

SOALARA LIMESTONE PROJECT PHASE 2 CORE ASSAY RESULTS

HIGHLIGHTS

- ~80% of Phase 2 assays show average 97.44% wt CaCO₃, classified as “High” purity Limestone¹
- Phase 2 coring (5 holes for 500m) confirms continuation of multiple “High to Very High” purity Limestone sequences in all holes, as previously identified in Phase 1² coring (4 holes for 400m)
- “High to Very High” purity Limestone sequences remain open at 100m depth in all 9 holes
- Flat-bedded geology, with easy all-weather access to the entire drill-collar grid
- Mineral Resource Estimate (MRE) to be conducted in July, covering an area of 1 square km
- Pathways towards mining operations to be investigated as an alternative to, or in combination with, further drilling

Cassius Mining Limited (“Cassius” or “the Company”) (ASX Code: CMD), is pleased to report the Phase 2 core assay results from its coring programme³ at the wholly owned Soalara Limestone project in Madagascar.

CEO James Arkoudis:

“The Soalara Project is now showing the quality we always believed it had. With all 9 vertical core holes to date confirming flat-bedded geology, encountering multiple thick sequences of Limestone at very shallow depths in every single hole in the two highest categories of purity and remaining open at depth in every hole, we are extremely optimistic on the future success of the Project.

With the initial MRE scheduled for July, we are confident the outcome will raise many options for our forward work programme, including consideration of development plans with or without potential JV partners.”

¹ Mitchell Limestone Purity Classification (2011) – see also page 2

² “Soalara Limestone – Phase 1 Core Results” – ASX 11 July 2022

³ “Madagascar Drilling Programme – Phase 1” - ASX 28 May 2021

PHASE 2 INTERSECTIONS at >97% wt CaCO₃ – “High to Very High purity” Limestone

- **CMDD005:**
 - 31.20m of “**High-Very High**” purity from 17.75 - 61.05m (72.1% of interval)
 - 14.25m of “**High**” purity from 77.40 - 92.44m (94.7% of interval)

- **CMDD006:**
 - 33.09m of “**High-Very High**” purity from 11.14 - 53.20m (78.7% of interval)
 - 26.49m of “**High-Very High**” purity from 69.21 - 100.25m (85.3% of interval)

- **CMDD007:**
 - 19.90m of “**High-Very High**” purity from 9.84 - 36.92m (73.5% of interval)
 - 13.82m of “**High**” purity from 79.00 - 100.30m (65.7% of interval)

- **CMDD008:**
 - 27.63m of “**High-Very High**” purity from 24.13 - 58.46m (80.5% of interval)
 - 21.01m of “**High**” purity from 61.58 - 88.21m (78.9% of interval)

- **CMDD009:**
 - 15.52m of “**High**” purity from 8.09 - 31.96m (65% of interval)
 - 14.44m of “**High-Very High**” purity from 39.00 - 55.60m (87% of interval)

MITCHELL Classification (2011) for Limestone Purity - based on Calcium Carbonate (CaCO₃) weight %

Calcium Carbonate content

Limestone classification	CaO (wt%)	CaCO₃ (wt %)
100% limestone	56.03	100.0
Very high purity	> 55.2	> 98.5
High purity	54.3 - 55.2	97.0 - 98.5
Medium purity	52.4 - 54.3	93.5 - 97.0
Low purity	47.6 - 52.4	85.0 - 93.5
Impure	< 47.6	< 85.0

* Pure Limestone equates to 56.03% wt CaO (Calcium Oxide), or 100.0% wt CaCO₃ (Calcium Carbonate).

PHASE 2 Diamond Coring

5 holes were cored for a total of 500.67m. Recovery varied from 89.45% to 96.64%, with an average of 93.29%.

Collar ID	Easting	Northing	RL	Azimuth	Inclination	Depth
CMDD005	371,598	7,389,002	89.35	0	-90	100.25
CMDD006	371,600	7,389,499	87.42	0	-90	100.25
CMDD007	371,599	7,390,001	90.79	0	-90	100.03
CMDD008	371,099	7,389,999	94.81	0	-90	100.04
CMDD009	370,600	7,390,000	93.45	0	-90	100.10

Table 1: Phase 2 drill collars

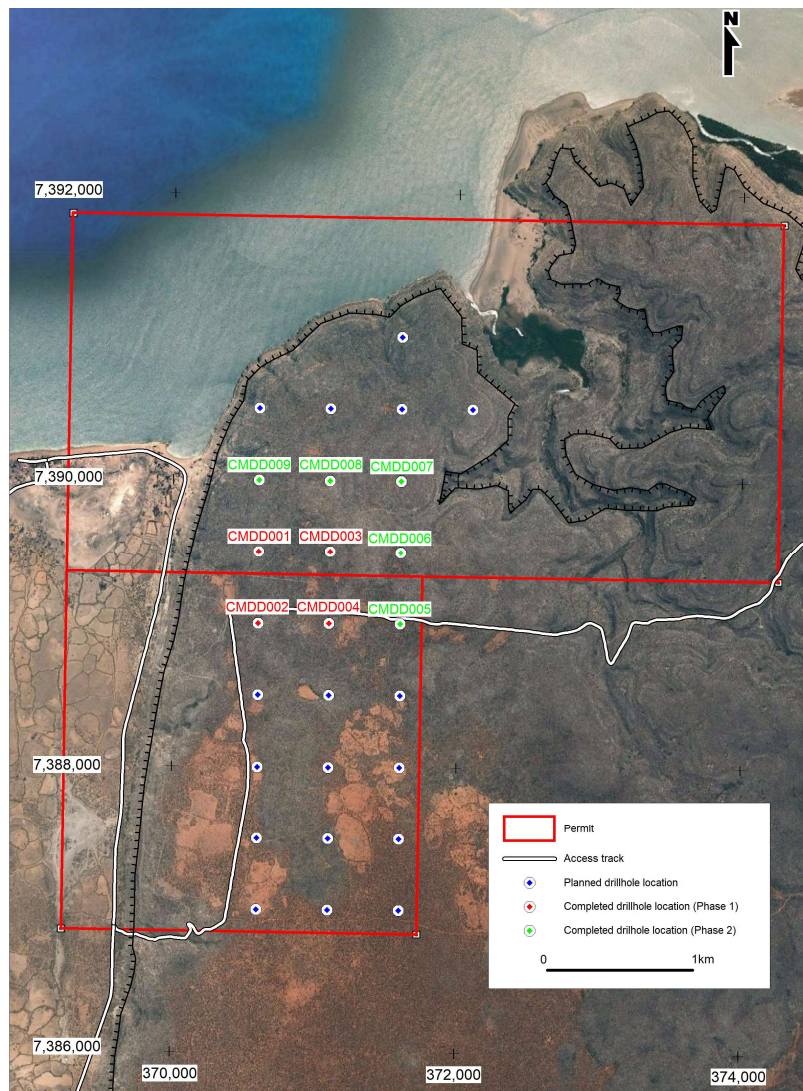


Fig 1: Phase 1 (red, CMDD001-004) and Phase 2 (green, CMDD005-009) Drill Collar Grid with access tracks

Drilling confirms continuation of significant limestone sequences to 100m final depth in all holes, mainly calcite-clast dominant intramicrite (and fossil-bearing biomicrite, oolite-bearing oomicrite), with interbedded thin clays and clayish limestones. The Limestone varies from 2.43-21.40m thick (Figs 2-6). Interbeds vary from 0.79- 7.18m.

A total of 544 sample assay results confirm CaO grades up to 56.03% (average 53.03%), equivalent to CaCO₃ grades up to 100% (average 94.67%). Excluding 108 sample results with CaO <52.4% (<93.5% CaCO₃), only ~19.9% of all assays, average grade increases to 54.59% CaO (97.44% CaCO₃) confirming “High” purity Limestones (Figs 2-6). Indicative of asset quality, **5 sample results yielded 56.03% CaO (100% pure Limestone).**

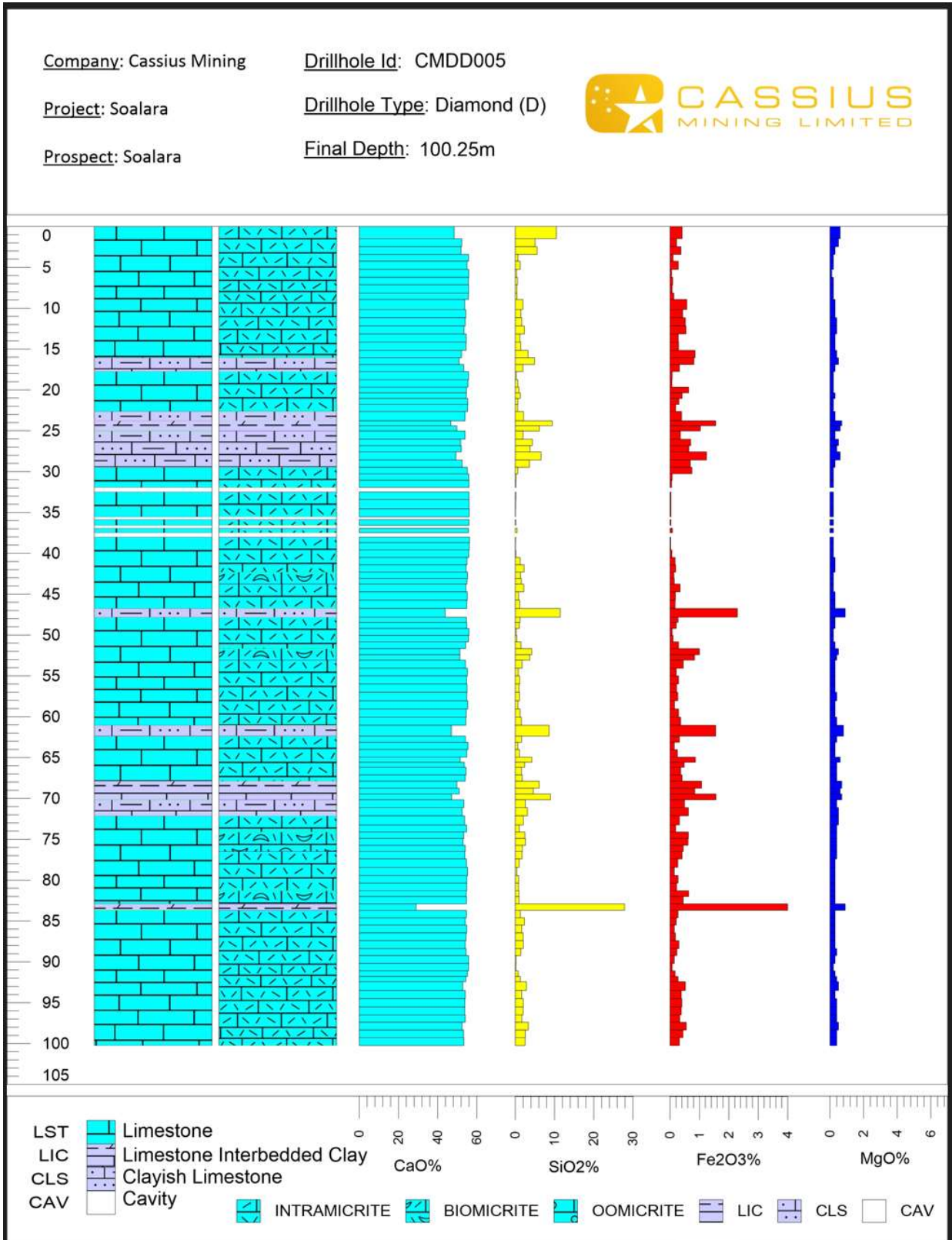


Fig 2: CMDD005 Hole Lithology, CaO% Purity and Impurities with Depth

Two interbedded clayish Limestones/clays of ~4-7m thickness occur at ~23-29.5m and ~68-72m depths, separating three Limestone sequences from surface to 100m final hole depth (each of ~23-38.5m thickness). Where any impurity is present, it primarily includes minor SiO₂ (Silicon Dioxide), Fe₂O₃ (Ferric Oxide) and MgO (Magnesium Oxide). Otherwise each Limestone sequence is only interlaid by one or two ~1m thick clayish Limestones.

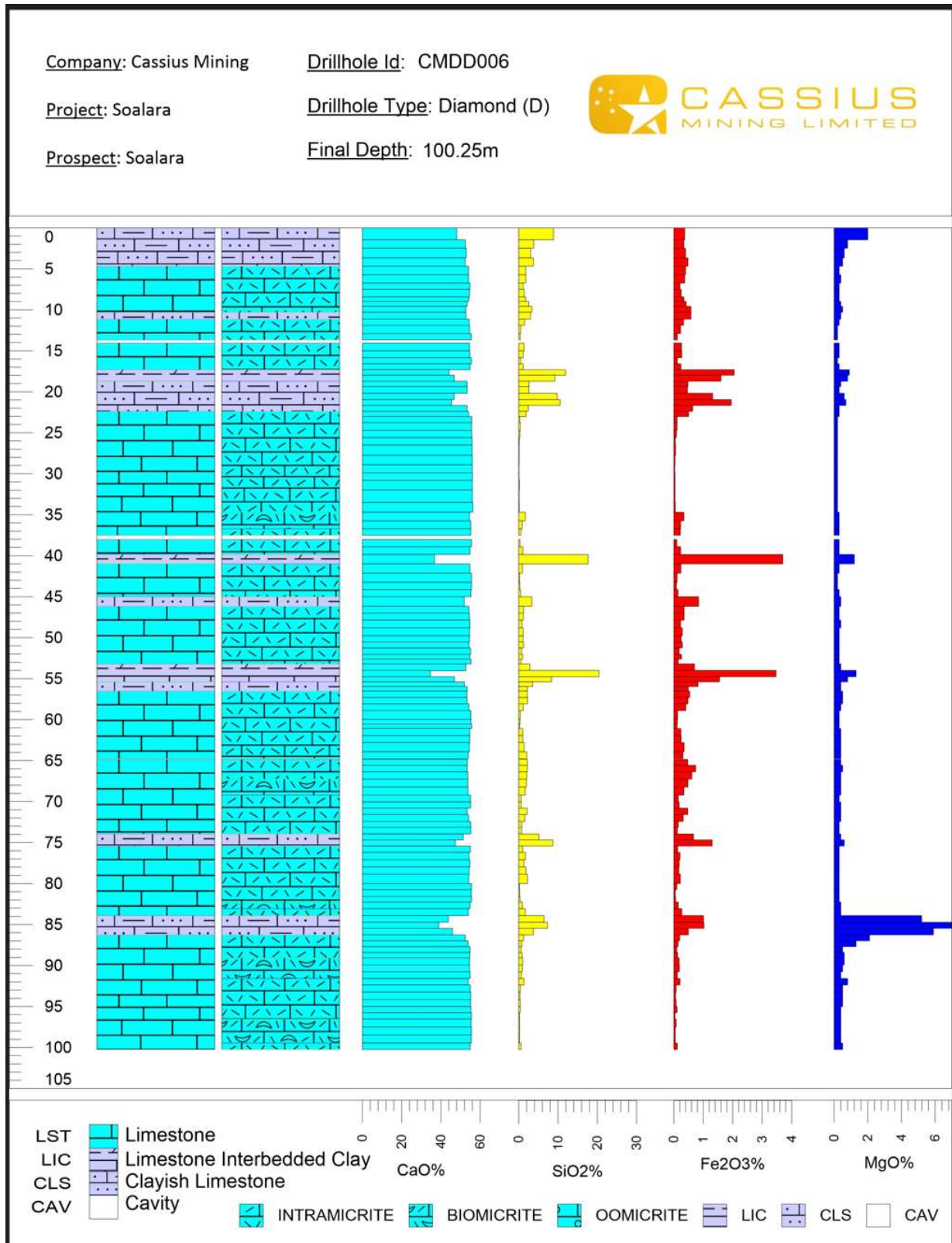


Fig 3: CMDD006 Hole Lithology, CaO% Purity and Impurities with Depth

Three interbedded clayish Limestones/clays of ~3-5m thickness occur at ~0-4.5m, ~17-22.5m and ~53-56.5m depths, separating three Limestone sequences from surface to 100m final hole depth (each of ~13-43.7m thickness). Where any impurity is present, it primarily includes minor SiO₂ (Silicon Dioxide), Fe₂O₃ (Ferric Oxide) and MgO (Magnesium Oxide). Otherwise each Limestone sequence is only interlaid by one or two ~1-2m thick clayish Limestones.

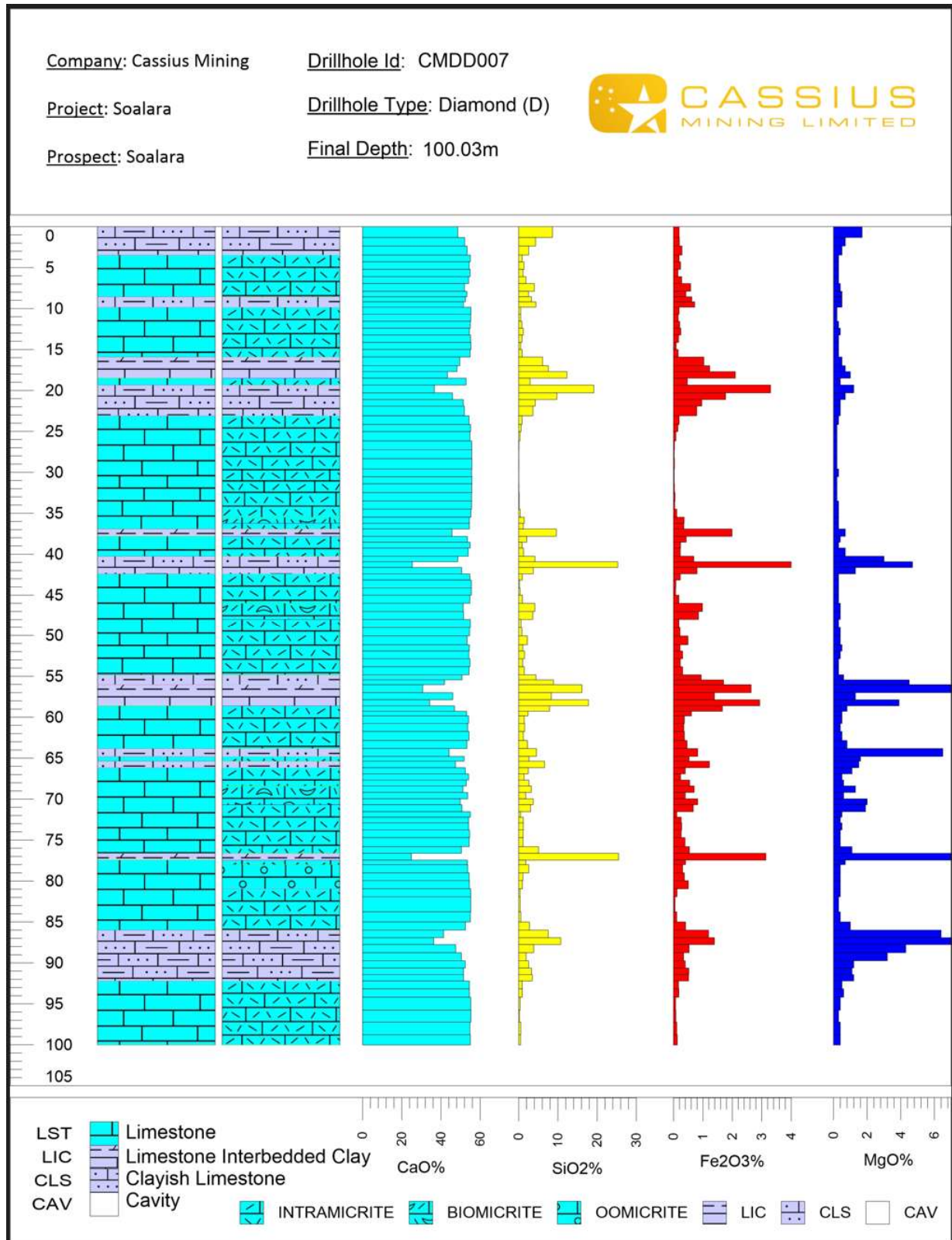


Fig 4: CMDD007 Hole Lithology, CaO% Purity and Impurities with Depth

Four interbedded clayish Limestones/clays of ~3.5-7m thickness occur at ~0-3.5m, ~16-23m, ~55-59m and 86-92m depths, separating four Limestone sequences from surface to 100m final hole depth (each of ~8-32.5m thickness). Where any impurity is present, it primarily includes minor SiO₂ (Silicon Dioxide), Fe₂O₃ (Ferric Oxide) and MgO (Magnesium Oxide). Otherwise each Limestone sequence is only interlaid by one or two ~1-2m thick clayish Limestones.

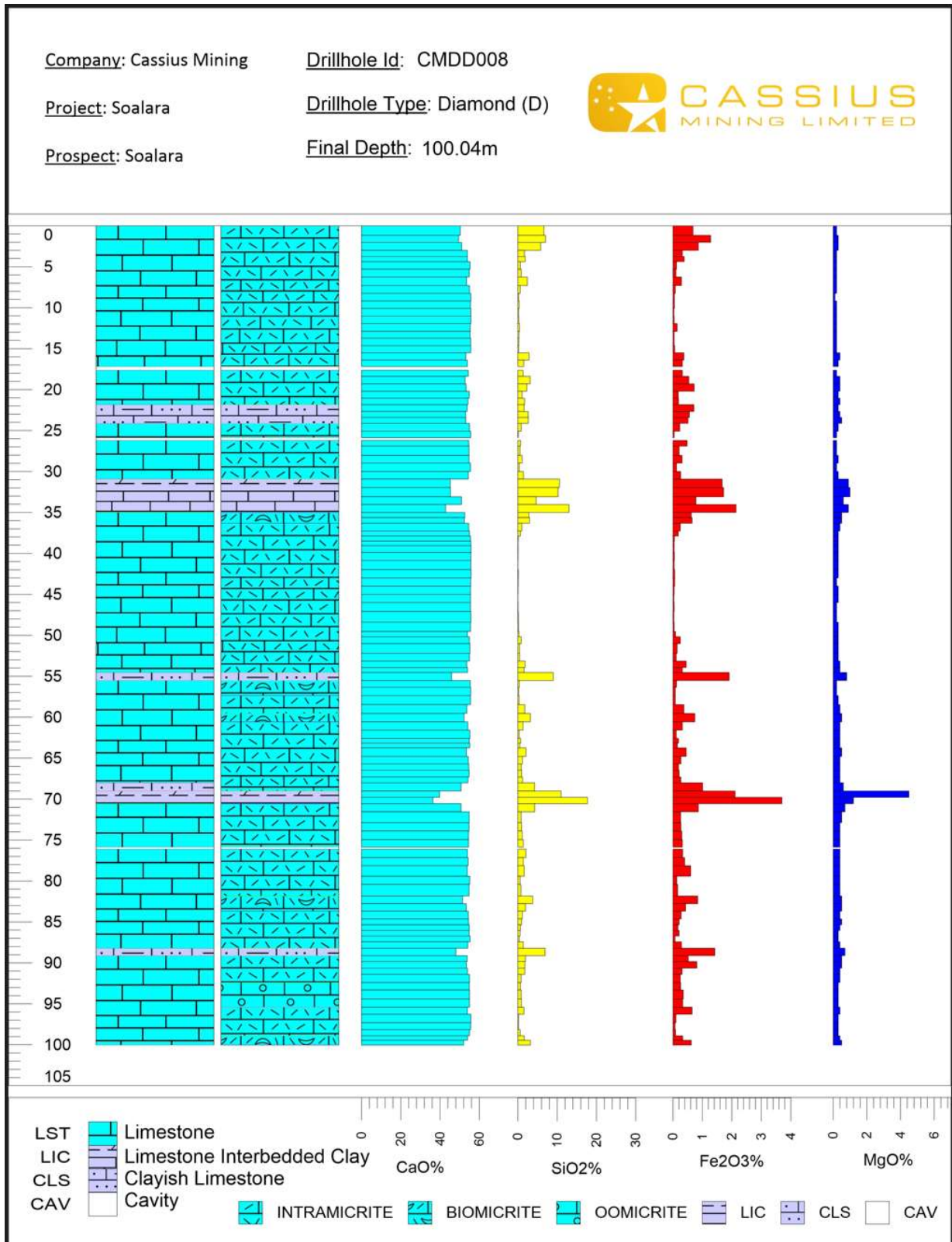


Fig 5: CMDD008 Hole Lithology, CaO% Purity and Impurities with Depth

Two interbedded clayish Limestones/clays of ~2.5-4m thickness occur at ~31-35m and 68-70.5m depths, separating three Limestone sequences from surface to 100m final hole depth (each of ~8-32.5m thickness). Where any impurity is present, it primarily includes minor SiO₂ (Silicon Dioxide), Fe₂O₃ (Ferric Oxide) and MgO (Magnesium Oxide). Otherwise each Limestone sequence is only interlaid by one or two ~1-2m thick clayish Limestones.

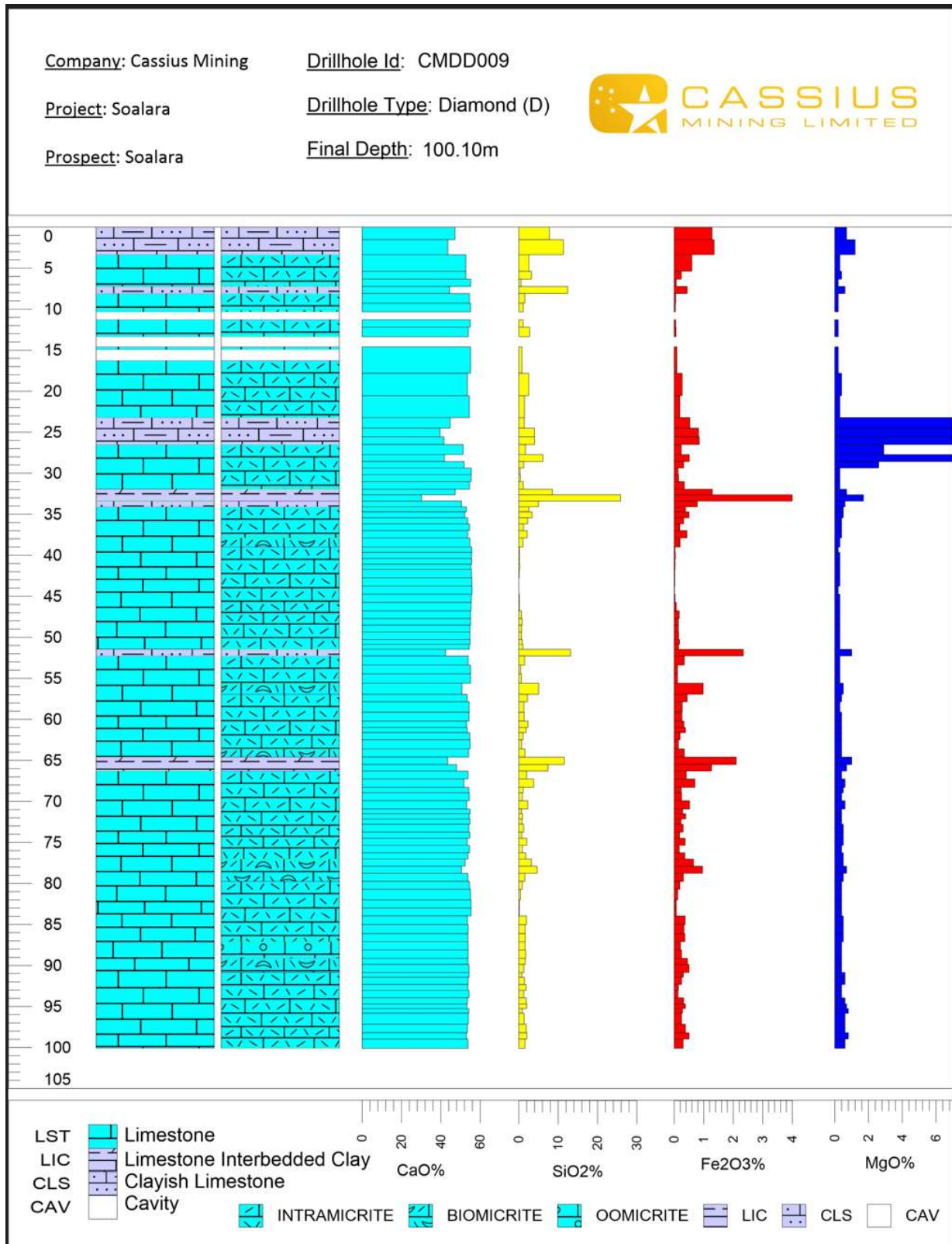


Fig 6: CMDD009 Hole Lithology, CaO% Purity and Impurities with Depth

Two interbedded clayish Limestones/clays of ~3-3.5m thickness occur at ~0-3.5m and 23-26.5m depths, separating two Limestone sequences from surface to 100m final hole depth (each of ~20.0-73.6m thickness). Where any impurity is present, it primarily includes minor SiO₂ (Silicon Dioxide), Fe₂O₃ (Ferric Oxide) and MgO (Magnesium Oxide). Otherwise each Limestone sequence is only interlaid by two or three ~1-2m thick clayish Limestones.

Weighted Averages and Limestone Purity

Weighted averages for CaO% and CaCO₃% are calculated for the “Very High”, “High” and “Medium” purity limestones based on the Mitchell’s Classification (as summarised in **Table 2** below). Weighted averages are not calculated for lower purity Limestones, Limestones with interbedded clays or clayish Limestones.

Collar ID	Interval		Weighted Average			Purity Classification
	From (m)	To (m)	Interval (m)	CaO%	CaCO ₃ %	
CMDD005	3.42	8.93	5.51	55.64	99.32	High
	8.93	15.17	6.24	54.14	96.64	Medium
	17.75	22.64	4.89	55.27	98.66	Very high
	29.47	40.50	9.23	55.93	99.83	Very high
	40.50	46.75	6.25	54.87	97.95	High
	47.82	51.67	3.85	55.14	98.43	High
	54.07	61.05	6.98	54.90	97.99	High
	62.37	67.89	5.52	54.18	96.71	Medium
	72.12	77.40	5.28	53.80	96.03	Medium
	77.40	82.90	5.50	54.86	97.93	High
83.69	92.44	8.75	54.81	97.83	High	
92.44	100.25	7.81	53.47	95.45	Medium	
CMDD006	4.68	11.14	6.46	53.86	96.14	Medium
	11.14	17.30	5.76	54.87	97.95	High
	23.02	34.70	11.68	55.95	99.86	Very high
	34.70	39.84	4.63	55.06	98.28	High
	41.00	45.00	4.00	55.31	98.73	Very high
	46.18	53.20	7.02	54.68	97.60	High
	56.52	58.90	2.38	53.62	95.70	Medium
	58.90	63.91	5.01	54.96	98.11	High
	63.91	69.21	5.20	53.70	95.85	Medium
	69.21	73.94	4.73	54.66	97.57	High
75.42	83.91	8.49	54.77	97.77	High	
86.98	92.36	5.38	54.50	97.29	High	
92.36	100.25	7.89	55.31	98.72	Very high	
CMDD007	3.47	6.11	2.64	54.75	97.74	High
	6.11	8.56	2.45	53.05	94.69	Medium
	9.84	15.91	6.07	55.04	98.25	High
	23.09	25.02	1.93	54.66	97.56	High
	25.02	34.50	9.48	55.58	99.22	Very high
	34.50	36.92	2.42	54.82	97.86	High
	37.82	40.25	2.43	54.07	96.52	Medium
	42.40	46.00	3.60	55.11	98.37	High
	47.97	54.82	6.85	54.38	97.06	High
	59.28	63.83	4.55	53.72	95.90	Medium
71.54	75.80	4.26	54.43	97.15	High	
77.45	79.00	1.55	53.56	95.61	Medium	
79.00	85.00	6.00	54.92	98.02	High	
92.21	100.03	7.82	54.93	98.05	High	
CMDD008	3.00	7.31	4.31	54.32	96.96	High
	7.31	15.50	8.19	55.50	99.07	Very high
	15.50	21.84	5.90	53.73	95.91	Medium
	24.13	30.93	6.47	54.93	98.05	High
	36.33	37.88	1.55	54.76	97.74	High
	37.88	49.53	11.65	55.62	99.29	Very high
	49.53	54.55	5.02	54.57	97.40	High
	55.52	58.46	2.94	55.51	99.08	Very high
	58.46	61.58	3.12	53.30	95.14	Medium
	61.58	68.01	6.43	54.52	97.32	High
71.55	81.84	10.05	54.48	97.24	High	
83.68	88.21	4.53	54.64	97.53	High	
89.11	91.40	2.29	53.73	95.90	Medium	
91.40	98.90	7.50	55.03	98.22	High	
CMDD009	3.36	7.23	3.87	53.27	95.10	Medium
	8.09	23.21	12.92	54.49	97.26	High
	29.36	31.96	2.60	55.14	98.42	High
	34.10	39.00	4.90	53.76	95.95	Medium
	39.00	46.78	7.78	55.63	99.29	Very high
	46.78	51.47	3.33	54.88	97.97	High
	52.27	55.60	3.33	54.70	97.64	High
	55.60	61.62	6.02	53.12	94.82	Medium
	61.62	64.53	2.97	54.58	97.42	High
	68.29	77.03	8.74	54.19	96.73	Medium
79.75	83.96	4.21	55.13	98.40	High	
83.96	100.10	16.14	53.81	96.05	Medium	

Table 2: Weighted averages for CaO%, CaCO₃% and purity by hole

Weighted averages confirm following significant “Very High”, “High” and “Medium” purity Limestones:

CMDD005

In total 14.12m of “Very High” purity, 36.48m of “High” purity and 24.85m of “Medium” purity Limestone sequences were intersected:

- Best intersection (very high purity) → 9.23m @ 99.83% CaCO₃
- Best intersection (high purity) → 8.75m @ 97.83% CaCO₃
- Best intersection (medium purity) → 7.81m @ 95.45% CaCO₃

CMDD006

In total 23.57m of “Very High” purity, 41.02m of “High” purity and 14.04m of “Medium” purity Limestone sequences were intersected:

- Best intersection (very high purity) → 11.68m @ 99.86% CaCO₃
- Best intersection (high purity) → 8.49m @ 97.77% CaCO₃
- Best intersection (medium purity) → 6.46m @ 96.14% CaCO₃

CMDD007

In total 9.48m of “Very High” purity, 41.59m of “High” purity and 10.98m of “Medium” purity Limestone sequences were intersected:

- Best intersection (very high purity) → 9.48m @ 99.22% CaCO₃
- Best intersection (high purity) → 7.82m @ 98.05% CaCO₃
- Best intersection (medium purity) → 4.55m @ 95.90% CaCO₃

CMDD008

In total 22.78m of “Very High” purity, 45.86m of “High” purity and 11.31m of “Medium” purity Limestone sequences were intersected:

- Best intersection (very high purity) → 11.65m @ 99.29% CaCO₃
- Best intersection (high purity) → 10.05m @ 97.24% CaCO₃
- Best intersection (medium purity) → 5.90m @ 95.91% CaCO₃

CMDD009

In total 7.78m of “Very High” purity, 29.36m of “High” purity and 39.67m of “Medium” purity Limestone sequences were intersected:

- Best intersection (very high purity) → 7.78m @ 99.29% CaCO₃
- Best intersection (high purity) → 12.92m @ 97.26% CaCO₃
- Best intersection (medium purity) → 16.14m @ 96.05% CaCO₃

CROSS SECTION – E-W cross-section of Limestone intervals (weighted averages for CaO% and thickness) for CMDD007-009 (Fig 7). Pure Limestone is 56.03% CaO.

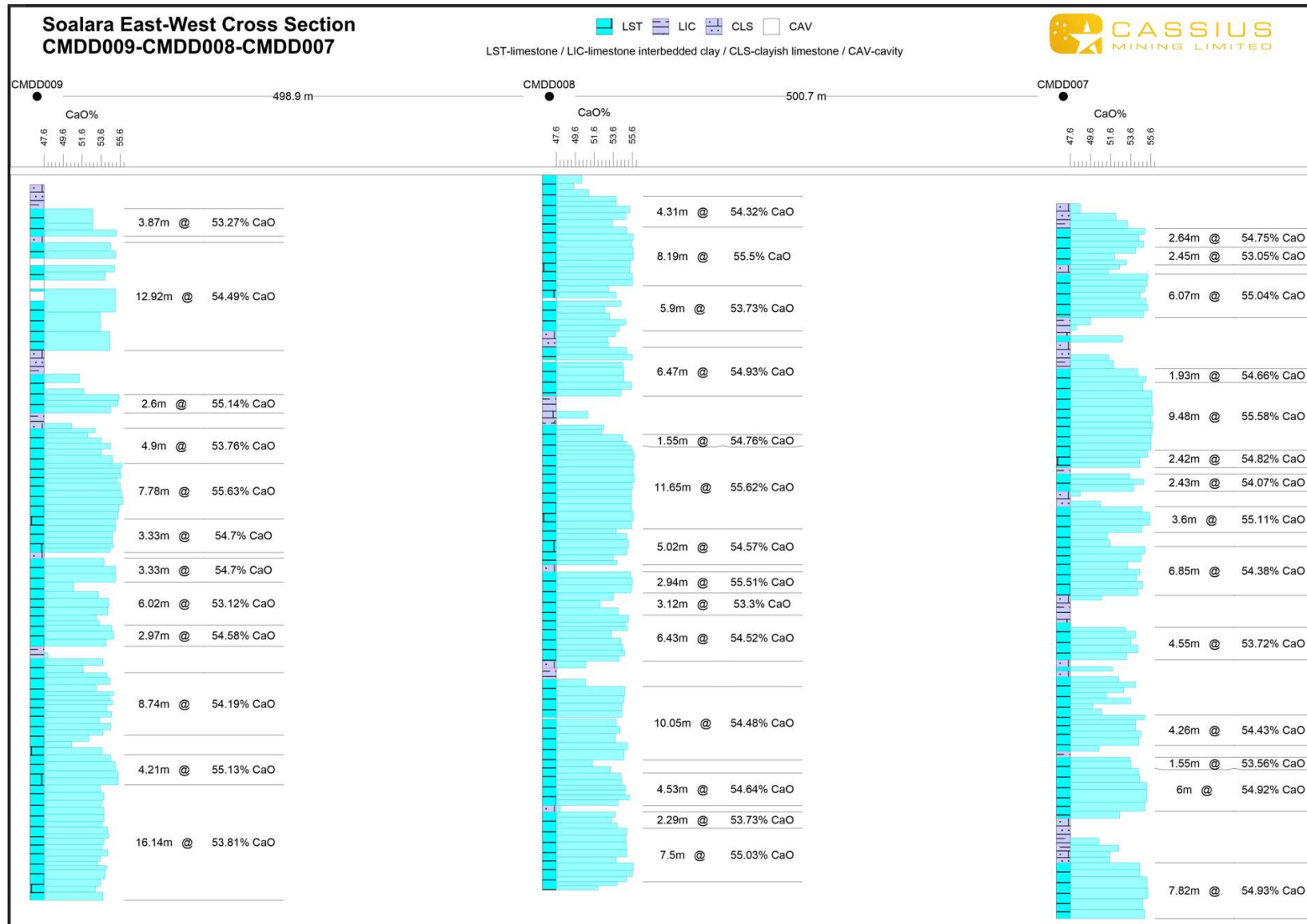


Fig 7: E-W cross section CMDD007 → 008 → 009: Limestone Purity Intervals (CaO%) and Thickness with Depth

CROSS SECTION – N-S cross-section of Limestone intervals (weighted averages for CaO% and thickness) for CMDD007-005 (Fig 8). Pure Limestone is 56.03% CaO.

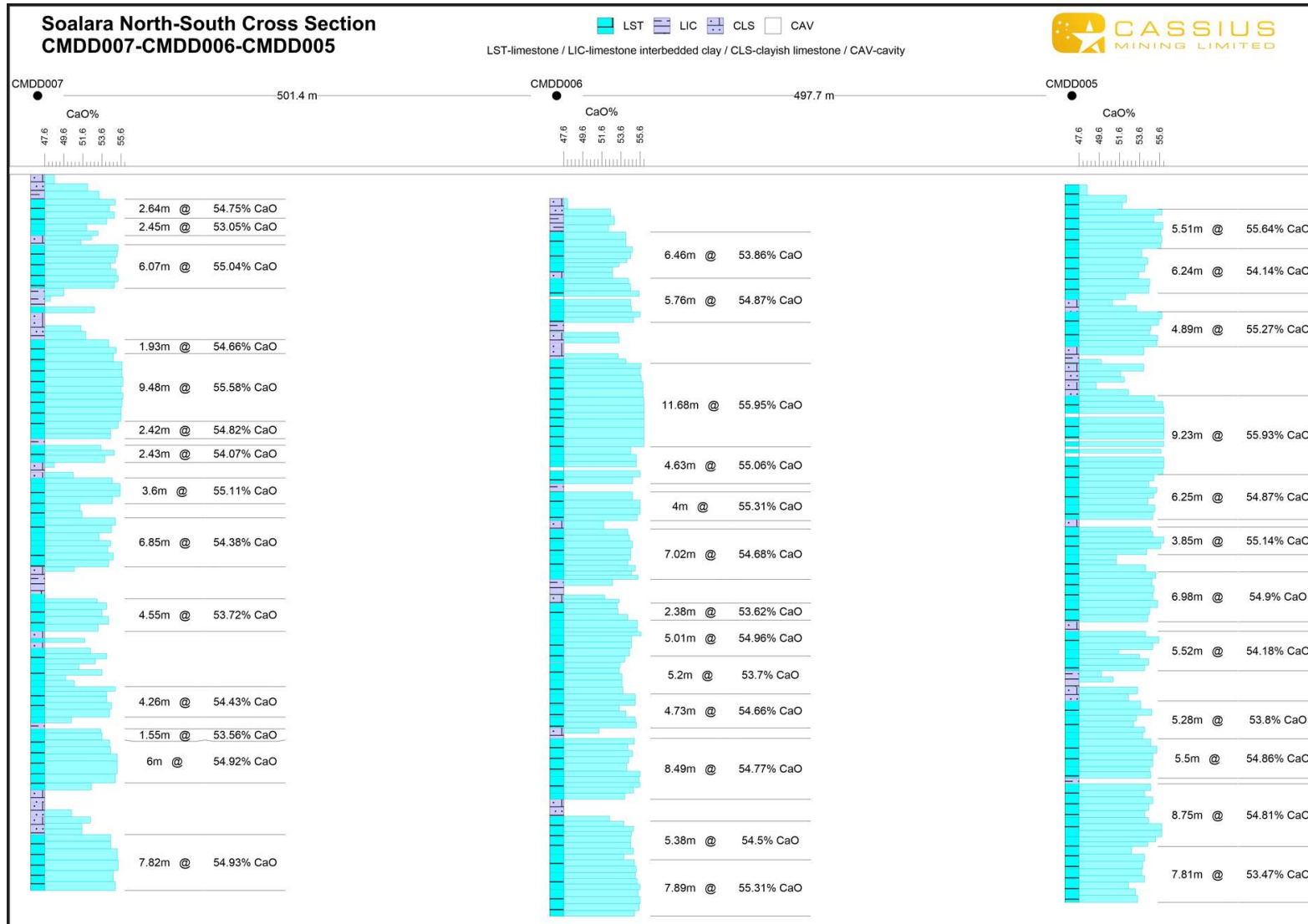


Fig 8: N-S cross section CMDD007 → 006 → 005: Limestone Purity Intervals (CaO%) and Thickness with Depth

CORE PHOTOS - following show typical core of “Very High”, “High” and “Medium” purity Limestones:

“Very High” Purity:



Fig 9 - VERY HIGH purity Limestone (CMDD006) from 23.02 to 34.70m, with weighted average 99.86% CaCO₃



Fig 10 - VERY HIGH purity Limestone (CMDD008) from 37.88 to 49.53m, with weighted average 99.29% CaCO₃

“High” Purity:



Fig 11 - HIGH purity Limestone (CMDD008) from 71.55 to 81.84m, with weighted average 97.24% CaCO₃

“Medium” Purity:



Fig 12 - MEDIUM purity Limestone (CMDD009) from 83.96 to 100.10m, with weighted average 96.05% CaCO₃

Weighted averages for Fe₂O₃%, MgO% and SiO₂% impurities are summarised in **Table 3** below, alongside CaO% and CaCO₃% purity, for the “Very High”, “High” and “Medium” purity Limestones. Weighted averages are not calculated for lower purity Limestones, Limestones with interbedded clays or clayish Limestones.

Collar ID	Interval		Weighted Average					
	From (m)	To (m)	Interval (m)	CaO%	CaCO ₃ %	Fe ₂ O ₃ %	MgO%	SiO ₂ %
CMDD005	3.42	8.93	5.51	55.64	99.32	0.12	0.18	0.60
	8.93	15.17	6.24	54.14	96.64	0.44	0.33	1.66
	17.75	22.64	4.89	55.27	98.66	0.25	0.21	0.68
	29.47	40.50	9.23	55.93	99.83	0.10	0.20	0.16
	40.50	46.75	6.25	54.87	97.95	0.19	0.26	1.48
	47.82	51.67	3.85	55.14	98.43	0.18	0.26	0.84
	54.07	61.05	6.98	54.90	97.99	0.25	0.33	1.06
	62.37	67.89	5.52	54.18	96.71	0.38	0.39	1.77
	72.12	77.40	5.28	53.80	96.03	0.42	0.42	1.93
	77.40	82.90	5.50	54.86	97.93	0.31	0.30	0.82
	83.69	92.44	8.75	54.81	97.83	0.20	0.31	1.32
	92.44	100.25	7.81	53.47	95.45	0.42	0.41	2.32
CMDD006	4.68	11.14	6.46	53.86	96.14	0.39	0.36	2.04
	11.14	17.30	5.76	54.87	97.95	0.23	0.26	0.92
	23.02	34.70	11.68	55.95	99.86	0.06	0.20	0.23
	34.70	39.84	4.63	55.06	98.28	0.23	0.30	0.92
	41.00	45.00	4.00	55.31	98.73	0.15	0.25	0.49
	46.18	53.20	7.02	54.68	97.60	0.27	0.31	0.99
	56.52	58.90	2.38	53.62	95.70	0.48	0.47	1.85
	58.90	63.91	5.01	54.96	98.11	0.21	0.36	0.78
	63.91	69.21	5.20	53.70	95.85	0.49	0.41	1.99
	69.21	73.94	4.73	54.66	97.57	0.23	0.35	1.09
	75.42	83.91	8.49	54.77	97.77	0.16	0.32	1.22
	86.98	92.36	5.38	54.50	97.29	0.15	0.66	0.88
92.36	100.25	7.89	55.31	98.72	0.07	0.44	0.30	
CMDD007	3.47	6.11	2.64	54.75	97.74	0.19	0.30	1.12
	6.11	8.56	2.45	53.05	94.69	0.43	0.39	2.86
	9.84	15.91	6.07	55.04	98.25	0.18	0.29	0.74
	23.09	25.02	1.93	54.66	97.56	0.17	0.26	0.75
	25.02	34.50	9.48	55.58	99.22	0.04	0.22	0.09
	34.50	36.92	2.42	54.82	97.86	0.26	0.30	0.93
	37.82	40.25	2.43	54.07	96.52	0.29	0.49	1.34
	42.40	46.00	3.60	55.11	98.37	0.14	0.30	0.59
	47.97	54.82	6.85	54.38	97.06	0.28	0.37	1.23
	59.28	63.83	4.55	53.72	95.90	0.41	0.54	1.67
	71.54	75.80	4.26	54.43	97.15	0.27	0.44	1.03
	77.45	79.00	1.55	53.56	95.61	0.35	0.51	2.32
79.00	85.00	6.00	54.92	98.02	0.20	0.37	0.61	
92.21	100.03	7.82	54.93	98.05	0.12	0.42	0.52	
CMDD008	3.00	7.31	4.31	54.32	96.96	0.23	0.20	1.47
	7.31	15.50	8.19	55.50	99.07	0.06	0.19	0.29
	15.50	21.84	5.90	53.73	95.91	0.39	0.35	2.01
	24.13	30.93	6.47	54.93	98.05	0.23	0.24	0.71
	36.33	37.88	1.55	54.76	97.74	0.22	0.36	0.87
	37.88	49.53	11.65	55.62	99.29	0.04	0.27	0.07
	49.53	54.55	5.02	54.57	97.40	0.22	0.33	0.84
	55.52	58.46	2.94	55.51	99.08	0.09	0.24	0.28
	58.46	61.58	3.12	53.30	95.14	0.48	0.43	2.07
	61.58	68.01	6.43	54.52	97.32	0.24	0.42	1.01
	71.55	81.84	10.05	54.48	97.24	0.31	0.41	1.15
	83.68	88.21	4.53	54.64	97.53	0.21	0.39	0.86
89.11	91.40	2.29	53.73	95.90	0.55	0.47	1.81	
91.40	98.90	7.50	55.03	98.22	0.27	0.32	0.70	
CMDD009	3.36	7.23	3.87	53.27	95.10	0.39	0.30	2.26
	8.09	23.21	12.92	54.49	97.26	0.14	0.26	1.58
	29.36	31.96	2.60	55.14	98.42	0.21	0.30	0.63
	34.10	39.00	4.90	53.76	95.95	0.33	0.40	1.97
	39.00	46.78	7.78	55.63	99.29	0.03	0.28	0.12
	46.78	51.47	3.33	54.88	97.97	0.15	0.30	0.76
	52.27	55.60	3.33	54.70	97.64	0.19	0.30	0.86
	55.60	61.62	6.02	53.12	94.82	0.47	0.40	2.45
	61.62	64.59	2.97	54.58	97.42	0.22	0.40	1.08
	68.29	77.03	8.74	54.19	96.73	0.30	0.47	1.25
	79.75	83.96	4.21	55.13	98.40	0.11	0.40	0.39
	83.96	100.10	16.14	53.81	96.05	0.32	0.53	1.58

Table 3: CMDD005-009: weighted averages for CaO% / CaCO₃% purity and Fe₂O₃ / MgO / SiO₂ impurity

Conclusions and Forward Operations

- Phases 1 and 2 confirm multiple thick sequences of “Very High”, “High” and “Medium” purity Limestones, primarily overburden free and interbedded with only occasional thin clayish Limestones and clays.
- Upper Limestone sequences are generally higher purity, though “High” and “Very High” purity Limestone sequences continue all the way to final depth (~100m) in every hole, remaining open at final depth.
- Both Phases confirm lateral and vertical Limestone continuity with depth in all 9 holes, with CaCO₃% purity generally increasing in a North Easterly direction.

With ~77% of all assays from the combined Phase 1 and 2 drilling programmes confirming an average of 97.26%wt CaCO₃, sitting in the “high purity” Limestone classification⁴, the drilling programme remains on track towards identifying a potential upgrade from the current JORC Exploration Target⁵ to a JORC Mineral Resource⁶.

The interim MRE for all 9 holes will be conducted from July (expected to be completed around late August) by H & S Consultants in Sydney, specialists in Resource Estimation and Feasibility Studies for Limestone.

The Soalara deposit currently has a JORC Exploration Target of 491 to 818 Mt of Limestone with a purity of “High to Very High”, across 26 holes on a grid covering an area of ~4.25 square kms. The 9 completed holes comprising exploration Phases 1 and 2 form a significant combined database across a 1 square km grid.

After review of the MRE, consideration will then be given to forward operations which is expected to also include pathways towards mining operations as an alternative to, or in combination with, further drilling of up to 17 additional holes on current exploration grid.

This has been authorized and approved by the board for release.

FURTHER INFORMATION: James Arkoudis - Director e: james@cassiusmining.com

Competent Person Statement

The information in this statement that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Jannie Leeuwner – BSc (Hons) Pr.Sci.Nat. MGSSA and is a full-time employee of Vato Consulting LLC. Mr. Leeuwner is a registered Professional Natural Scientist (Pr.Sci.Nat. - 400155/13) with the South African Council for Natural Scientific Professions (SACNASP). Mr. Leeuwner has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and the activity being undertaken to qualify as a Competent Person as defined in the Note for Mining Oil & Gas Companies, June 2009, of the London Stock Exchange and the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’ (JORC Code). Mr. Leeuwner consents to the inclusion of the information in this release in the form and context in which it appears.

Ghana Office

HNO. 4, 9th Street,
 Adjiringanor
 Greater Accra, GHANA
 P.O Box GP 17867
 ACCRA

Madagascar Office

Lot II 99 ABA
 Soavimasoandro,
 Antananarivo,
 MADAGASCAR

Cassius Mining Limited

ACN 115 027 033

www.cassiusmining.com

Sydney Office

189A St. John’s Rd,
 Forest Lodge,
 NSW 2037,
 AUSTRALIA
 PO Box R383
 Royal Exchange
 NSW 1225

Tanzania Office

Plot 890, House 19
 Yacht Club Road,
 Masaki
 PO Box 11085
 Dar Es Salaam,
 TANZANIA

⁴ Mitchell classification (2011)

⁵ “Soalara High Grade Limestone Project – Independent Technical Review” – ASX 19 May 2016.

⁶ The potential quantity and grade of the defined Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

JORC Code, 2012 Edition – Table 1 – Soalara Limestone Project

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <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> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <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 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.</i> 	<ul style="list-style-type: none"> • Diamond drilling was used to obtain HQ3 size core, with the core cut using a diamond blade core saw. • Samples were taken along the depth intervals and lithological sub-division mark-ups to gather representative samples. • Sampling consists of approx. 1m samples of ½ core with breaks at lithological discontinuities - typical 1-4kg. • Samples were oven dried, manually crushed to -2mm, split twice through a 50/50 riffle splitter to obtain a representative sub-sample of approx. 100g, and then pulverise that >85 % pass -75 µm. • The pulp samples were sent to a NATA accredited laboratory (SGS) in Perth, Australia for whole rock analysis by X-Ray Fluorescence (XRF) spectrometry. • QA/QC procedures applied with alternating standards and blanks inserted every 20 samples, and two duplicates inserted every 100 samples.
Drilling techniques	<ul style="list-style-type: none"> • <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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> 	<ul style="list-style-type: none"> • Conventional wireline diamond drilling was used to obtain all drill cores and drilling was undertaken with a LF70 trailer mounter drilling rig. Nominal core diameter was 61.1mm (HQ3) in 0.5-1.5m runs. Drill holes were inclined at -90° (vertical) and core is not orientated. A total of 5 diamond drill holes (CMDD005, CMDD006, CMDD007, CMDD008 and CMDD009) were completed during the 2nd phase of the 2022 drilling program and 500.67m were drilled.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>Whether a relationship exists between sample recovery and grade</i> 	<ul style="list-style-type: none"> • Core recovery is measured every run by geologists. • Core recoveries of >93% on average was achieved for sampled cores. Cavities were intersected at drill holes CMDD005 (1.8m) from 35.53 to 35.87m, 36.57 to 36.95m and 37.48 to 38.02m, at

Criteria	JORC Code explanation	Commentary
	<i>and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	<p>CMDD006 (1.01m) from 13.67 to 14.07m, 37.51 to 38.02m and 64.76 to 64.86m, at CMDD008 (1.01m) from 17.19 to 17.63m, 25.88 to 26.21m and 75.86 to 76.10m and at CMDD009 (3.55m) from 10.33 to 11.30m, 13.36 to 14.59m and 14.92 to 16.27m.</p> <ul style="list-style-type: none"> No bias or relationship has been observed between recovery and grade.
Logging	<ul style="list-style-type: none"> <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> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> Logging includes descriptions of mineralisation and lithological aspects of the core. Lithologies are logged according to the Folks limestone classification system, which classifies limestone on basis of grain type and grain size. All drill core is logged quantitatively using industry standard practice on site in enough detail to allow mineral resource estimates as required. All core is photographed both wet and dry and as both whole and half core. All drill holes are logged in their entirety.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> ½ cores are cut using a diamond core saw and collected for assays. Other ½ cores are stored. Samples are prepared at the OMNIS laboratory in Antananarivo and samples are oven dried, crushed to -2mm, split twice through a 50/50 riffle splitter to obtain a representative sub-sample, weighing approx. 100g and then pulverized that >85% pass -75µm. Pulp samples were sent to a NATA accredited laboratory (SGS) in Perth, West Australia for whole rock analysis by XRF spectrometry. QA/QC procedures applied with alternating standards and blanks inserted every 20 samples, and two duplicates inserted every 100 samples. 1m sampling is deemed to be comprehensive and representative for the style/type of mineralisation under investigation.
Quality of assay data and	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc,</i> 	<ul style="list-style-type: none"> Assays were conducted at the SGS laboratory in Perth, West Australia. SGS is accredited with NATA for Limestone using the XRF78S analysis method, which holds while transitioning to a new SGS Globally Aligned XRF72LS analysis method. The

Criteria	JORC Code explanation	Commentary
laboratory tests	<p><i>the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	<p>XRF72LS analysis method is not yet an accredited method with NATA and pulps from the 2nd phase of the 2022 drilling program were assayed using the XRF72LS analysis method. XRF72LS entails the formation of a homogenous glass disk by the fusion of 0.4 to 0.9 g of pulverized sample material with 7-10g of Lithium borates containing flux and appropriate releasing and non-wetting agent(s) using an automated electric fusion device. The disk specimen is analyzed by WDXRF spectrometry.</p> <ul style="list-style-type: none"> QA/QC procedures applied with alternating standards and blanks inserted every 20 samples, and two duplicates inserted every 100 samples by the technical team in addition to the internal QAQC from the laboratory. Standards, blanks, and duplicates for drill sample analyses reported in this announcement have performed satisfactorily. AMIS0461/BCS513 standards were inserted every 20 samples, AMIS0793 blanks were inserted every 20 samples. Duplicates from the sample preparation laboratory were included at a rate of 2 duplicates per 100 samples. It should be noted that the in-house limestone standards (AMIS0461/BCS513) consistently reported bias lower with an average of 0.29% for CaO (AMIS0461) and 0.20% for CaO (BCS513). After investigation SGS has adjusted and applied a factor of 0.5% to the CaO results. The XRF dataset was normalized to 100%, therefore, when the 0.5% factor was applied to CaO, SGS thoroughly reviewed the Totals to ensure that the data remained within the specified range. If any of the normalized totals exceeded the specified range, SGS adjusted the normalization value for the Total to realign it accordingly. Selective samples should be sent to an external umpire lab for checks prior to commencing with an MRE.
Verification of sampling	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> 	<ul style="list-style-type: none"> All work was completed, and significant intersections verified by Vato Consulting personnel. No twin holes have been completed but are planned for future

Criteria	JORC Code explanation	Commentary
and assaying	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<p>drill programs.</p> <ul style="list-style-type: none"> All data is recorded on paper logs and after digitally using a standard logging system and files are stored in Excel files, with the objective being to import all data into an industry standard relational and auditable database to finalise a MRE. CaO has been converted to CaCO₃ using a conversion factor 1.7845
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill collar locations were recorded initially with a handheld GPS (readings are average out with an accuracy of approx.1m). Final collar locations were completed at the end of the drilling program by using differential GPS (dGPS) (with an accuracy to cm). Grid system used - UTM WGS84 Z38S No topographical survey was completed yet to produce a Digital Terrain Model (DTM).
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Data spacing nominally 500m x 500m for drill hole collars. Data spacing sufficient for understanding controls on geological and grade/purity continuity due to the flat bedded nature of the limestone. No MRE estimated yet. No sample compositing has been applied, other than the weighted average calculations of mineralised intercepts for very high, high and medium purity limestones based on the Mitchell classification system. This system is used to establish various grades of limestone purity based on the CaO and CaCO₃ contents: <ul style="list-style-type: none"> Very high purity >98.5 CaCO₃ wt% / >55.2 CaO wt% High purity 97.0-98.5 CaCO₃ wt% / 54.3-55.2 CaO wt% Medium purity 93.5-97.0 CaCO₃ wt% / 52.4-54.3 CaO wt% Low purity 85.0-93.5 CaCO₃ wt% / 47.6-52.4 CaO wt%
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Vertical holes. Orientation of sampling is perpendicular to the flat bedding limestone sequence. No known bias present.

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Samples retained onsite at a secure storage at the Soalara Project prior to dispatch to the OMNIS laboratory in Antananarivo. Samples bags were sealed as soon as sub-sampling was completed and stored securely until dispatch to the laboratory in Australia via courier.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> Company / Vato Consulting undertake a regular QA/QC review of all data. To date no problems encountered with quality.

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	<ul style="list-style-type: none"> <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> <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> 	<ul style="list-style-type: none"> Two Exploitation (Mining) permits (14542 and 14960) granted to Soalara Calcaire SARLU by Ministère auprès de la présidence chargé des Mines et du Pétrole (MPMP) and Bureau du Cadastre Minier de Madagascar (BCMM) on 04 November 2015 for a period of 40 years (expiring 03 November 2055). Exclusive rights granted for exploitation of limestone (calcaire). Cassius fully owns Soalara Calcaire SARLU. Only agreements with 3 previous shareholders of Soalara Calcaire SARL. One shareholder paid in full with other two shareholders to receive the USD\$ 420,000 on first commercial shipment and a royalty. No known legal disputes relating to the property. Permits and Government admin fees in good standing. Security of tenure considered acceptable. No known impediments to operate in the area. Two Mining (Exploitation) Licenses have secure tenure until expiry on 3 Nov 2055.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> Historical exploration completed by Services des Mines des Madagascar (1928-1948), Service Géologique (pre1966), Madagascar Mineral Resources SARL (2005-09) and Gulf Industrials (2010-15). Limited to geological mapping, geological observations, rock-chip sampling and geochemical analysis.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> Soalara project contains flat bedded limestone deposited in a

Criteria	JORC Code explanation	Commentary
		tropical marine environment in the Eocene period. Prospective limestone forms a plateau exposed in a cliff face up to 90-100m thick, divided into an upper and lower sequence based on clay content and lithological variability.
Drill hole Information	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ 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. 	<ul style="list-style-type: none"> • During the 1st phase of drilling four diamond holes (CMDD001, CMDD002, CMDD003 and CMDD004) were completed with drill collar data stated in release dated 11 July 2022. • During the 2nd phase of drilling, five diamond holes (CMDD005, CMDD006, CMDD007, CMDD008 and CMDD009) were completed with drill collar data as stated in this release.
Data aggregation methods	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Significant results reported are weighted averages based upon sample length and very high, high and medium limestone purity grades. • The intercepts reported in this release are reported in weighted percent (%) calcium oxide (CaO), calcium carbonate (CaCO₃), ferric oxide (Fe₂O₃), magnesium oxide (MgO) and silicon dioxide (SiO₂).
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • 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'). 	<ul style="list-style-type: none"> • Vertical holes and the orientation is perpendicular to the flat bedding limestone sequence. • Vertically orientated drilling results reflect true thicknesses of the limestone sequence.
Diagrams	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • All relevant maps, sections and tabulations of drill hole collars provided in this release.

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Exploration results reported correspond to the assay results received for the 5 drill holes (CMDD005, CMDD006, CMDD007, CMDD008 and CMDD009) drilled during the 2nd phase of drilling.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Representative density measurements are completed using the Caliper Vernier method (for weathered core) and the Density Scale Air-Water method (for fresh core) for all lithologies identified during the logging process.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> H & S Consultants Ltd in Sydney (Geological Specialists in Resource Estimation) will conduct a study to potentially determine an upgrade from the existing JORC Exploration Target to a Mineral Resource. Following the MRE study, Cassius's intention is to conduct a 3rd phase of the programme with results reviewed after each phase to continuously define forward extent of the programme, whilst also considering pathways to mining operations.