

Exceptional High Grade Vanadium Intercepts - Abenab, Namibia

Highlights

- Assays from maiden vanadium drilling program received:
 - 32.3m @ 1.8% V₂O₅
 - including 10.8m @ 4.0% V₂O₅
 - 4.1m @ 3.8% V₂O₅
- Broad zones of Vanadium rich mineralisation encountered
- Underground grab sample 6.2% V₂O₅, (14.1%Pb, 6.6% Zn)
- Discovery of new zone of high grade, vanadium rich mineralisation near surface
- Mineralisation remains open along strike and at depth
- Significant extension of down dip vanadium mineralisation confirms potential
- Desktop mining scoping study, including bulk sample processing, underway

4% V₂O₅ ~ 6.7% Cu*

Avonlea Minerals Limited (ASX: AVZ FSX: 3A2) (“Avonlea”) is delighted to announce the assay results from the recent 1608m maiden diamond core drilling program, completed in December 2011 at Avonlea’s Abenab vanadium prospect, northern Namibia. Exclusive Prospecting Licence 4416 (EPL 4416) sits within the Otavi Mountainland region, which includes mineralisation types such as the Vanadium-rich Abenab mine, the Copper-rich Tsumeb and Tschudi mines, and the lead-zinc-vanadium ores of the Berg Aukas mine. The Abenab prospect in EPL 4416 is approximately 40kms from the regional mining and processing township of Tsumeb in northern Namibia; well serviced with respect to power, water, roads, rail and labour.

Drilling and assays have now confirmed some exceptional vanadium (V₂O₅) grade intersections as well as broad zones of Vanadium (Pb and Zn) rich mineralisation. The significant intersections of which are summarised in Table I below and referenced in detail, in Annexure I. A bulk sample of the mineralisation has been compiled and is currently undergoing preliminary metallurgical testing.

Managing Director David Riekie commented:

“To achieve both high grade intersections and broad zones of mineralisation, from our first pass drilling program is extremely encouraging and it would be fair to say, that our expectations were realised earlier than expected. Programs are also underway to evaluate our new nearer surface discovery and the strike extensions.

“Our objective is to assess the potential for a low CAPEX, near term mining operation at the previously operating Abenab mine, and utilise modern mining and processing technology to enhance the potential production profile. These positive early exploration results form a foundation for pursuing this near term objective, and we will continue to assess the data we have on hand to determine the targets for further exploration. We now have bulk samples with the laboratories to assess concentrate recoveries from simple crushing and gravity processes. The database of historical information comprising both exploration and mining reference material, now coupled with these recent and confirmatory exploration results, provides Avonlea with basis to develop a desktop study to consider the potential at Abenab.”

Hole ID	From (m)	To (m)	Interval (m)	V2O5 (%)	Zn (%)	Pb (%)	Pb+Zn (%)
ABD001	181.68	181.92	0.24	14.70	11.20	33.60	44.80
	221.86	226.00	4.14	3.78	2.80	8.76	11.56
incl	224.10	226.00	1.90	7.80	5.70	18.50	24.20
ABD008	145.84	178.10	32.26	1.81	1.67	3.93	5.61
incl	160.92	171.72	10.80	3.97	3.44	8.43	11.87

Table I: Highlighted assay results from drill holes

* Cu Equivalent Value = V₂O₅ Price / Cu Price 1% V₂O₅ ~ 1.67% Cu (based on V₂O₅ @ US\$13,888 Cu @ US\$8,300) indicative only

This first stage exploration program, specifically targeted the areas potential for near surface, as well as down dip mineralised extensions to the high grade, historical Abenab Vanadium mine. The current drilling outcomes are represented in a plan view in Figure 1.

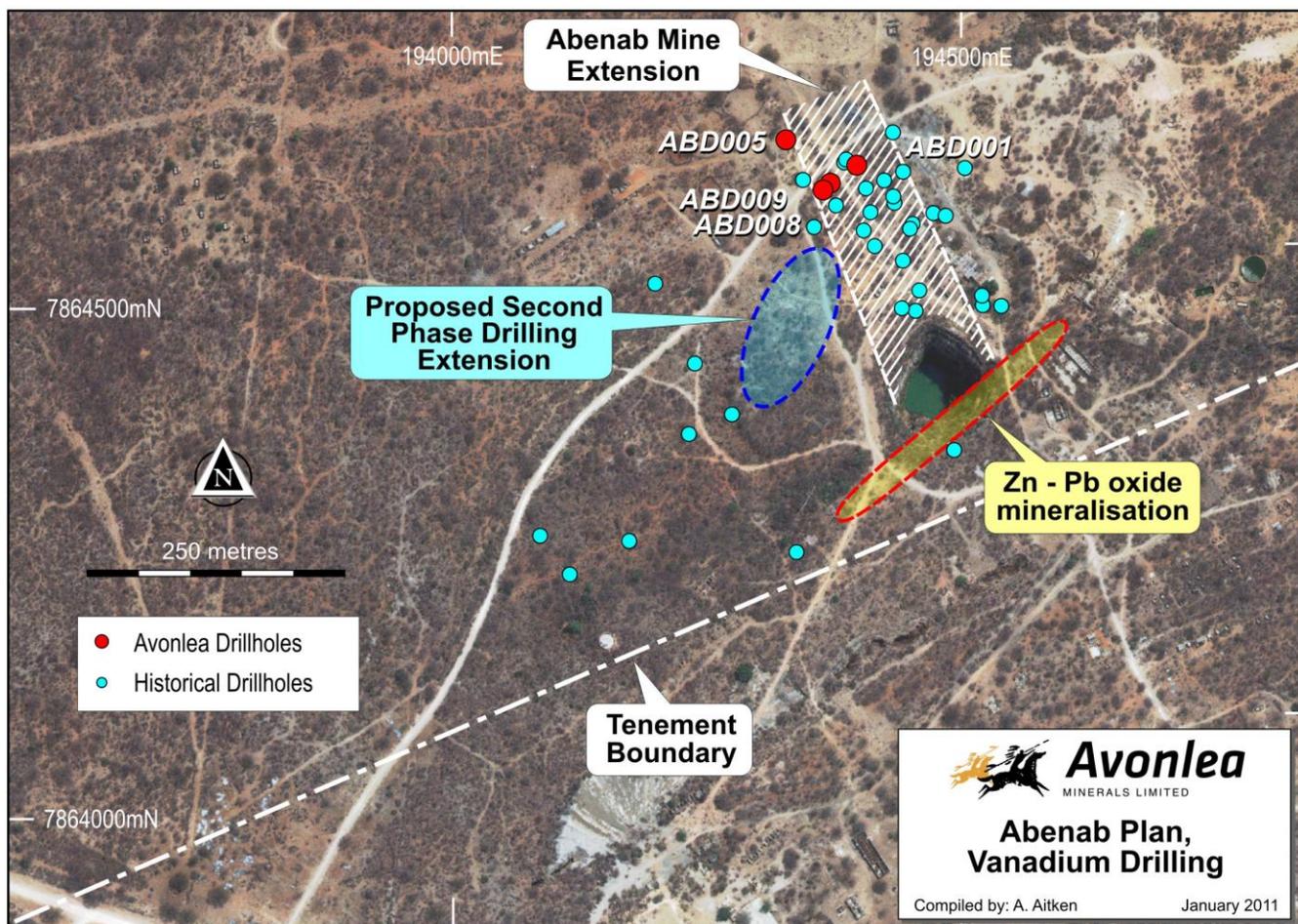


Figure 1: Plan view of the Abenab prospect, including current and historical drill hole locations.

In addition to the drill hole intersections, Avonlea geologists gained access to the 5 level of the Abenab mine from the open pit to investigate the geology and mineralisation that was historically mined. Several samples were taken from underground including a minor high grade pod still unmined within the workings. Further, within the historical workings, clay seams were sampled indicating they are vanidiferous, See table 2 below.

Sample ID	V2O5(%)	Pb(%)	Zn(%)	Pb+Zn(%)	Description	East_Z34	North_Z34	Local_RL
218110	0.338	0.743	0.478	1.221	clay zone from Abenab 5 level	194539	7864335	1190
218111	0.433	1.625	0.649	2.275	clay zone from Abenab 5 level	194532	7864402	1190
218112	0.903	2.032	3.426	5.458	clay zone from Abenab 5 level development, crosscut1	194523	7864399	1190
218115	6.145	14.076	6.559	20.635	HG UG sample from Abenab 5 level	194481	7864412	1190

Table 2: Underground samples from Abenab 5 Level. Coordinates are in WGS84 Zone 34

The nature of the mineralisation encountered at Abenab are relatively unique minerals, descloisite-vanadinite; both secondary vanidiferous oxide and chloride minerals composed of Pb-Zn- V (see Figure 2 for picture).

These minerals are distinguished due to relatively higher vanadium grades when compared to the more recognised and market dominant ferrovanadium; a by-product from magnetite deposits and which typically require magnetic and solvent extraction processes. Historical processing flowcharts of the Abenab ore, demonstrated that recovery of Vanadium rich concentrates were primarily undertaken through simple gravity separation system and conventional floatation circuit. Advancement in hydrometallurgical recovery methods and concentration processes, since this time will now form part of the current scoping studies and bulk sample processing.

Typically most vanadium is derived as by-products from large magnetite deposits that grade between 0.3 to 0.7% V_2O_5 . With the low cost exploration program completed at Abenab for a total cost of drilling and assay approximately \$300,000, we anticipate future drilling costs to be similar. With the metallurgical test work focussing on producing a simple, low cost processing flow sheet, we are now attempting to replicate and then improve on the recoveries the historical mine achieved.

The ore that was mined at the Abenab mine, and these unique grades and characteristics have been well documented in geological publications and the results of Avonlea's recent drilling have confirmed both near surface and down dip extension to mineralisation, warranting further exploration activity to better determine the potential.



Figure 2 Descloisite from Abenab mine and brecciated descloisite ore from Abenab ROM collected November 2010 by AVZ geologists.

Abenab Mine - background

The Abenab mine operated between 1921 and 1938 whereby approximately 1.8Mt of ore was mined to produce 42mlbs (or approximately 102,000 tonnes) of concentrate at 18.0% V_2O_5 . Historical figures indicate that the Abenab vanadium ore concentrate was very consistent and characterised by its simple recovery and concentration attributes; achieving average grades of 18.0% V_2O_5 , 13.4% Zn and 42.4% Pb. Production was from open pit and underground operations that reached a depth of 215m from 11 levels.

Ongoing Activity

The ongoing accumulation of historical data, comprising both geological and historical mining records, has provided the impetus in the light of these encouraging drilling results, to develop a desktop scoping study to assess the potential of low cost (and low capital expenditure) of mining methods that were previously and successfully undertaken during the 1930's, and augment this with modern mining technological advancements. Historical metallurgical flow sheet located in the archives is being utilised to guide the current metallurgical testing.

The current price of V_2O_5 is US\$13,888 per tonne; based on a Copper price of US\$8,300, 1% V_2O_5 is equivalent to 1.67% Cu.

The underground workings are still to be further assess along with the development of a 3D mine model and database from the historical records.

Yours Faithfully



David Riekie

MANAGING DIRECTOR

About Avonlea

Avonlea Minerals Limited (ASX: AVZ) is an Australian publicly listed exploration company based in Perth, Western Australia. It operates with a board experienced in African exploration and corporate matters.

AVZ through its local subsidiaries in Namibia has accumulated an exciting portfolio of Exclusive Prospecting Licences (EPL's). The company has applied for EPL's covering 9,500sq km (1,625kms remain pending) and are considered prospective for Specialty Minerals (Vanadium & Tin), Rare Earth Elements and Precious and Base Metals.

AVZ announced on in December 2011 details of a JORC compliant Fe inferred Resource estimate of 693 million tonnes at 24% from its Ondjou Prospect; drilling is continuing to expand on this base. In addition the company has released details of the potential Exploration Target size of its prospect of between 2 to 3.4Bt (20 – 30%+ Fe) from this and its other Fe prospects.*

*This exploration target mineralisation tonnage and grade is conceptual in nature as there has been insufficient exploration completed to define a Mineral Resource in accordance with the JORC Code (2004), and it is uncertain if further exploration will result in the determination of a Mineral Resource.

The information in this report that related to Exploration Results, Exploration Targets, Mineral Resources or Ore Reserves is based upon information compiled by Mr Alex Aitken a member of the Australian Institute of Geoscientists. Mr Alex Aitken is a full time employee of the company. Mr Aitken has sufficient experience which is relevant to the style and mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent persons as defined in the 2004 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Aitken has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Note: Drill core samples were taken from NQ and HQ diamond core with 1/2 core samples submitted for ICP/OES/MS analysis with a sodium peroxide fusion sample preparation. Samples were selected on the basis of geological boundaries where possible. All samples were submitted to Genalysis in Canning Vale, Perth for analysis.

Hole ID	Easting	Northing	dip	azi_utm	EOH Depth
ABD001	194395.4	7864639	-80	145	264
ABD005	194327	7864665	-80	145	440.3
ABD008	194363.4	7864616	-80	145	437.5
ABD009	194370	7864621	-85	130	

WG84 Zone 34 coordinates

Annexure I

Hole ID	From (m)	To (m)	Interval (m)	V2O5 (%)	Zn(%)	Pb (%)	Pb+Zn (%)
ABD001	181.68	181.92	0.24	14.70	11.20	33.60	44.80
	205.65	206.00	0.35	1.14	0.70	2.70	3.40
	221.86	226.00	4.14	3.78	2.80	8.76	11.56
inc	224.10	226.00	1.90	7.80	5.70	18.50	24.20
ABD005	349.00	434.30	85.30	443ppm	1.16	0.66	1.82
	439.10	440.30	1.20	602ppm	1.50	0.36	1.86
ABD008	145.84	178.10	32.26	1.81	1.67	3.93	5.61
inc	160.92	171.72	10.80	3.97	3.44	8.43	11.87
	273.85	320.78	46.93	0.58	0.56	1.28	1.85
inc	289.45	293.50	4.05	1.25	1.11	2.75	3.86
	300.55	302.95	2.40	1.51	1.22	3.24	4.46
	391.90	437.50	45.60	530ppm	1.60	0.83	2.43
ABD009	149.65	168.60	18.95	0.36	0.44	0.91	1.35
inc	166.20	168.60	2.40	1.06	1.50	2.58	4.09
	174.21	176.55	2.34	2.69	2.42	6.86	9.28
	180.60	180.87	0.27	0.94	1.30	3.00	4.30
	334.47	337.62	3.15	337ppm	0.59	1.69	2.28
	371.40	443.00	71.60	237ppm	0.54	0.99	1.53