

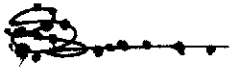
The target is the system to break down the highly alkaline materials in alumina red mud tailings using native extremophile microbes

The remediation of red mud has become a major problem globally and there is yet to be an effective solution. “Worldwide, there are about five billion tonnes of red mud in storage facilities and dams, and this increases by 125 million tonnes or more each year,” explains SMI’s Longbin Huang. “Such red mud deposits contain large amounts of caustic soda and alkaline minerals that aren’t easily dissolved or washed away, resulting in extremely alkaline and salty conditions that are difficult for normal living soil microorganisms and plants to overcome.” Huang’s breakthrough was to develop a ‘bioweathering’ approach to break down these alkaline materials. Working with industry partners Rio Tinto and Queensland Alumina Limited, he turned to one of the only forms of life found in red mud – naturally occurring extremophile microbes that thrive in highly alkaline environments.



Mc.
2022. 02. 01.
20: 03.
Home
T.
H: self
D: wave
POA: -
POUP: P. F.
SA: D. F.

383639



A: Curving across
Loopy up
wavy down
loopy aside
Stretching down
loopy aside
Across
Soft, hard, hard,
hard

B: Natural
liquid.
Biological
band

(P2.)

(Liquid)

White

Shiny

Goopy

Gum - like

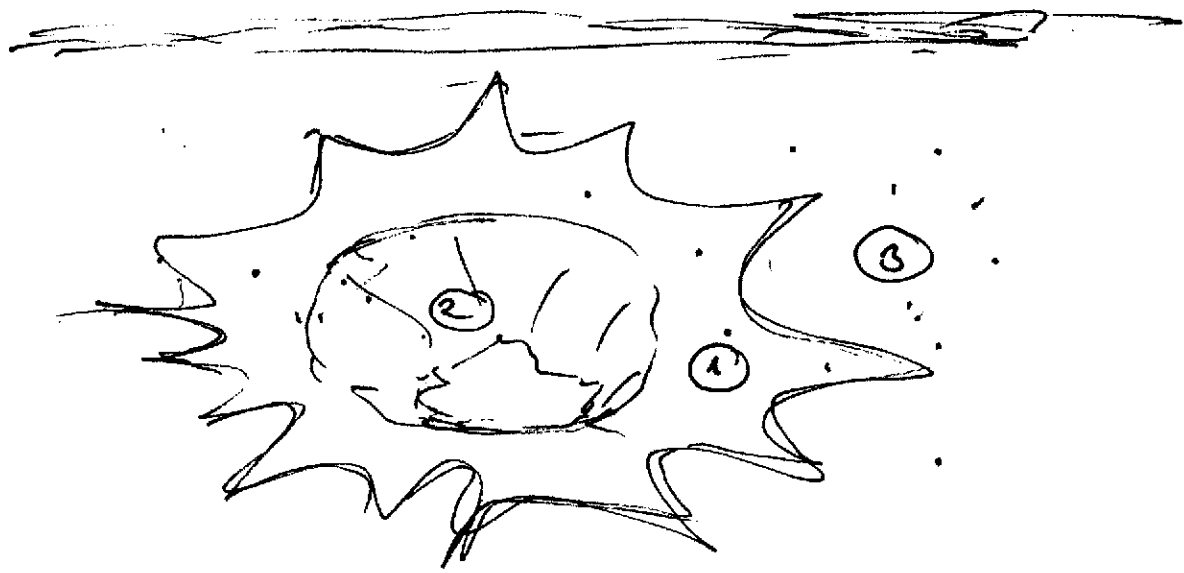
Stretched out

Spread out

A: I just see
a big sand
formation in
hat of me

E: supposed

(P3)



①
 White
 Googly
 Sketched out
 Covering
 Down
 Sketched across
 Splashed out
 Orange

SC: impact site

②
 Crossed
 Round
 Eo my
 Soley
 Followed out
 Dug out
 Deep

(rs.)

3

3

Wet
 Grey
 Rody
 Swook
 Cured
 Pebbly
 Titled
 Pebbly



Down

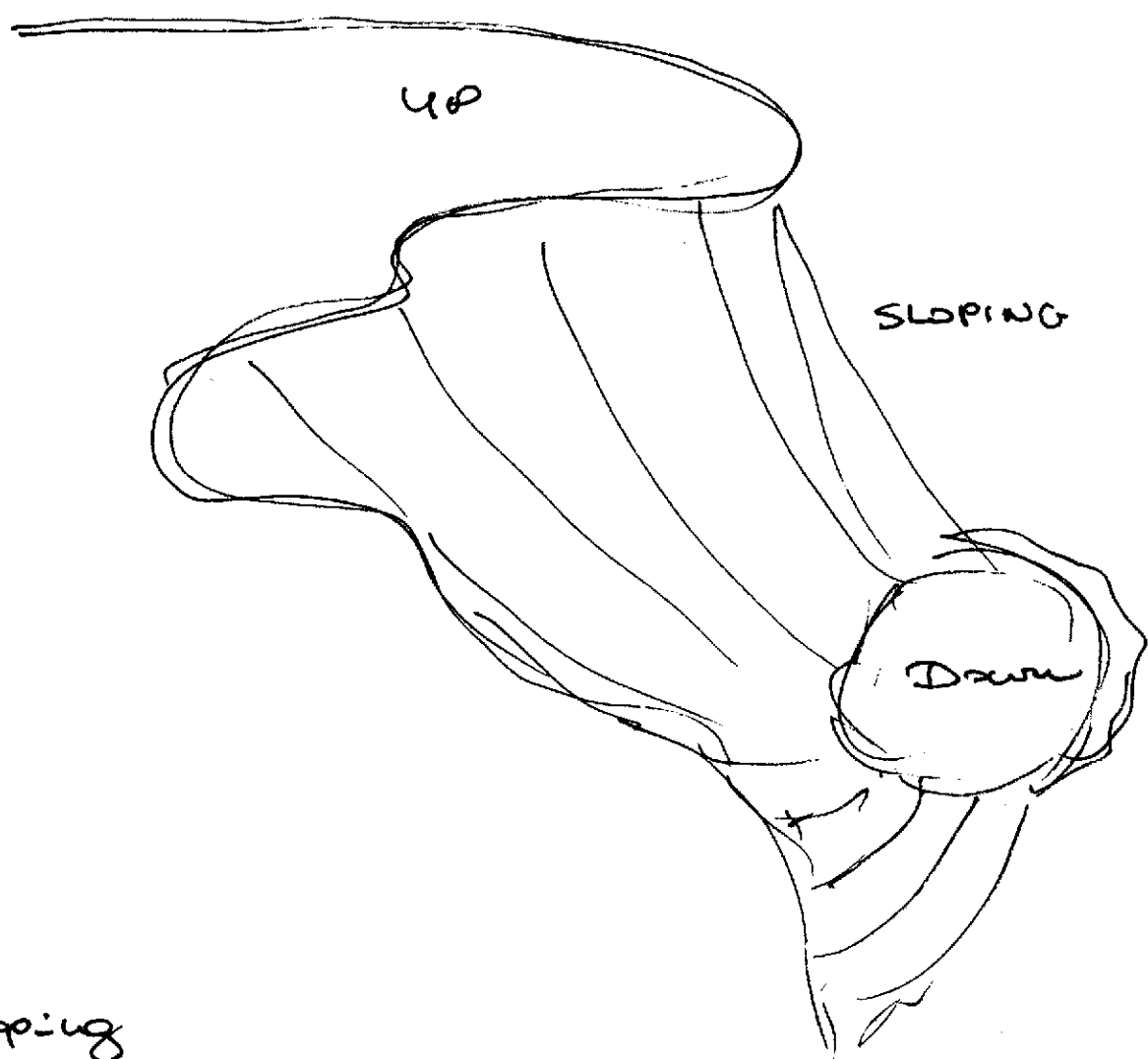
Grey
 Rody
 Swook
 Rounded rectangulars
 Slavy

Sci. Cold
 stones

Titled

nos a manmade quality

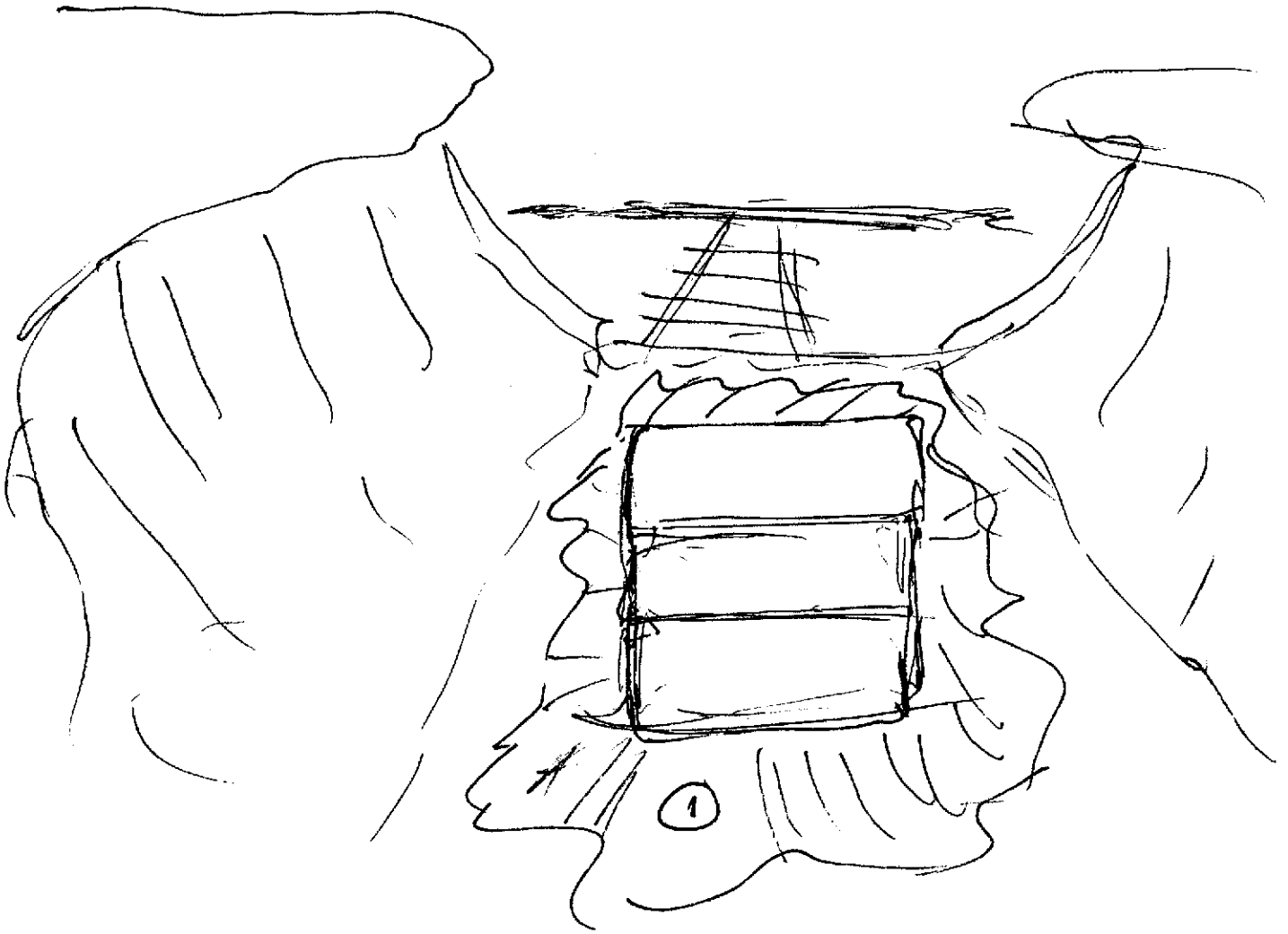
(P3.)



- sloping
- Downward
- Crossed
- Rounded
- Followed out
- Below
- Orange
- Tenacotta
- Early
- rainy
- Wet
- Goosey
- Shifty

(P.S.)

5



①
white
liquid
gooey
weird
toxic
...

(PA.)
(Toxic)

P2	D	AI	SI	T	C	SC	CS
					c toxic)		

fluid
 sketched out
 sh: dry
 precipitated
 gum - wire
 gassy

liquid
 rubber
 liquid
 plastic

Hollow
 Rounded rectangular
 Diamond
 sloping
 Spilled out
 Sketched out.

Repulsed



hand
 cast
 hole
 liquid
 ugly
 excretion
 byproduct

EOS 20:25

3