1	543500	8323000	Soil	5.48	0.09	0.01	0.01	2.60	0.32	2.07	0.32	0.02	0.24	0.03	0.02	86.60	1.68
2	544000	8323000	Soil	5.57	0.18	0.01	0.01	3.59	0.59	5.82	0.33	0.04	0.03	0.04	0.03	78.10	1.14
3	544500	8323000	Rock	10.30	55.30	0.01	0.01	0.06	0.01	43.70	0.39	0.00	0.00	0.04	0.02	0.39	0.01
4	545000	8323000	Soil	0.07	0.13	0.01	0.01	5.69	0.87	5.67	0.45	0.06	0.05	0.07	0.04	75.60	1.24
5	545500	8323000	Rock	10.50	49.30	0.02	0.00	0.57	0.56	40.60	1.77	0.03	0.00	0.06	0.12	5.66	0.07
6	546000	8323000	Soil	1.13	0.13	0.01	0.01	8.85	1.02	5.29	0.85	0.08	0.23	0.06	0.04	72.90	1.11
7	546500	8323000	Soil	9.45	0.13	0.01	0.01	6.41	1.00	3.96	0.34	0.05	0.07	0.05	0.03	79.80	1.05
8	547000	8323000	Soil	7.21	0.12	0.01	0.01	4.66	1.04	3.47	0.33	0.04	0.04	0.04	0.02	82.60	1.06
9	547500	8323000	Soil	6.63	0.16	0.01	0.01	7.14	1.12	4.69	0.59	0.08	0.07	0.06	0.03	76.80	1.14
10	548000	8323000	Soil	8.22	0.14	0.02	0.01	4.43	0.62	2.94	0.27	0.02	0.48	0.04	0.02	84.50	1.02
11	543500	8323500	Soil	5.30	0.17	0.01	0.01	2.31	0.75	2.95	0.28	0.03	0.10	0.03	0.02	85.20	0.77
12	544000	8323500	Soil	7.28	0.55	0.00	0.01	2.59	0.46	7.62	0.48	0.03	0.06	0.05	0.03	81.60	1.07
13	544500	8323500	Soil	5.92	0.30	0.01	0.01	3.29	0.87	6.17	0.40	0.05	0.03	0.04	0.03	77.90	0.93
34	543500	8324500	Soil	13.20	0.88	0.00	0.02	5.22	1.08	9.91	0.70	0.05	0.12	0.06	0.04	67.80	0.99
35	544000	8324500	Soil	12.20	0.53	0.00	0.01	4.08	1.62	9.18	0.51	0.04	0.15	0.07	0.04	70.40	0.89
36	544500	8324500	Soil	9.46	0.20	0.00	0.02	5.96	1.21	3.74	0.34	0.05	0.09	0.05	0.03	77.50	1.03
47	544000	8325000	Soil	10.30	0.15	0.01	0.01	5.19	1.50	4.33	0.29	0.03	0.16	0.05	0.03	76.70	0.94
48	544500	8325000	Soil	7.99	0.17	0.01	0.01	5.71	1.43	4.08	0.34	0.07	0.15	0.06	0.03	78.30	1.00
49	545000	8325000	Soil	5.52	0.05	0.01	0.01	3.90	0.78	2.69	0.29	0.02	0.04	0.04	0.02	85.60	0.92
50	545500	8325000	Soil	14.70	0.32	0.01	0.08	12.70	0.43	9.40	1.27	0.11	0.17	0.10	0.05	58.10	2.40
60	544500	8325500	Soil	7.83	0.43	0.01	0.01	4.52	0.88	4.57	0.37	0.06	0.10	0.07	0.03	80.10	0.85
61	545000	8325500	Soil	16.20	1.03	0.00	0.02	9.07	0.43	9.69	1.09	0.08	0.27	0.06	0.02	59.70	1.95
62	545500	8325500	Soil	14.30	0.56	0.01	0.02	7.75	0.49	8.91	0.88	0.07	0.27	0.08	0.04	64.80	1.58
74	545500	8326000	Soil	9.54	0.41	0.01	0.02	7.75	0.17	5.63	1.22	0.06	1.18	0.09	0.05	71.20	2.60
82	551000	8326000	Rock	0.36	29.80	0.01	0.00	1.72	0.14	46.30	20.10	0.07	0.03	0.02	0.03	1.10	0.04
84	545500	8326500	Soil	12.90	0.26	0.01	0.02	8.33	0.45	7.94	0.76	0.10	0.41	0.10	0.04	66.40	2.16

ID	EAST	NORTH	Sample Type	Al2O3	CaO	Cl	Cr2O3	Fe	K2O	LOI	MgO	MnO	Na2O	P2O5	SO3	SiO2	TiO2
92	551000	8326500	Soil	18.50	0.12	0.01	0.02	11.50	6.42	4.03	1.68	0.12	0.11	0.10	0.01	55.90	0.96
95	545500	8327000	Soil	8.13	0.13	0.01	0.02	5.82	0.54	4.23	0.39	0.07	0.59	0.06	0.02	77.70	1.93
96	546000	8327000	Soil	9.92	0.10	0.01	0.02	9.25	0.77	5.73	0.44	0.09	0.05	0.08	0.02	71.70	1.72
103	551000	8327000	Soil	11.60	2.54	0.02	0.01	8.43	2.58	5.98	1.28	0.16	0.08	0.23	0.04	65.50	1.17
107	545500	8327500	Soil	8.83	0.32	0.01	0.01	14.20	0.63	6.64	0.45	0.18	0.06	0.12	0.04	67.40	1.08
121	546000	8328000	Rock	2.77	23.40	0.07	0.00	5.78	0.83	35.20	12.70	0.16	0.09	0.13	0.07	18.40	0.17
131	551000	8328000	Soil	8.18	0.09	0.01	0.02	8.89	1.78	4.23	0.60	0.05	0.04	0.06	0.04	75.20	0.70
132	551500	8328000	Soil	12.80	0.31	0.01	0.02	8.81	2.09	9.18	0.86	0.10	0.05	0.12	0.06	64.00	1.32
133	552000	8328000	Soil	0.64	0.09	0.10	0.00	2.55	0.12	0.69	0.05	0.01	0.07	0.02	0.02	95.10	0.06
134	552500	8328000	Soil	7.65	0.12	0.01	0.00	3.91	1.09	3.76	0.69	0.05	0.24	0.10	0.02	80.90	1.00
147	551500	8328500	Soil	13.00	0.23	0.01	0.02	7.96	1.80	8.10	0.83	0.10	0.06	0.08	0.04	66.10	1.51
148	552000	8328500	Soil	8.15	0.24	0.01	0.01	8.47	0.74	4.91	2.45	0.05	0.32	0.07	0.03	72.60	1.88
149	552500	8328500	Soil	10.20	0.32	0.01	0.01	5.76	0.81	7.36	2.40	0.08	0.20	0.09	0.03	70.80	1.51
161	551500	8329000	Rock	0.18	52.80	0.02	0.00	0.26	0.08	43.50	1.87	0.02	0.02	0.03	0.14	0.97	0.01
162	552000	8329000	Soil	13.90	0.19	0.04	0.01	7.28	1.06	7.21	0.59	0.05	0.15	0.09	0.10	67.80	1.21
163	552500	8329000	Soil	9.77	0.21	0.01	0.01	3.75	0.59	5.23	0.39	0.06	1.21	0.06	0.03	77.50	1.21
175	552000	8329500	Soil	6.68	0.38	0.01	0.01	5.82	0.94	4.52	0.45	0.04	0.10	0.05	0.03	80.30	0.80
176	552500	8329500	Soil	10.00	0.10	0.01	0.01	8.09	0.79	4.41	0.47	0.05	0.04	0.08	0.03	74.20	1.15
177	549000	8330000	Soil	8.99	0.13	0.01	0.02	7.16	1.43	3.96	0.59	0.05	0.04	0.05	0.03	75.80	1.25
178	549500	8330000	Soil	12.60	0.13	0.01	0.02	9.97	1.46	6.97	0.71	0.13	0.07	0.11	0.03	66.30	1.81
191	552000	8330500	Soil	9.50	0.18	0.01	0.01	6.96	1.41	5.52	0.70	0.08	0.04	0.08	0.03	72.80	2.14
192	552500	8330500	Soil	13.40	0.38	0.01	0.02	7.94	0.89	9.93	0.87	0.10	0.06	0.10	0.03	64.90	1.67
193	549000	8331000	Rock	0.36	53.80	0.01	0.00	0.43	0.11	42.60	0.37	0.03	0.00	0.07	0.13	2.06	0.03
194	549500	8331000	Soil	7.85	0.16	0.01	0.01	5.69	1.69	4.21	0.60	0.06	0.06	0.05	0.03	78.20	1.19
195	550000	8331000	Soil	13.30	0.29	0.01	0.02	13.10	0.83	7.67	1.00	0.12	0.80	0.15	0.04	58.10	4.33
196	550500	8331000	Soil	12.50	0.08	0.01	0.02	9.86	0.89	5.88	0.58	0.09	0.04	0.10	0.03	68.30	1.46
198	551500	8331000	Soil	8.83	0.13	0.01	0.01	4.49	1.64	4.55	0.59	0.03	0.13	0.08	0.03	77.30	2.10
199	552000	8331000	Soil	16.10	0.22	0.01	0.02	12.20	1.56	9.20	0.69	0.14	0.04	0.14	0.04	58.00	1.53
200	552500	8331000	Soil	11.00	0.27	0.01	0.02	10.20	0.77	6.88	0.68	0.08	0.21	0.11	0.04	66.60	3.15
201	549000	8331500	Rock	0.20	54.70	0.01	0.00	0.22	0.11	42.80	0.29	0.01	0.00	0.04	0.02	1.55	0.02
202	549500	8331500	Soil	7.54	0.54	0.01	0.01	5.13	1.63	3.25	0.64	0.06	0.09	0.05	0.03	79.40	1.17
203	550000	8331500	Soil	7.97	0.17	0.01	0.01	5.50	1.81	4.16	0.57	0.05	0.06	0.06	0.03	78.30	1.18
204	550500	8331500	Soil	12.90	0.27	0.01	0.02	12.00	0.79	8.71	1.27	0.15	0.06	0.17	0.04	61.60	1.73
205	551000	8331500	Soil	17.50	0.06	0.05	0.02	4.99	5.01	3.70	1.40	0.01	0.14	0.06	0.01	65.40	1.22
206	551500	8331500	Soil	0.19	0.09	0.00	0.00	48.00	0.02	6.38	0.12	0.05	0.01	0.11	0.01	44.00	0.00
207	552000	8331500	Soil	13.70	0.32	0.01	0.02	8.58	1.39	9.79	0.85	0.09	0.07	0.12	0.04	62.90	2.14
208	552500	8331500	Soil	9.11	0.25	0.01	0.01	7.06	0.74	5.62	0.98	0.06	0.38	0.09	0.03	72.90	2.09
211	550000	8332000	Rock	3.50	41.30	0.01	0.00	1.11	1.71	33.30	1.11	0.02	0.01	0.07	0.28	17.10	0.19
212	550500	8332000	Soil	14.70	0.41	0.01	0.02	17.40	0.77	7.41	1.04	0.08	0.98	0.16	0.04	49.90	6.43
213	551000	8332000	Soil	11.40	0.05	0.01	0.03	1.84	3.60	2.22	0.56	0.00	0.07	0.05	0.02	78.90	0.93
214	551500	8332000	Soil	13.60	0.14	0.01	0.02	8.40	1.54	7.22	0.60	0.09	0.07	0.12	0.04	65.80	1.96
215	552000	8332000	Soil	7.79	0.11	0.00	0.02	8.18	0.82	3.96	0.56	0.05	0.08	0.08	0.03	75.80	2.45
216	552500	8332000	Rock	0.28	27.00	0.04	0.00	2.83	0.08	41.80	17.90	0.09	0.05	0.03	0.03	9.96	0.04
220	550500	8332500	Soil	12.80	0.10	0.01	0.02	9.71	1.26	6.08	0.98	0.08	0.12	0.10	0.03	66.50	1.78
222	551500	8332500	Soil	12.00	0.14	0.01	0.02	8.59	0.47	5.18	0.56	0.05	1.70	0.09	0.05	69.30	1.51
223	552000	8332500	Soil	14.80	0.23	0.02	0.02	15.70	1.24	7.24	1.14	0.07	0.99	0.11	0.03	53.30	4.31
224	552500	8332500	Soil	19.10	0.22	0.01	0.02	15.60	0.81	8.37	1.04	0.06	1.03	0.10	0.03	49.60	3.61

## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>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 pulverized 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.</i></li> </ul>	<p>Representative samples were obtained from surface and were between 0.5kg-1.0kg. Samples sent to an accredited lab for analysis. They were crushed, dried and pulverized (total prep) to produce a sub sample for analysis</p> <p>These samples underwent XRF assay. Duplicate and standard testing was performed under Spiffire protocols and QAQC procedures as per industry best practice.</p>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li><i>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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	No drilling was performed.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>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.</i></li> </ul>	No drilling was performed.
<i>Logging</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	Geological logging of the samples was recorded and dip and strike observations were recorded.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> </ul>	No sub sampling was performed.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>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.</li> </ul>	<p>The method used for all Limestone assays was X-Ray Fluorescence (XRF) XRF offers a robust and repeatable method, consistent with industry requirements. The relatively low flux to sample ratio offers good sensitivity for the majority of elements and creates a matrix which is not subject to particle size effects. The XRF method delivers highly accurate and precise results across the full range of calcium oxide ore types.</p> <p>No geophysical tools were used to determine any element concentrations used in either resource estimate.</p> <p>Sample preparation checks for fineness were carried out by the laboratory as part of their internal procedures.</p> <p>Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in house procedures. Umpire laboratory campaigns with two other laboratories have been carried out as independent checks of the assay and these show good precision. Certified reference materials, having a good range of values, were inserted blindly and randomly. Results highlight that sample assay values are accurate and that contamination has been contained. Repeat or duplicate analysis for samples reveals that precision of samples is within acceptable limits.</p>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<p>Spitfire geological staff identified significant area of limestone exposure in the surface chip samples based on previous training and assay correlation.</p>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<p>Hole collar locations for all holes were surveyed using a hand held Garmin GPS C78s with an accuracy of +/- 4 m. Elevation was adjusted to the Aster Satellite data with height accuracy within +/- 0.5m.</p> <p>Prior to further work, the actual collar locations and surrounding topography will be surveyed for inclusion in possible future resource models. The grid system used is MGA_GDA94, zone 35. Topographic surface uses Aster Satellite data</p>

Criteria	JORC Code explanation	Commentary
		contours with height accuracy within +/-0.5m.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	Nominal sampling spacing for the samples was 500m as this is an exploration sampling program.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	All samples were taken from surface.
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	Chain of custody is managed by Spitfire. Samples for White Lion Limestone are stored at Intertek Labs secure facility. Whilst in storage, they are kept on a locked yard. Tracking sheets have been set up to track the progress of batches of samples.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	A review of the internal sample audit system was undertaken by Spitfire in August 2015.

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	The sampling is located wholly within the exploration licence 14948-HQ-LML. The tenement is 100% owned by Spitfire Global Pty Ltd. The tenement is in good standing and no known impediments exist.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	Only a small sampling program has been performed on 14948-HQ-LML prospect.
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	The regional geology comprises Katangan and Muva Supergroup rocks to the north of the east to west trending Mwembeshi Shear Zone (MSZ). The carbonate sediments of interest are considered to be platformal carbonates with subordinate siliciclastic sediments of the Upper Roan Group (R4) of the Katangan Supergroup.

Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	Refer to appendix 1 & 2: Summary of sample locations results.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	All assays reported have not been truncated or length weighted. No selective procedures were used to skew the high grade Limestone results. No mineral equivalent values are used for reporting exploration results.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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’).</i></li> </ul>	The exploration area is dominantly flat lying and is sampled to a grid.
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	Refer to figure1 in body of text.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.</i></li> </ul>	All results are reported.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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</i></li> </ul>	All results have been reported if they are material and/or meaningful.

Criteria	JORC Code explanation	Commentary
	<i>of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	
Further work	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	All further work planned exploration activities will be explained in the main body of the text.

Sections 3, 4 and 5 of the 2012 JORC code do not apply to the exploration sampling results at the current project stage.

**ENDS**