

# Agam Iron Sand Primary Report

## Introduction

Agam Regency in Western Sumatra, Republic of Indonesia has high potential for Iron Sand, which was known from the Dutch colonization era.

Geologically, the location is on a low land which sand sedimentation is formed from the stream or as result from chemistry and physic processes of Ultra-Mafic Rocks.

Iron sand observed in layered strato-paleochannels which was related to the volcanic activities of Mount Talamu Volcano, Mount Singgalang Volcano and Mount Tandikat Volcano, which all three volcanoes were dominated by Andesitic lava flows.

An initial drilling program of total of 20 holes test pits drilled by Coziron Resources to identify the mineralized Iron Sand Layers at Agam tenement. This primary program will be followed by an intensive 8000m Rotary Air Blast (RAB) drilling program to fully explore the entire Agam tenement for Iron Sand Formations.

## Agam Joint Venture

On May 1<sup>st</sup> 2008 Coziron Resources (**ASX: CZR**) announced its Joint Venture with the Indonesian Partner PT Galian Endapan Buana (**GEB**) the total licensed are is 3960 hectares. Furthermore, an application for mining and export licenses was logged at the Indonesian Authorities and still in process.

GEB holds the exploration permit of the Ulayat Nagari Tiku V and Agam in Western Sumatra, the JV was formed on 80:20 basis, CZR 80% and GEB 20%.

## Agam Iron Sand Project Development

As announced on June 10<sup>th</sup> 2008 **Coziron Resources Limited (CZR)** singed a legally binding term sheet with the Chinese based company **WUHAN TONGRUI Industry and Trade Ltd (WUHAN)** to develop Agam Iron Sand Project.

## Agam Location and Accessibility

The prospective tenement is located to the north-northwest NNW of Padang City in Western Sumatra, accessible by sealed road. The distance is 95Km and the journey may take a maximum of 2 hours travel by car. (Refer to Map -2 Agam Locality Map).



Map - 1 Agam tenement Locality Map

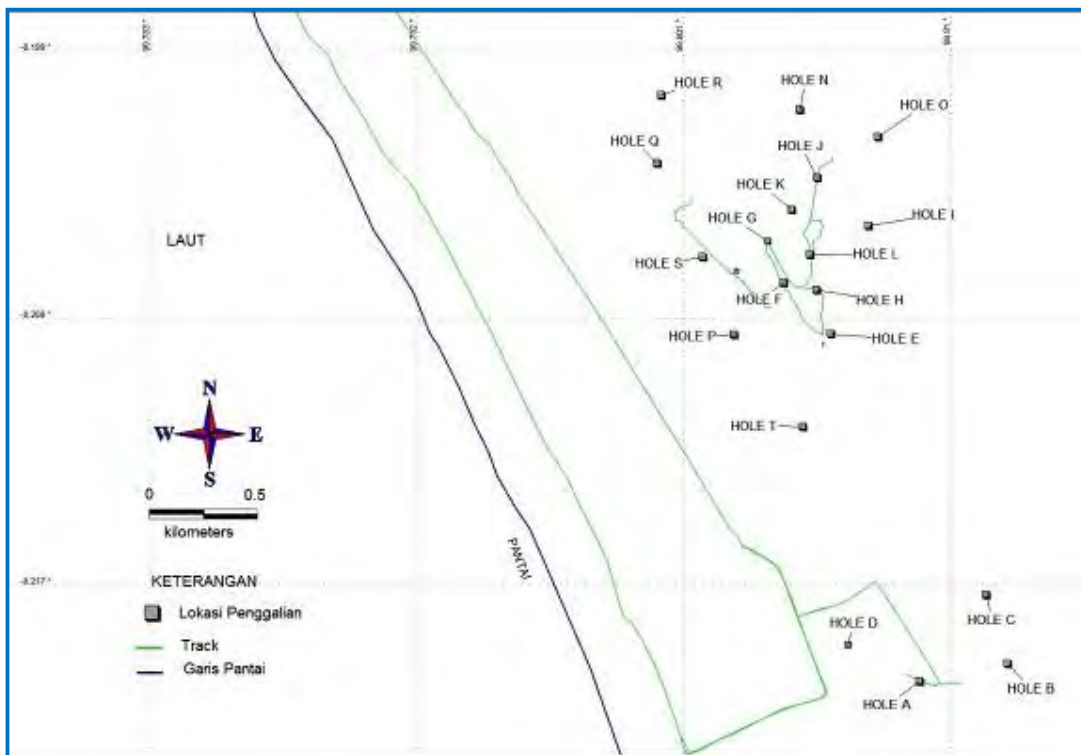
## Exploration Techniques

An extensive mapping geology program was carried out at Agam tenement followed by shallow drilling program to intercept the Iron Sand Layers.

Initially, a three inches diameter hand augers commenced the drilling program to establish the Iron Sand locations for the Test Pits drilling. Then the exploration program entered its second phase of digging 20 test pits using an excavator to identify the thickness of the Mineralized Iron Sand Layers, the twenty Holes Test Pits named alphabetically from **A** to **U**. The 20 test pits (Holes) vary in depth. But, generally were between 3 - 4m deep and an average diameter of 2m.

(Refer to Map -2 the drilled 20 “Holes” Test Pits plan below).

The Southern holes A, B, C & D does not contain identifiable Fe Sand Layers, while the rest of the northern 16 holes contain well defined Fe Sand Layers.



Map - 2 Coziron initial 20 Test Pit Holes diagram

## Analyzing Method

On-the-spot elemental analysis carried out to determine the Iron percentage at the mineralized zones, for this purpose an “Innov-X” portable X-Ray Fluorescence (XRF) analyzer was used at each intercepted Iron Sand Layer at all 20 test pits. The following table shows the Fe percentage at each Test Pit for each mineralized layer. Fe percentage taken from 67 mineralized intervals giving the average Fe 17.1% for layers from 1 - 4m deep. Noticeably, the middle intervals have higher Fe content than the lower and upper intervals. Conventionally, Fe concentration was observed at depths between 1 to 3m. (Refer to table -1 below).

Agam IRON-SAND Test Pits Summary - (XRF) analyzer results							
Test Pit Number	Interval (m) from - to	Thickness of Iron Sand (m)	Fe (%)	Test Pit Number	Interval (m) from - to	Thickness of Iron Sand (m)	Fe (%)
A	0 - 1.0	1	5	K	0 - 1.0	1	10
	1.0 - 1.80	0.8	10		1.0 - 1.8	0.8	30
	1.8 - 3.0	1.2	16		1.8 - 3.0	1.2	10
B	0 - 1.0	1	6	L	0 - 1.0	1	8
	1.0 - 1.25	0.25	15		1.0 - 1.30	0.3	40
	1.25 - 2.25	1	10		1.30 - 2.5	1.2	25
	2.25 - 3.0	0.75	10		2.5 - 3.0	0.5	20
C	0 - 1.0	1	7	N	0 - 1.0	1	7
	1.0 - 2.0	1	12		1.0 - 1.80	0.8	35
	2.0 - 3.0	1	15		1.8 - 3.0	1.2	20
D	0 - 1.0	1	8	O	0 - 0.5	0.5	8
	1.0 - 2.0	1	10		0.5 - 1.5	1	35
	2.0 - 3.0	1	10		1.5 - 2.2	0.7	25
					2.2 - 3.0	0.8	15
E	0 - 1	1	15	P	0 - 1.0	1	5
	1.0 - 1.8	0.8	35		1.0 - 2.5	1.5	25
	1.8 - 3.0	1.2	25		2.5 - 3.5	1	20
F	0 - 1	1	10	Q	0 - 1.5	1.5	3
	1.0 - 1.3	0.3	30		1.5 - 2.5	1	20
	1.3 - 2.5	1.2	20		2.5 - 3.5	1	15
	2.5 - 3.7	1.2	15				
G	0 - 1	1	7	R	0 - 1.0	1	6
	1.0 - 1.8	0.8	35		1.0 - 1.8	0.8	35
	1.8 - 3.0	1.2	20		1.8 - 3.2	1.4	10
H	0 - 1	1	8	S	0 - 1.0	1	8
	1.0 - 1.40	0.4	35		1.0 - 3.0	2	25
	1.4 - 2.5	1.1	25		3.0 - 4.0	1	15
	2.5 - 3.5	1	10				
I	0 - 1.0	1	8	T	0 - 1.0	1	5
	1.0 - 2.0	1	25		1.0 - 2.5	1.5	25
	2.0 - 3.0	1	20		2.5 - 3.5	1	20
J	0 - 1.0	1	6	U	0 - 1.0	1	8
	1.0 - 1.8	0.8	30		1.0 - 2.0	1	30
	1.8 - 2.5	0.7	20		2.0 - 3.0	1	25
	2.5 - 3.2	0.7	15		3.0 - 4.0	1	10

Table - 1 Portable X-Ray Fluorescence (XRF) analyzer Results

## Agam Geology

Agam Tenement is part of Padang, Western Sumatra Geology Map (1:250.000 scale) the Iron Sand observed at the test pit holes has sharp contact with a minimal overburden transported material of oxidized fine sand with A & B Soil profiles. The oxidized sand contains minor Goethite and Haematite, below 4m some holes have encountered few aquifers. (Refer to photos below).



**Photo - 1**

Test Pit of Holes E, F & G revealed 10% - 35% Iron.  
Notice the stratified Iron Sand sharp contacts.

## Agam Mineralogy

Agam Iron Sand formed as a final product of chemical and physical weathering processes of Andesitic / Basaltic origin rocks, in addition to the volcanic activity that produced significant amounts of Hornblendes.

Beside the moderate to high Fe<sub>2</sub>O<sub>3</sub> Iron Sands concentrations, minor Titanium Oxide TiO<sub>2</sub> was observed and measured up to 8% by the XRF portable analyzer.

## Inferred Resources Calculation

Magnetic separation process is done by increment method result from this increment is used to determine the Magnetic Degree value (MD).

The Magnetic Degree value (MD) is the result of heavy concentrate measurement divide by the initial weight multiply by 100% as shown in the formula as below:

$$MD = \frac{\text{Concentrate weight}}{\text{Initial weight}} \times 100\%$$

Iron sand deposit that included in the resources calculation is the total of calculated resources by adding each of drilled hole resources, whereas concentrate resources are calculated using the following formula:

$$C = (L \times T) \times MD \times SG$$

**C** = Resources in tones.

**L** = Drilled area in m<sup>2</sup>

**T** = Thickness in meter.

**MD** = Magnetic Degree in %

**SG** = Specific Gravity (weight).

**Therefore, Inferred Resource Calculation for Agam Iron Sand tenement:**

$$L = 6.000.000\text{m}^2$$

$$T = 3\text{m}$$

$$MD = 18\% \text{ (average)}$$

$$SG = 3$$

$$C = (6.000.000 \times 3) \times 18\% \times 3$$

**The Inferred Resource Calculation (C) = 9.720.000 Metric Tones.**

## Recommendations

Agam Iron Sand project proved to be economically viable. However, it needs further drilling to identify the limits of mineralization zones. The announced 8000m Rotary Air Blast (RAB) drilling program has to be implemented within the next few months to enhance mining opportunity at the foreseeable future.

An accurate sampling and assaying program must be parallel to the RAB drilling program, an accredited laboratory to be assigned for this task.

The RAB program will be designed as shallow vertical holes between 8 -15m in depth, with standard spacing of 25m in accordance with the surface drilled program.

Titanium Oxide  $TiO_2$  may be considered as a by-product to increase the profitability of Agam Project.


Coziron Consultant Geologist will be visiting Agam Site regularly for the RAB program implementation and supervising the drilling and sampling activities.

## Conclusion

From this preliminary drilling program, the prospect of Iron Sand at Agam Tenement , of the 20 drilled test pits holes, 4 holes (A - D) contain MD value of 2 - 8%, and the remaining 16 test pit holes (E - U) has MD value of 10 - >25%.

The Inferred Resource Calculation for **Fe** value for the 600 hectares area of Agam tenement is **9.720.000 Metric Ton**.

Yours Faithfully,



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**Bakr Khudeira**  
**Geologist**

The contents of this report that relate to geology and historical exploration are based on information compiled by Mr. Bakr Khudeira, who is a Professional Geologist and Member of the Australian Institute of Mining and Metallurgy (AusIMM). He has sufficient experience relevant to the style of mineralization and types of deposit under consideration and to the activity being undertaken to qualify as a "Competent Person" as defined in the 2004 Edition of the Australasian Code for Reporting Results, Mineral Resources and Ore Reserves. Mr. Khudeira consents to the inclusion of this report of the matters compiled by him in the form and context in which they appear.