

# MAIDEN DIAMOND DRILLING ON ST ARNAUD'S NELSON LINE INTERSECTS BROAD GOLD AND SILVER MINERALISATION

## THE DRILLING CONFIRMS BROAD ZONES OF GOLD MINERALISATION AND VISIBLE GOLD BENEATH HISTORIC MINING ON THE NELSON LINE OF LODE

- Navarre has received diamond core assay results for a 17-hole program consisting of 4,580 metres of drilling at the St Arnaud Gold Project in western Victoria.
- The drilling intersected two prominent quartz-sulphide bearing structures containing broad zones of gold mineralisation and rare visible gold.
- Highlight results include:
  - **1.0 metre at 13.9 grams per tonnes (g/t) gold** within a broader zone of **25.3 metres at 1.7 g/t gold** from 157.7m (NED008)
  - **4.6 metres at 3.2 g/t gold & 26.9 g/t silver** from 194m (NED009)
  - **4.0 metres at 2.4 g/t gold & 15.9 g/t silver** from 165.8m (NED010)
  - **8.3 metres at 2.1 g/t gold & 1.6 g/t silver** from 266.7m (NED011)
- The drilling tested the potential for mineral resources beneath and adjacent to the Comstock open pit, on the Nelson Line of Lode that was mined late last century.

Navarre Minerals Limited (ASX: NML) (Navarre or the Company) is pleased to report diamond core assay results from the recently completed drilling program at its wholly owned St Arnaud Gold Project, 240 kilometres northwest of Melbourne, Victoria Australia (Figure 1).

The new assay results come from a 17-hole program consisting of 4,580 metres of drilling, which tested the shallow gold potential beneath the old Comstock open pit on the Nelson Line (Figures 2 & 3). The Nelson Line is one of three main lines of reef worked within the historical 400,000-ounce St Arnaud Goldfield.

The drilling has intersected two main mineralised quartz-sulphide bearing structures containing broad zones of irregularly distributed low to medium grade gold, silver and arsenic assays and rare visible gold (Figure 4).

The drilling also highlights the development of a higher-grade, steeply south plunging gold shoot around the intersection of the bedding parallel Comstock with the discordant Walkers shear zones (Figure 5). This mineralisation has similar geometry to historically mined shoots within the St Arnaud Goldfield and remains open at depth and along strike to the north.

Highlight results include:

- **1.0 metre at 13.9 g/t gold** within a broader zone of **25.3 metres at 1.7 g/t gold** from 157.7m (NED008)
- **4.6 metres at 3.2 g/t gold & 26.9 g/t silver** from 194m (NED009)
- **4.0 metres at 2.4 g/t gold & 15.9 g/t silver** from 165.8m (NED010)
- **8.3 metres at 2.1 g/t gold & 1.6 g/t silver** from 266.7m (NED011)
- **1.9 metres at 5.0 g/t gold** within a broader zone of **8.2 metres at 1.3 g/t gold** from 152.4m (NED004)
- **6.4 metres at 1.3 g/t gold** from 250.6m (NED007)

The St Arnaud Goldfield consists of the New Bendigo (Bristol), New Chum and Nelson lines (Figure 2). The Nelson Line produced the most gold and was worked over a strike extent of approximately five kilometres to a maximum depth of 685 metres in the goldfield's deepest mine, the Lord Nelson Mine.

The Lord Nelson Mine was the only mine to produce gold from sulphide ores below a depth of 200 metres, with records showing a total of 323,000 recovered ounces.

Navarre Managing Director, Ian Holland said:

*“The Company is pleased with the results from its first round of diamond core drilling on the Nelson line of reef.*

*“We are encouraged by the presence of quartz - sulphide mineralisation with rare visible gold within two main reef structures beneath the old pit.*

*“The recognition of a higher-grade gold shoot with similar geometry to those historically mined within the prolific St Arnaud Goldfield gives us confidence to forge ahead with our methodical evaluation of what is the second largest hard-rock goldfield in Victoria's Stawell Geological Zone.”*

The latest diamond core drilling results follow up on previously reported high-grade gold intercepts recorded in reconnaissance air-core drilling (refer ASX announcement of 16 June 2021).

The Company’s next step at St Arnaud is to complete two-kilogram bulk leach extractable gold (BLEG) sampling, to test for the presence of coarse, ‘nuggety’ gold potentially missed by the routine 50-gram fire assays. The mineralisation remains open along strike and will be subject to follow-up drilling.

**The drilling program in detail**

This announcement relates to Navarre’s recently completed, 4,580 metre diamond core drilling program that followed up encouraging air-core (AC) gold intersections around historic workings on the Nelson line of reef (Figures 2 - 6).

The target area was focused beneath the Comstock open pit mine on the Nelson Line, the richest historical line of reef within the St Arnaud Goldfield that produced 400,000 ounces between 1855 and 1916 at an average grade of 15 grams per tonne (Figure 2).

The program was Navarre’s first diamond core testing on the Nelson Line and follows encouraging gold assay results returned from reconnaissance AC drilling (see ASX announcement on 16 June 2021).

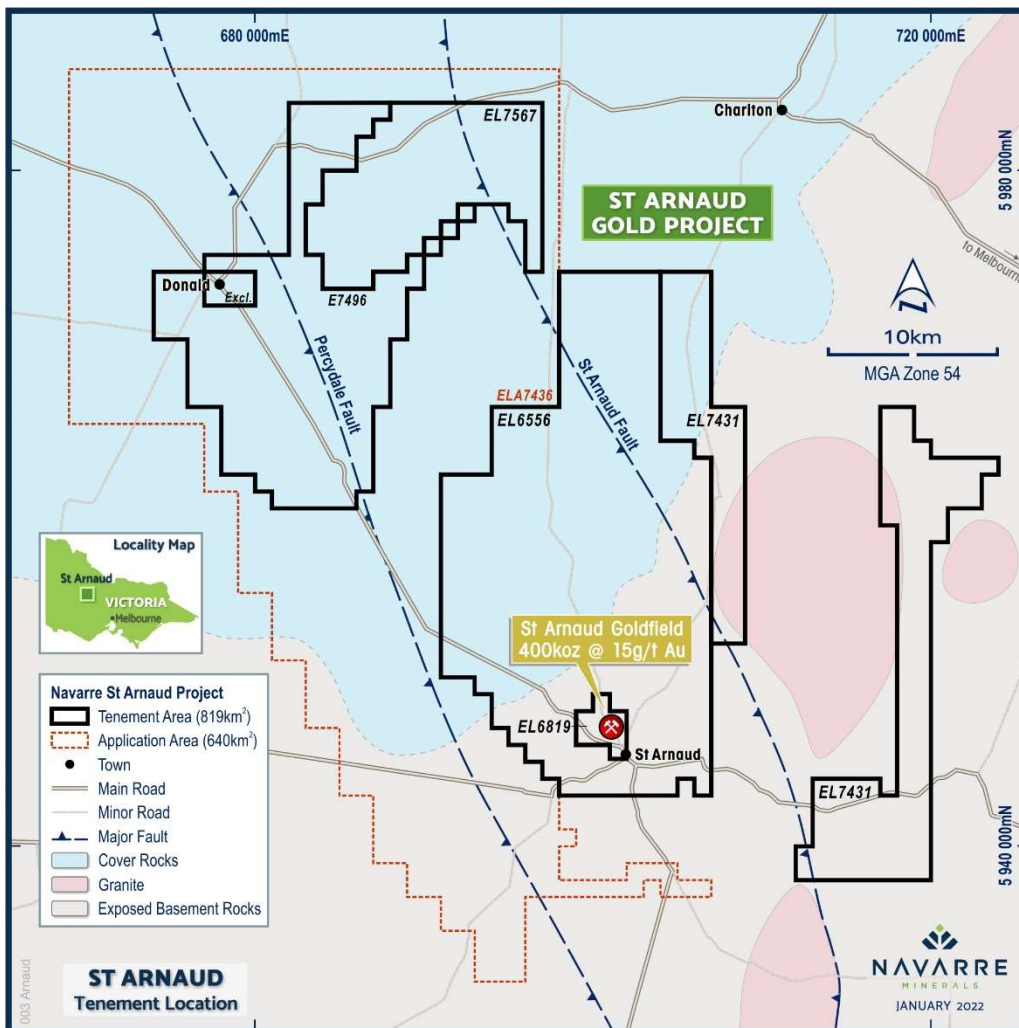


Figure 1: Location of Navarre’s St Arnaud Gold Project.

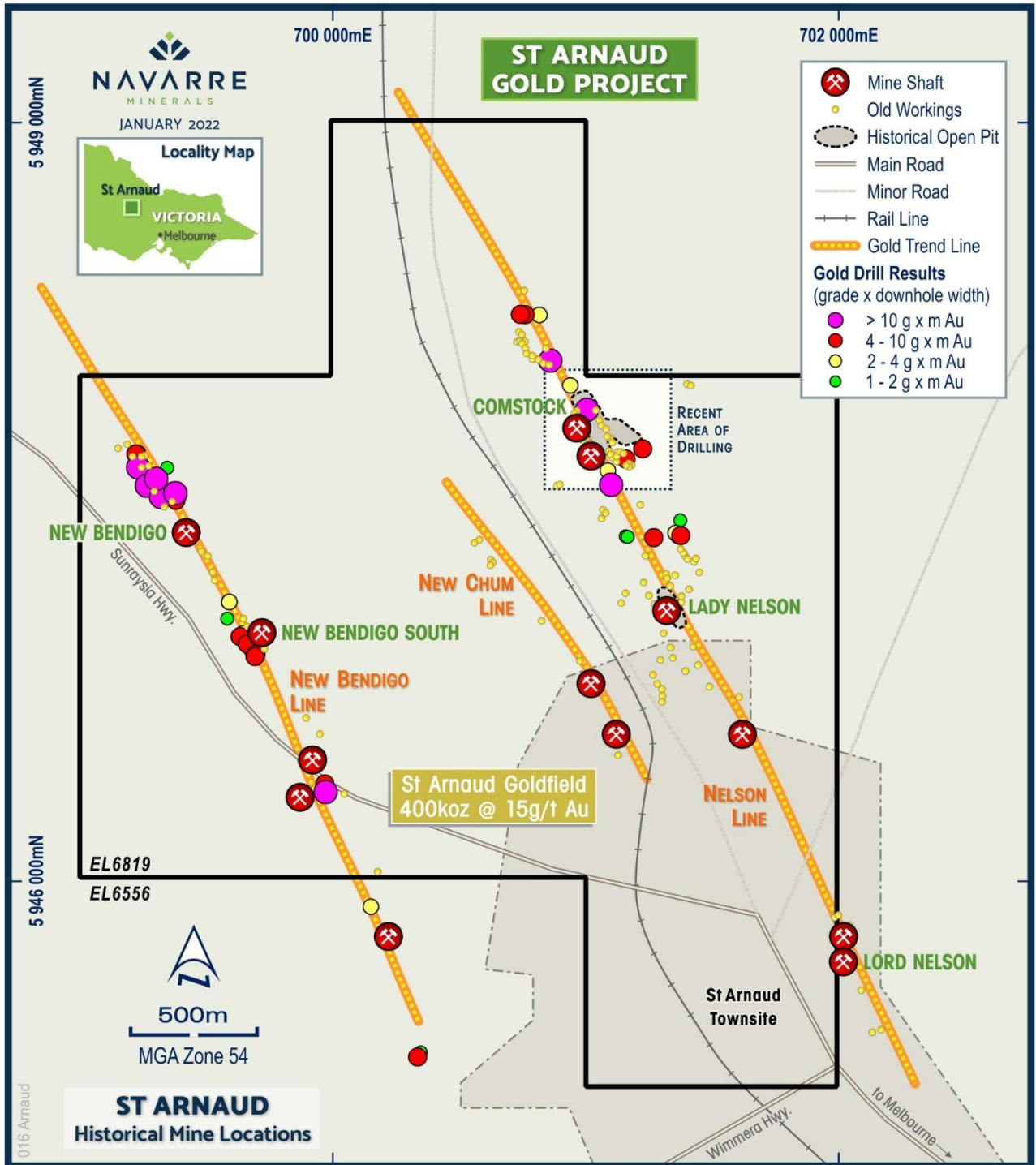


Figure 2: Plan showing the three major lines of reef worked within the historical St Arnaud Goldfield and the location of Navarre’s significant drilling intercepts.





**Figure 3:** Aerial photograph looking south over two diamond core drilling rigs on the eastern rim of the old Comstock open pit (September 2021).

Navarre has received assay results for all seventeen holes of the diamond core drilling program. This drilling has intersected two main quartz reef structures (Comstock and Walkers), lesser mineralised shears and associated quartz stockwork zones (refer Figures 4 - 6):

- **Comstock Shear** – a variably 1 to 20-metre-wide northwest-trending mineralised quartz reef structure. Historically this reef was mined in the Comstock open pit over a strike extent of 330 metres. This is the most continuous structure intersected in the drilling program. The structure contains zones of strong sulphide mineralisation in the form of arsenopyrite, pyrite ± galena ± sphalerite (strong pathfinder elements in most Victorian gold deposits). This shear has been confirmed by drilling over a 260 metre strike extent and to approximately 200 metres depth. The structure remains open along strike and at depth (Figure 4).
- **Walkers Shear** – an irregular 0.5 to 5-metre-wide quartz reef and stockworks structure containing zones of strong sulphide mineralisation in the form of arsenopyrite ± galena ± sphalerite and rare visible gold. This shear has been confirmed by drilling over a 250 metre strike extent and to 200 metres depth. This structure trends slightly oblique to the strike of the Comstock Shear and is interpreted to intersect the Comstock Shear in the northern end of the old open pit where higher-grade intercepts define a steeply plunging gold shoot (Figure 5). This gold shoot remains open to the north and at depth (see Figure 5).



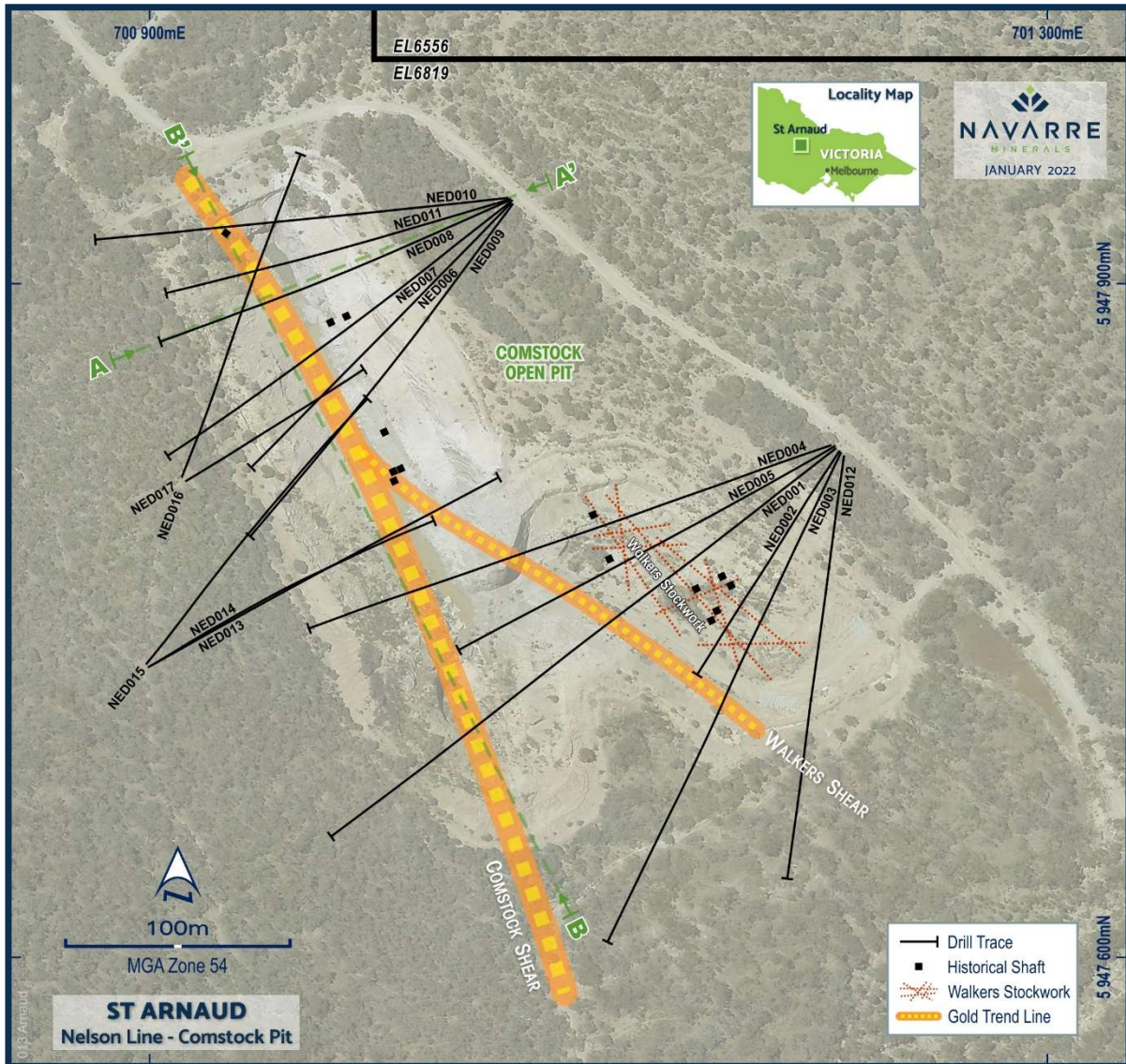


Figure 4: Comstock Pit – Location of diamond core drilling and simplified geology.

Significant diamond core drilling intercepts from the Nelson Line include (see Tables 1 & 2; Figures 4 - 6):

- 1.0 metre at 13.9 g/t gold within a broader zone of 25.3 metres at 1.7 g/t gold from 157.7m (NED008)
- 4.6 metres at 3.2 g/t gold & 26.9 g/t silver from 194m (NED009)
- 4.0 metres at 2.4 g/t gold & 15.9 g/t silver from 165.8m (NED010)
- 8.3 metres at 2.1 g/t gold & 1.6 g/t silver from 266.7m (NED011)
- 1.9 metres at 5.0 g/t gold within a broader zone of 8.2 metres at 1.3 g/t gold from 152.4m (NED004)
- 6.4 metres at 1.3 g/t gold from 250.6m (NED007)

The results indicate:

1. Gold mineralisation occurs in planar, bedding parallel to slightly oblique northwest trending quartz reef structures that are generally inclined steeply to the west at approximately 70 – 75 degrees (Figure 6).
2. The auriferous quartz reefs and stockwork zones contain irregularly distributed low to medium grade gold, silver and arsenic grades with rare visible gold that vary from a few metres to 20 metres in thickness.
3. The quartz reef textures vary from laminated, brecciated to massive (buck) with the former textures related to higher grade gold mineralisation as compared to buck vein zones. The buck quartz zones appear to be emplaced after the earlier laminated to brecciated quartz types.
4. Based on historical mining records and recent drilling, higher grade gold shoots tend to develop at near vertical orientations, pitching steeply towards the south within the plane of the mineralisation. This contrasts with the shallow orientations typically developed in the central Victorian goldfields.

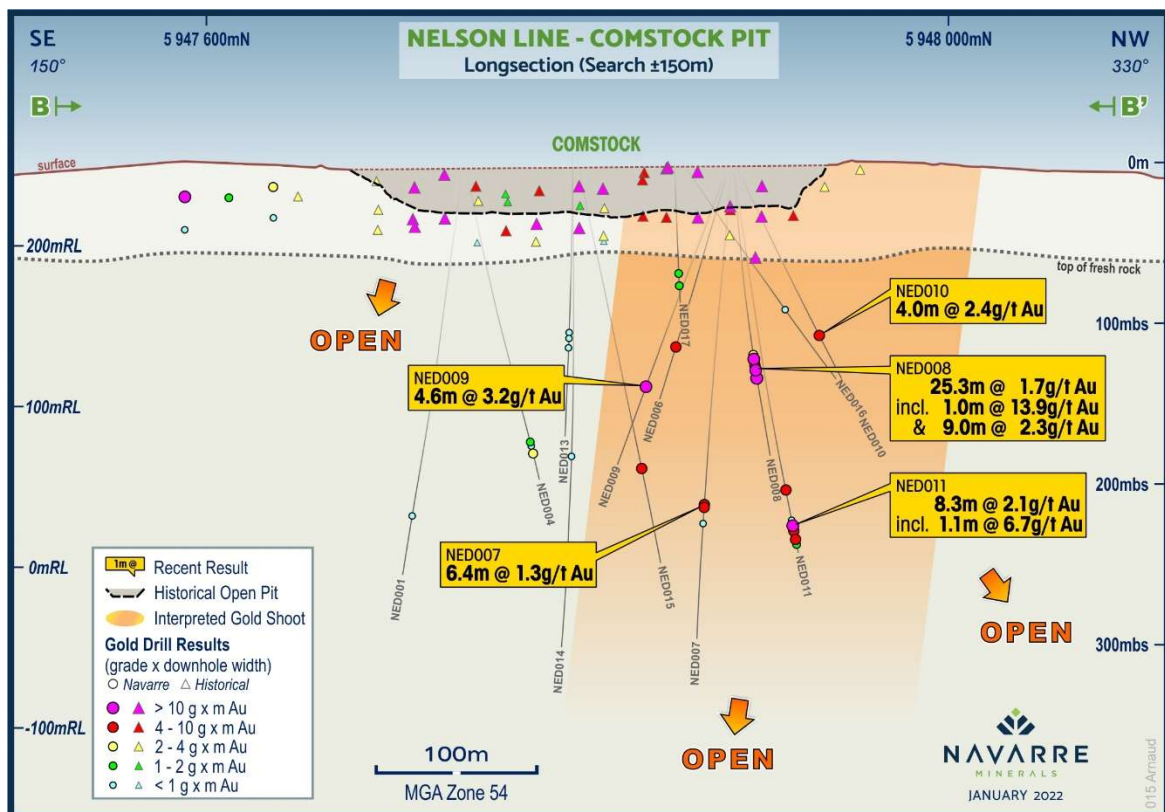


Figure 5: Longitudinal projection of the Comstock Shear showing significant drill intercepts (refer to Figure 4 for location).



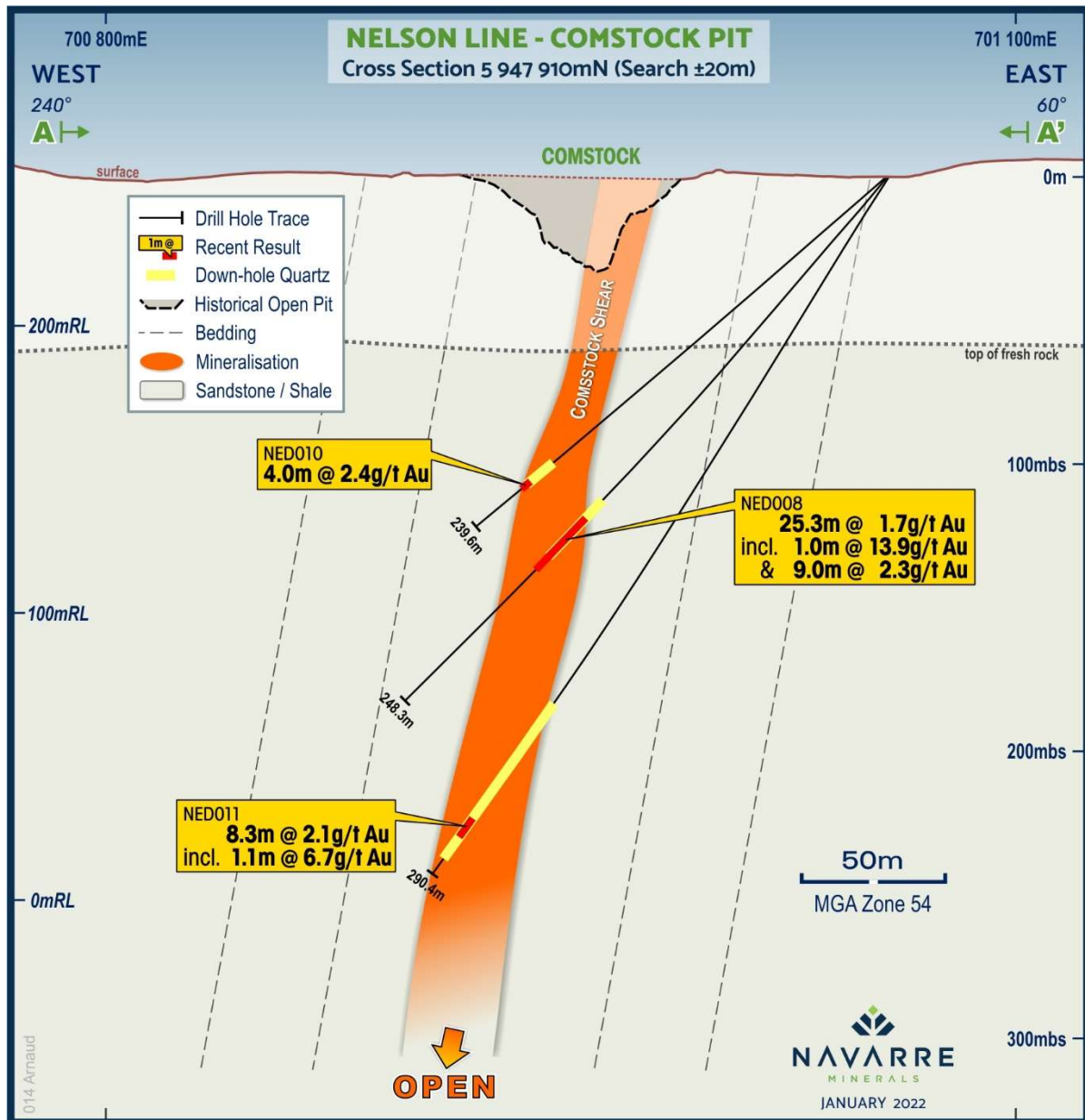


Figure 6: Cross section interpretation through a gold shoot located in the northern end of the old Comstock open pit (refer to Figure 4 for location).

### Background to St Arnaud Goldfield

Alluvial gold was first discovered at St Arnaud in 1855 and was quickly traced to its source in outcropping quartz reefs. By 1860, 47 hard rock mines were in operation. From 1855 to 1916, approximately 400,000 ounces of gold were produced at a recovered grade of over 15 grams per tonne of gold from the hard rock mines.



The St Arnaud Goldfield consists of several lines of reefs which were worked to the southern edge of the younger Murray Basin cover. These reef trends are known as the New Bendigo (Bristol), New Chum and Nelson lines (Figure 2).

The Nelson Line produced the most gold and was worked over a strike extent of approximately five kilometres to a maximum depth of 685 metres in the goldfields deepest mine, the Lord Nelson Mine.

The Lord Nelson Mine was the only mine to produce gold from sulphide ores below a depth of 200m, with records showing a total of 323,000 recovered ounces (80 per cent of total goldfield production).

Most other mines closed on reaching the water table because the technology was not available to economically treat the sulphide ores in addition to the added cost of pumping mine water.

The Lord Nelson Mine demonstrates the prospectivity of the area in terms of vertical continuity of auriferous reef systems. Ten steep, west-dipping quartz reefs of up to 7.5 metres in width were worked between 1864 and 1916. Historically, silver was a common occurrence with gold mineralisation in the St Arnaud Goldfield.

In 2018, Navarre's maiden reconnaissance drilling program demonstrated the potential for economic mineralisation of the St Arnaud Goldfield to extend under shallow Murray Basin cover more than 5 kilometres beyond the limits of historic workings (refer ASX release on 30 July 2018).

This mineralisation remains open along strike and will be subject to follow-up drilling. The best gold result was 4 metres at 6.6 grams per tonne gold from 48m (SAC022) and the best silver result was 1 metre at 67.4 g/t silver from 50m (SAC055).

**This announcement has been approved for release by the Board of Directors of Navarre Minerals Limited.**

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For further information, please visit [www.navarre.com.au](http://www.navarre.com.au) or contact:

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**Table 1: St Arnaud diamond core drill hole collars**

Hole ID	East (GDA94)	North (GDA94)	RL (AHD)	Depth (m)	Dip	Azimuth GDA (Degrees)	Prospect
NED001	701206	5947827	246.3	379.4	-42	232	Comstock
NED002	701207	5947826	246.3	200.0	-54	212	Walkers
NED003	701208	5947825	246.2	301.1	-36	205	Walkers
NED004	701204	5947828	246.2	312.6	-38	250	Comstock
NED005	701205	5947828	246.3	284.1	-48	242	Walkers
NED006	701061	5947936	251.8	221.3	-42	224	Comstock
NED007	701062	5947937	251.8	352.9	-57	233	Comstock
NED008	701061	5947937	251.8	248.3	-47	248	Comstock
NED009	701062	5947936	251.8	266.6	-45	218	Comstock
NED010	701060	5947938	251.7	239.6	-39	264	Comstock
NED011	701061	5947938	251.7	290.4	-57	255	Comstock
NED012	701209	5947824	246.2	253.4	-41	188	Walkers
NED013	700900	5947730	259.8	251.1	-45	061	Comstock
NED014	700899	5947729	259.8	341.6	-65	063	Comstock
NED015	700898	5947730	259.8	300.0	-60	040	Comstock
NED016	700914	5947814	256.3	207.1	-42	020	Comstock
NED017	700916	5947812	256.4	131.2	-44	058	Comstock

**Table 2: St Arnaud significant gold intercepts (NED001 – NED017)**

Hole ID	From (m)	To (m)	Interval (m)	Gold (g/t)	Arsenic (ppm)	Silver (g/t)	Comment
NED001 <i>including and and and and</i>	178.7	205.1	<b>26.4</b>	0.3	<b>1892</b>	0.4	Walkers Shear
	178.7	187.3	<b>8.6</b>	0.5	<b>2252</b>	0.5	
	199.2	205.1	<b>5.9</b>	0.5	<b>1870</b>	0.6	Walkers Shear
	265.8	262.2	0.4	<b>1.0</b>	<b>3720</b>	0.9	Comstock Shear Footwall
	314.9	315.7	0.8	0.3	228	0.3	Comstock Shear
	333.3	333.6	0.3	0.4	448	0.3	Comstock Shear
NED002	108.5	108.9	0.4	0.5	<b>2060</b>	0.2	Walkers Stockwork
NED003 <i>and and and and and and and and and</i>	70.0	70.6	0.6	0.3	33		Walkers Stockwork
	81.4	82.4	1.0	0.3	38		Walkers Stockwork
	91.7	93.7	2.0	<b>1.0</b>	203		Walkers Stockwork
	112.6	113.1	0.5	0.4	130		Walkers Stockwork
	116.3	117.1	0.8	0.4	56		Walkers Stockwork
	119.0	119.8	0.8	0.4	84		Walkers Stockwork
	123.2	124.2	1.0	0.4	63		Walkers Stockwork
	138.3	138.8	0.5	0.6	<b>2350</b>		Walkers Shear Footwall
	148.1	148.7	0.6	0.8	<b>4930</b>	0.4	Walkers Shear
	155.0	156.0	1.0	0.3	57		Walkers Shear Hangingwall
	241.1	242.9	1.8	0.4	453	0.6	Walkers Shear Hangingwall
NED004 <i>and including and and and and and and and and and</i>	142.7	143.4	0.7	0.4	<b>2880</b>	0.2	Walkers Stockwork
	152.4	160.6	<b>8.2</b>	<b>1.3</b>	141		Walkers Stockwork
	152.4	154.3	1.9	<b>5.0</b>	116		
	171.3	172.3	1.0	0.3	63	0.1	Walkers Shear Footwall
	174.5	176.5	2.0	0.6	99	0.6	Walkers Shear Footwall
	202.1	202.8	0.7	0.4	97	0.1	Walkers Shear
	207.9	209.7	1.8	0.5	<b>2423</b>	0.3	Walkers Shear
	217.6	226.1	<b>8.5</b>	0.6	<b>1691</b>	<b>1.7</b>	Walkers Shear
	262.4	262.9	0.5	0.7	568	<b>1.4</b>	Comstock Shear Footwall
	271.8	273.3	1.5	<b>1.3</b>	723	<b>1.9</b>	Comstock Shear
	276.1	277.2	1.1	0.8	<b>3291</b>	<b>2.8</b>	Comstock Shear
284.2	285.1	0.9	<b>2.5</b>	<b>5973</b>	<b>78.8</b>	Comstock Shear Hangingwall	
NED005	222.5	222.8	0.3	0.3	754		Walkers Shear Footwall. Visible Gold

Hole ID	From (m)	To (m)	Interval (m)	Gold (g/t)	Arsenic (ppm)	Silver (g/t)	Comment
<i>and</i>	233	241.3	<b>8.3</b>	0.3	403		Walkers Shear Hangingwall
NED006	19.1	19.6	0.5	0.5	436	0.3	Walkers Stockwork
<i>and</i>	22.8	23.8	1.0	<b>2.3</b>	272		Walkers Stockwork
<i>and</i>	153.7	162.4	<b>8.7</b>	0.6	485	<b>1.5</b>	Walkers Shear
<i>and</i>	170.5	175	<b>4.5</b>	<b>1.1</b>	<b>2063</b>	<b>4.5</b>	Comstock Shear
NED007	91	92	1.0	<b>2.4</b>	68		Walkers Stockwork
<i>and</i>	99.6	100.2	0.6	0.4	<b>2150</b>		Walkers Stockwork. Visible Gold
<i>and</i>	167.5	170.2	2.7	<b>1.1</b>	62		Walkers Shear Footwall
<i>and</i>	191	192	1.0	0.4	64		Walkers Shear Hangingwall
<i>and</i>	245.5	257	<b>11.5</b>	0.8	<b>2684</b>	0.9	Comstock Shear
<i>including</i>	250.6	257	<b>6.4</b>	<b>1.3</b>	<b>4232</b>	<b>1.2</b>	
<i>and</i>	261.6	262.5	0.9	0.5	<b>1780</b>	0.4	Comstock Shear
<i>and</i>	265.5	266.2	0.7	<b>1.1</b>	357	<b>1.3</b>	Comstock Shear
<i>and</i>	278	279	1.0	0.5	338	0.9	Comstock Shear Hangingwall
<i>and</i>	291	292	1.0	0.4	175	0.6	Comstock Shear Hangingwall
NED008	157.7	183	<b>25.3</b>	<b>1.7</b>	291	<b>2.0</b>	Comstock Shear
<i>including</i>	157.7	158	0.3	<b>8.6</b>	69		Comstock Shear Footwall
<i>including</i>	161	162	1.0	<b>13.9</b>	101		Comstock Shear Footwall
<i>including</i>	164	170	<b>6.0</b>	0.9	219		Comstock Shear Footwall
<i>including</i>	174	183	<b>9.0</b>	<b>2.3</b>	603	<b>5.7</b>	Comstock Shear
<i>and</i>	202.3	203.2	0.9	0.5	142	<b>1.0</b>	Comstock Shear Hangingwall
NED009	16	16.9	0.9	0.5	659	0.3	Walkers Stockwork
<i>and</i>	158.4	159	0.6	0.7	42		Walkers Shear Footwall
<i>and</i>	162	164	2.0	<b>1.3</b>	240		Walkers Shear Footwall
<i>and</i>	167	168	1.0	0.6	30		Walkers Shear
<i>and</i>	178	179	1.0	0.4	38	0.2	Walkers Shear Hangingwall
<i>and</i>	182	183	1.0	0.3	<b>1870</b>	<b>1.1</b>	Comstock Shear Footwall
<i>and</i>	194	198.6	<b>4.6</b>	<b>3.2</b>	<b>1001</b>	<b>26.9</b>	Comstock Shear
<i>and</i>	242	243	1.0	0.4	26		Comstock Shear Hangingwall
NED010	165.75	169.7	<b>4.0</b>	<b>2.4</b>	<b>1247</b>	<b>15.9</b>	Comstock Shear
NED011	152.6	153.6	1.0	<b>1.2</b>	46		Walkers Shear Footwall
<i>and</i>	155.9	157	1.1	0.8	42		Walkers Shear Footwall
<i>and</i>	226.7	227.4	0.8	0.5	<b>9520</b>		Comstock Shear Footwall
<i>and</i>	235.6	249.3	<b>13.7</b>	0.5	<b>3397</b>	0.6	Comstock Shear Footwall
<i>and</i>	265	266	1.0	0.4	<b>10000</b>		Comstock Shear
<i>and</i>	266.7	275	<b>8.3</b>	<b>2.1</b>	<b>5964</b>	<b>1.6</b>	Comstock Shear
<i>including</i>	272.9	274	1.1	<b>6.7</b>	<b>10000</b>	<b>5.9</b>	
<i>and</i>	279	282	3.0	<b>1.4</b>	269	<b>7.7</b>	Comstock Shear Hangingwall
<i>and</i>	283.2	285.5	2.3	0.5	298	0.5	Comstock Shear Hangingwall
<i>and</i>	290	290.4	0.4	0.7	<b>2690</b>	0.9	Comstock Shear Hangingwall
NED012	155.5	156.2	0.7	<b>1.2</b>	21		Walkers Stockwork
<i>and</i>	213.4	241.5	1.1	<b>1.0</b>	<b>1045</b>	0.3	Walkers Shear
<i>and</i>	235.4	236.3	0.9	0.8	19	0.5	Walkers Shear Hangingwall
NED013	149.8	150.2	0.4	0.4	<b>4790</b>	0.7	Comstock Shear Hangingwall
<i>and</i>	156.3	157	0.7	<b>1.1</b>	120	0.4	Comstock Shear Hangingwall
<i>and</i>	161.6	162.1	0.5	<b>1.4</b>	<b>4310</b>	<b>1.3</b>	Comstock Shear
<i>and</i>	169.8	170.8	1.0	0.5	165	0.6	Comstock Shear Footwall
<i>and</i>	191.9	192.7	0.8	0.4	252	<b>1.2</b>	Walkers Shear Hangingwall
<i>and</i>	194.3	196.4	2.1	0.9	<b>1009</b>	<b>1.3</b>	Walkers Shear
<i>and</i>	205.9	206.6	0.7	0.4	62		Walkers Shear Footwall
<i>and</i>	216.1	217	0.9	0.5	778	0.3	Walkers Shear Footwall
NED014	195.7	196.7	1.0	<b>1.2</b>	374	0.6	Comstock Shear Hangingwall
<i>and</i>	205.2	205.7	0.5	0.7	<b>5430</b>	0.7	Comstock Shear Hangingwall
<i>and</i>	241.2	242.9	1.7	<b>1.6</b>	<b>1258</b>	<b>3.9</b>	Comstock Shear
<i>and</i>	278	278.4	0.4	0.8	<b>1890</b>	0.4	Walkers Shear



Hole ID	From (m)	To (m)	Interval (m)	Gold (g/t)	Arsenic (ppm)	Silver (g/t)	Comment
NED015	223.6	234.4	<b>10.8</b>	0.8	<b>1756</b>	<b>2.3</b>	Comstock Shear
NED016	89.7	90.7	1.0	0.4	445	0.8	Comstock Shear Hangingwall
<i>and</i>	140.6	141.6	1.0	0.6	445	0.8	Comstock Shear
<i>and</i>	155	156.1	1.1	<b>2.5</b>	14		Comstock Shear Footwall
<i>and</i>	161.7	162.6	0.9	0.5	32		Comstock Shear Footwall
<i>and</i>	174.7	176.5	1.8	<b>1.4</b>	23		Comstock Shear Footwall
<i>and</i>	188.6	189.6	1.0	0.7	55		Comstock Shear Footwall
<i>and</i>	190.6	191.6	1.0	0.9	60	0.7	Comstock Shear Footwall
<i>and</i>	198.4	199.4	1.0	0.4	56		Comstock Shear Footwall
NED017	76	81	<b>5.0</b>	0.5	407	0.5	Comstock Shear Hangingwall
<i>and</i>	104	106.9	2.9	0.6	353	0.7	Comstock Shear
<i>and</i>	116	116.7	0.7	<b>1.4</b>	353	0.7	Walkers Shear

### JORC Reporting of Historical St Arnaud Exploration Results

Some data disclosed in this release is historical in nature. Although Navarre has reviewed and assessed these historical exploration results, the Company has limited knowledge on how the data was collected and assayed and, as a consequence, has had to make assumptions based on the available data generated by these companies.

The historical St Arnaud exploration results were accessed from various public domain company annual technical reports and downloaded from the Victorian State Government' GeoVic website <https://earthresources.vic.gov.au/geology-exploration/maps-reports-data>.

### Competent Person Statement

The information in this release that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Geoff McDermott, who is a Member of The Australian Institute of Geoscience and who is Technical Director of Navarre Minerals Limited. Mr McDermott has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr McDermott consents to the inclusion in the release of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Navarre's Exploration Results have been extracted from various Navarre ASX announcements and are available to view on the Company's website at [www.navarre.com.au](http://www.navarre.com.au) or through the ASX website at [www.asx.com.au](http://www.asx.com.au) (using ticker code "NML").

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

## Forward Looking Statements

This document may contain forward-looking information within the meaning of securities laws of applicable jurisdictions. These forward-looking statements are made as of the date of this document and Navarre Minerals Limited (the Company) does not intend, and does not assume any obligation, to update these forward-looking statements. Forward-looking statements relate to future events or future performance and reflect Company management's expectations or beliefs regarding future events and include, but are not limited to, the estimation of mineral reserve and mineral resources, the realisation of mineral reserve estimates, the likelihood of exploration success at the St Arnaud Gold Project, the timing and amount of estimated future production, costs of production, capital expenditures, success of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage. Forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "outlook", "guidance" or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. These forward-looking statements involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Navarre and any of its officers, employees, agents or associates. Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Readers are cautioned not to place undue reliance on forward-looking statements and Navarre assumes no obligation to update such information.

## About Navarre Minerals Limited

**Navarre Minerals Limited (ASX: NML) is a gold producer and an advanced mineral exploration company with a core mission to develop and operate large, high-grade and long-life mineral deposits.**

Based in Stawell, Victoria, Navarre to date has focused on exploring the state's premier gold districts. In October 2021 the Company entered into an agreement to acquire the **Mt Carlton Operation** in northern Queensland from Evolution Mining.

The Mt Carlton acquisition also includes 815 square kilometres of highly prospective tenements, which the Company intends to explore aggressively.

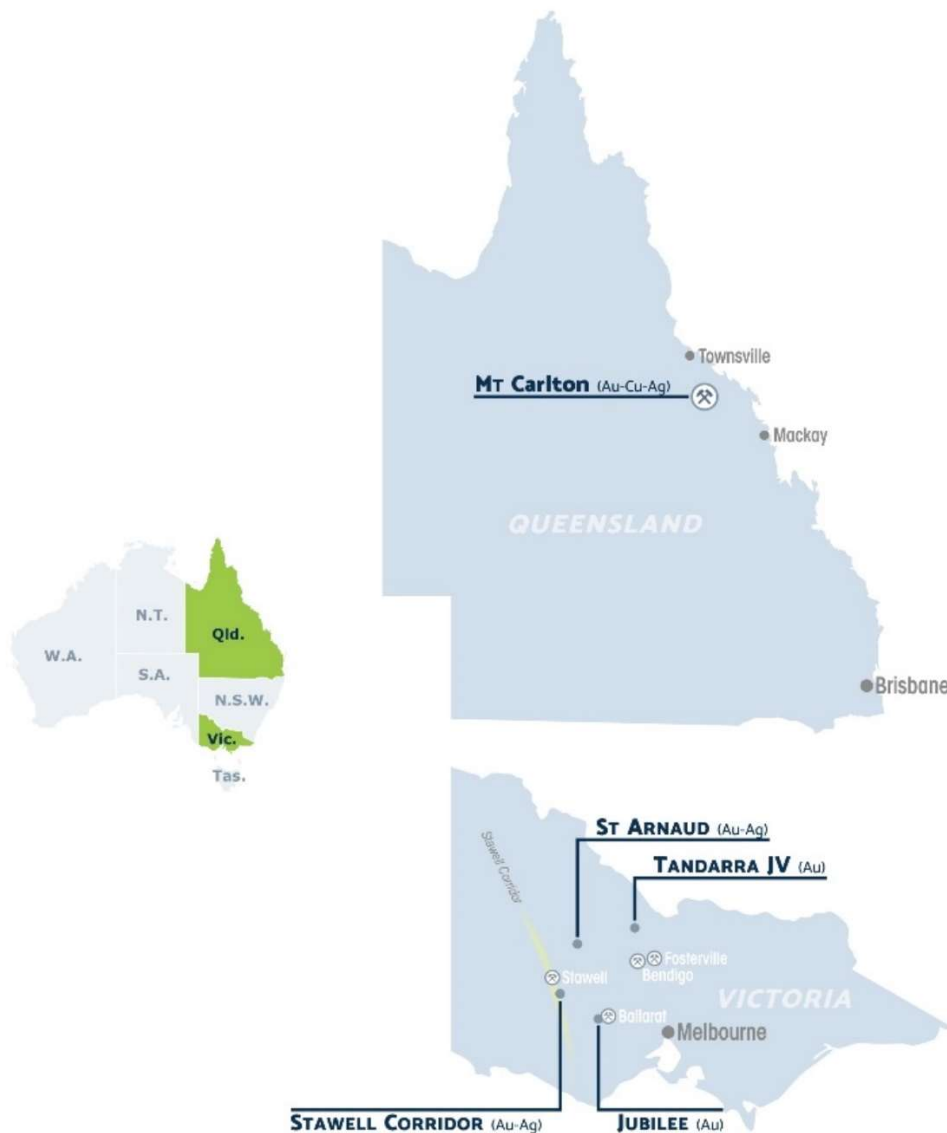
In Victoria, Navarre is searching for gold deposits in an extension of a corridor of rocks that host the Stawell (~six million ounce) and Ararat (~one million ounce) goldfields (the **Stawell Corridor Gold Project**). Within this Project, the Company is focused on growing the recently reported maiden Mineral Resource on the margins of the Irvine basalt dome (the Resolution and Adventure prospects) and advancing the high-grade gold discovery on the 14.5 kilometre long **Langi Logan** basalt dome.

Navarre is also searching for high-grade gold at its **St Arnaud Gold Project**. Recent drilling has identified gold mineralisation beneath and adjacent to historical mine workings of the 400,000 ounce St Arnaud Goldfield.

In joint venture with Catalyst Metals, the high-grade Tandarra Gold Project is targeting the next generation of gold deposits under shallow cover in the region. Tandarra is 50 kilometres northwest of Kirkland Lake Gold’s world-class Fosterville Gold Mine, and 40 kilometres north of the 22-million-ounce Bendigo Goldfield.

At the Jubilee Gold Project, 25 kilometres southwest of LionGold’s Ballarat Gold Mine, the Company is targeting extensions and repetitions of an historically mined transverse gold-bearing quartz reef. These structures are similar to Fosterville’s high-grade Swan-Eagle system.

See more at [www.navarre.com.au](http://www.navarre.com.au)





**JORC Code, 2012 Edition – Table 1**

*Section 1: Sampling Techniques and Data*

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>The diamond drill core samples were selected on geological intervals varying from 0.3m to 1.4m in length.</li> <li>Drill core was routinely cut in half (usually on the right of the marked orientation line) with a diamond saw, and one half submitted for analysis.</li> <li>Sample representivity was ensured by a combination of Company procedures regarding quality control (QC) and quality assurance/ Testing (QA). Certified standards and blanks were routinely inserted into assay batches.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Pre-collars were drilled to solid bedrock using an HWT (114.3mm) drill bit followed by diamond coring with a diameter of 63.5mm (HQ).</li> <li>Diamond drilling of HQ3 (triple-tube) was undertaken to ensure maximum core recovery.</li> <li>All drill core was orientated with a Reflex ACT III core orientation tool then continuously marked with a line while on an angle iron cradle.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All diamond core was logged capturing any core loss, if present, and recorded in the database.</li> <li>All drill depths are checked against the depth provided on the core blocks and rod counts are routinely carried out by the driller.</li> <li>Core recovery for the areas sampled was generally good.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Geological logging of samples follows Company and industry common practice. Qualitative logging of samples includes (but was not limited to), lithology, mineralogy, alteration, veining and weathering.</li> <li>All logging is quantitative, based on visual field estimates.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <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>	<ul style="list-style-type: none"> <li>Detailed diamond core logging, with digital capture, was conducted for 100% of the core by Navarre's geological team.</li> <li>Half core was sampled from HQ diameter drill core.</li> <li>Company procedures were followed to ensure sub-sampling adequacy and consistency. These included (but were not limited to), daily workplace inspections of sampling equipment and practices.</li> <li>Blanks and certified reference materials are submitted with the samples to the laboratory as part of the quality control procedures.</li> <li>No second-half sampling has been conducted at this stage.</li> <li>The sample sizes are considered appropriate to correctly represent the sought-after mineralisation.</li> </ul>
Quality of assay data and laboratory tests	<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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Analysis for gold is undertaken at ALS Perth, WA by 50g Fire Assay with an AAS finish to a lower detection limit of 0.01ppm Au using ALS technique Au-AA26.</li> <li>ALS also conducted a 35 element Aqua Regia ICP-AES (method: ME-ICP41) analysis on each sample to assist interpretation of pathfinder elements.</li> <li>No field non-assay analysis instruments were used in the analyses reported.</li> <li>A review of certified reference material and sample blanks inserted by the Company indicate no significant analytical bias or preparation errors in the reported analysis</li> <li>Internal laboratory QAQC checks are reported by the laboratory and a review of the QAQC reports suggests the laboratory is performing within acceptable limits.</li> </ul>
Verification of sampling and assaying	<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>	<ul style="list-style-type: none"> <li>Samples are verified by Navarre geologists before importing into the drill hole database.</li> <li>No twin holes have been drilled by Navarre during this program.</li> <li>Primary data was collected for drill holes using a Geobase logging template on a laptop using lookup codes. The information was sent to a database consultant for validation and compilation into a SQL database.</li> <li>Reported drill results were compiled by the Company's geologists and verified by the Senior Exploration Geologist and Technical Director.</li> <li>No adjustments to assay data were made.</li> </ul>
Location of data points	<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>	<ul style="list-style-type: none"> <li>All maps and locations are in UTM Grid (GDA94 zone 54).</li> <li>All drill collars are initially measured by hand-held GPS with an accuracy of <math>\pm 3</math> metres. On completion of program, a contract surveyor picks-up collar positions utilising a differential GPS system to an accuracy of <math>\pm 0.02</math>m.</li> <li>At St Arnaud, topographic control is achieved via use of a DTM developed from a 2008 ground gravity survey measuring relative height using radar techniques.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Variable drill hole spacings are used to adequately test targets and are determined from geochemical, geophysical and geological data together with historic mining information.</li> <li>Drilling reported in this program is of an early exploration nature and has not been used to estimate any mineral resource or ore reserves.</li> <li>Refer to sampling techniques, above for sample compositing.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration is at an early stage and, as such, knowledge on exact location of mineralisation, in relation to lithological and structural boundaries, is not accurately known.</li> <li>The drill orientation is attempting to drill perpendicular to the geology and mineralised trends previously identified from earlier drilling. Due to the early stage of exploration, it is unknown if the drill orientation has introduced any sampling bias. This will become more apparent as further drilling is completed.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody is managed by Navarre staff.</li> <li>All drill samples are stored in a secured facility prior to dispatch to the assay laboratory.</li> <li>Drill samples are transported from Stawell, Victoria by a licenced reputable transport company to a registered assay laboratory in Pooraka, SA (ALS Laboratories). At the laboratory samples are stored in a locked yard before being processed and tracked through sample preparation.</li> <li>On completion of sample preparation, ALS securely transport samples for assay at their Perth, WA facility.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>There has been no external audit or review of the Company's sampling techniques or data at this stage.</li> </ul>

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The St Arnaud Gold Project is located within Navarre's 100% owned "St Arnaud" exploration licences EL 6556, EL 6819, EL 7431 and EL 7567 which were granted on 21 August 2017, 22 October 2020, 26 March 2021 and 30 August 2021, respectively for an initial period of 5 years.</li> <li>EL 6556, EL 6819, EL7431 and EL 7567 are current and in good standing.</li> <li>The project occurs on a combination of freehold and crown land.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>There have been several phases of previous exploration on and about the St Arnaud Gold Project.</li> <li>Most exploration in the area has concentrated on the known extents of the historic St Arnaud Goldfield.</li> <li>In the late 1960s Planet Metals undertook an assessment of the historic St Arnaud Goldfield. Ten diamond drill holes were</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>proposed to test the potential of the field however, these were not drilled.</p> <ul style="list-style-type: none"> <li>In 1984, General Gold Resources NL undertook a 10-hole diamond drill program of approximately 2,500m testing targets on the New Bendigo and Nelson lines.</li> <li>Compass Minerals took over the exploration licence and formed a Joint Venture with WMC who tested the shallow potential of the northern end of the field. The licence then passed to Glenburn Manor in 1992 (International Minerals NL) who carried out further shallow percussion and diamond drilling and mined a small open pit. This operation ceased in 1995.</li> <li>Sedimentary Holdings Ltd drilled 2 diamond holes in 2006, to test the possible extensions of the Lord Nelson workings. These drill holes confirmed the continuation of the mineralised structure.</li> <li>In 2008 Rex Minerals Ltd undertook a 4,800m drilling program targeting gold mineralisation below several of the richest historic hard rock mine workings. This drilling included a bonanza gold intersection of 1m@ 1,174 g/t Au from 425m in STDD004 beneath the historical New Bendigo Shaft workings on the New Bendigo (Bristol Line) (see Rex ASX announcements of 15 &amp; 16 April 2008).</li> <li>In 2008 Rex undertook a detailed airborne magnetic survey to identify if the mineralised lines of the St Arnaud Goldfield extend north under Murray Basin cover.</li> <li>Navarre has reviewed and assessed all previous exploration results available in the public domain.</li> </ul>
<p><i>Geology</i></p>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The project area is considered prospective for the discovery of gold deposits of similar character to those historically mined in the adjacent St Arnaud Goldfield. The St Arnaud Goldfield has produced approximately 0.4 million ounces of gold from hard rock sources. The St Arnaud Goldfield comprises several lines of reefs which were worked to the edge of the Murray Basin cover. These reefs were known as the West Field, New Bendigo (Bristol), Nelson (including New Chum Line) and East Field.</li> <li>The Nelson Line produced the most gold and was worked over a strike length of 3.2km to a maximum depth of 685m in the goldfields deepest mine, the Lord Nelson Mine. The Lord Nelson Mine was the only mine to produce gold from sulphide ores below a depth of 120m with records showing a total of 323,000 recovered ounces (80% of total goldfield production).</li> <li>The Lord Nelson Mine demonstrates the prospectivity of the area in terms of vertical continuity of auriferous reef systems. Mineralisation is associated with steep west dipping faults ranging in size from 10cm to several metres. Gold is</li> </ul>

Criteria	JORC Code explanation	Commentary
		commonly located within laminated quartz veins in the fault zone or in low angle extension quartz veins extending up to 5m from the related fault zone. Ten auriferous quartz reefs of between 0.8m to 7.5m width were worked in the Lord Nelson Mine between 1864 and 1916.
Drill hole Information	<ul style="list-style-type: none"> <li>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"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Reported results are summarised in Figures 2 - 5 and Tables 1 - 4 within the main body of the announcement.</li> <li>Drill collar elevation is defined as height above sea level in metres (RL).</li> <li>Drill holes were drilled at an angle deemed appropriate to the local structure and stratigraphy and is tabulated in Table 1.</li> <li>Hole length of each drill hole is the distance from the surface to the end of hole, as measured along the drill trace.</li> </ul> <p><b>Historical drill information</b></p> <ul style="list-style-type: none"> <li>Although Navarre has reviewed exploration results of previous explorers on the St Arnaud Goldfield, the Company has limited knowledge on how the data was collected, sampled and assayed, and consequently, has had to make assumptions based on the available historical data.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>All reported assays have been average weighted according to sample interval.</li> <li>No top cuts have been applied.</li> <li>An average nominal 0.3g/t Au lower cut-off is reported as being potentially significant in the context of this drill program.</li> <li>No metal equivalent reporting is used or applied.</li> </ul> <p><b>Historical drill information</b></p> <ul style="list-style-type: none"> <li>Although Navarre has reviewed exploration results of previous explorers on the St Arnaud Goldfield, the Company has limited knowledge on how the data was aggregated, and consequently, has had to make assumptions based on the available historical data.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The exact geometry and extent of primary mineralisation is not known at present due to the early stage of exploration.</li> <li>Mineralisation results are reported as "down hole" intervals as true widths are not yet known.</li> </ul> <p><b>Historical drill information</b></p> <ul style="list-style-type: none"> <li>Although Navarre has reviewed exploration results of previous explorers on the St Arnaud Goldfield, the Company has limited knowledge on the relationship between mineralisation widths and intercept lengths, and consequently, has had to make assumptions based on the available historical data.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to diagrams in body of text.</li> </ul>

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All drill hole results received to date have been reported in this announcement.</li> <li>No holes are omitted for which complete results have been received.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All relevant exploration data is shown in diagrams and discussed in text.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Areas of positive drill results are expected to be followed up with further drilling.</li> </ul>