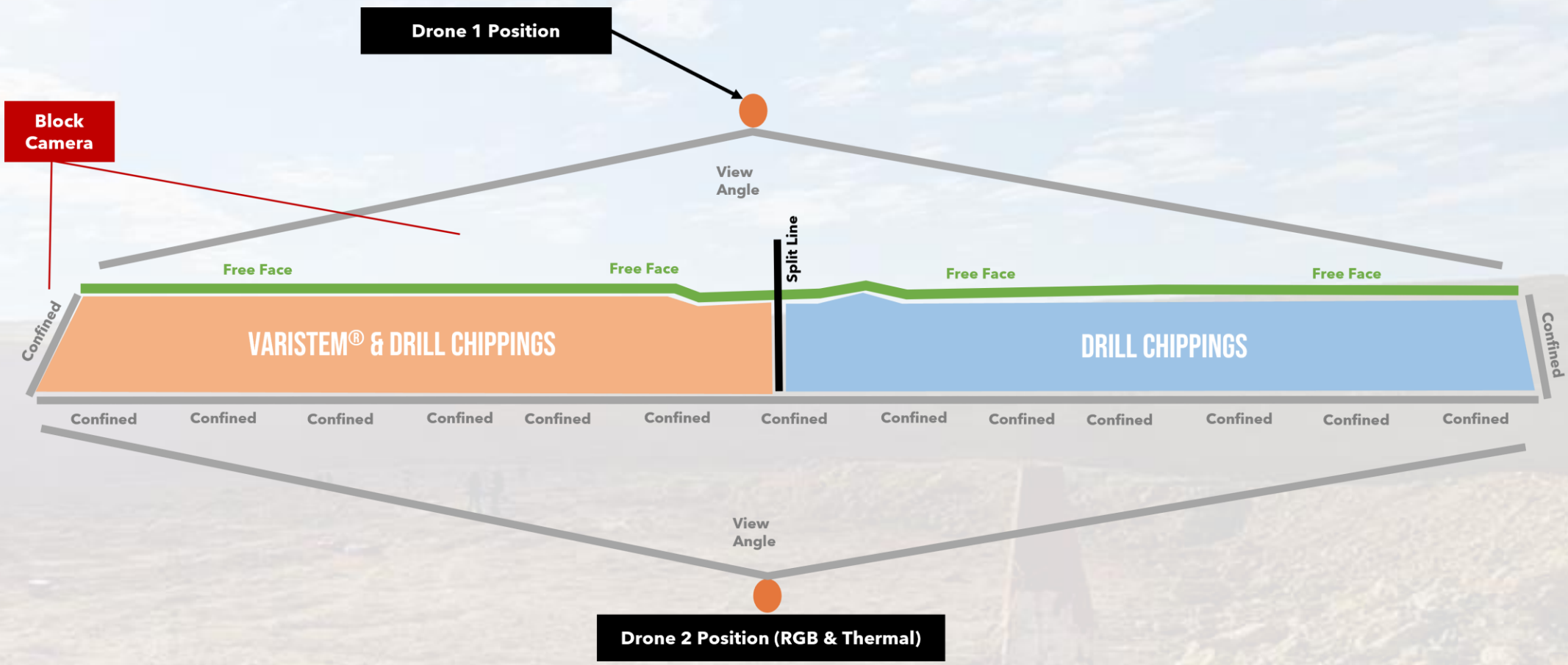
HOW A MINOR CHANGE TO BLAST DESIGN CAN RESULT IN AN INCREASE IN LOADING RATES OF +8%

A CASE STUDY FROM A SOUTH AFRICAN METALLIFEROUS MINE

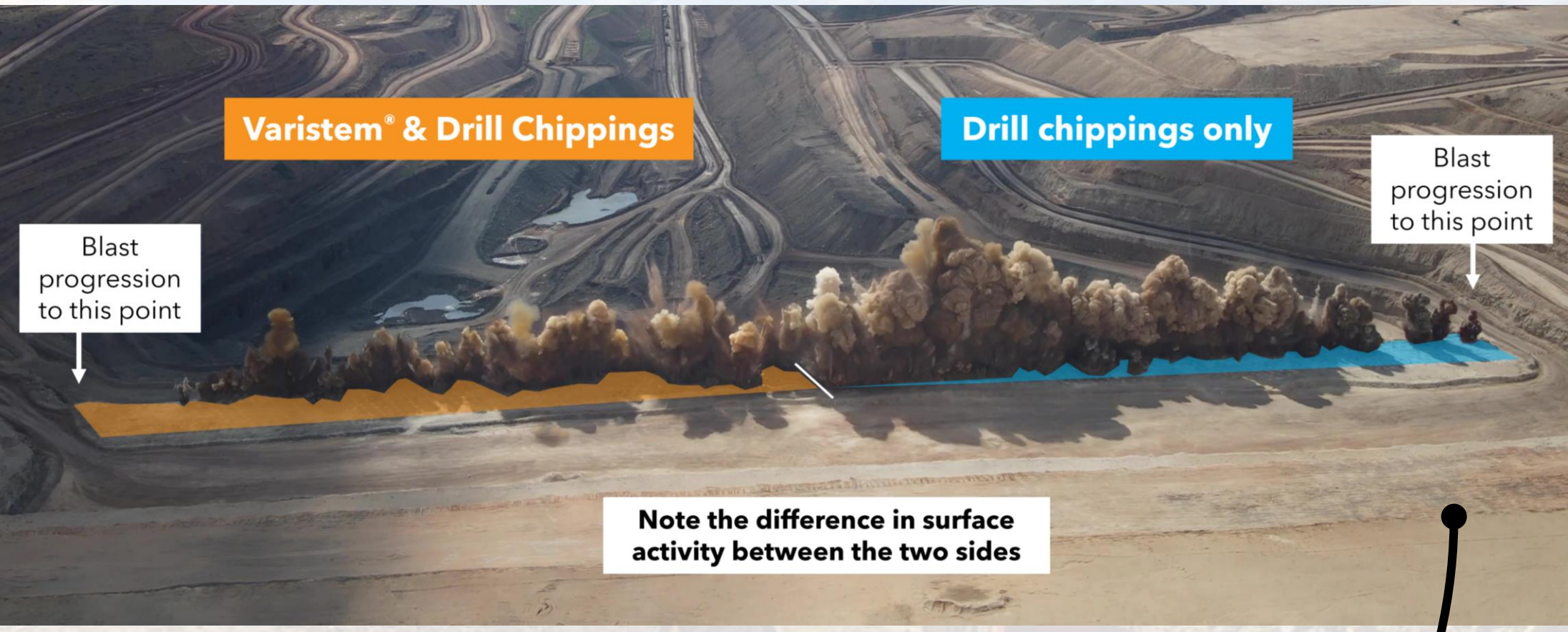
WE SET UP A TRIAL BLAST AT A METALLIFEROUS MINE IN SOUTH AFRICA, WHERE THE INTENT WAS TO DEMONSTRATE THE IMPACT OF IMPROVED ENERGY RETENTION

A LARGE WASTE (CALCLRETE) BLOCK WAS SELECTED, AND DIVIDED INTO TWO



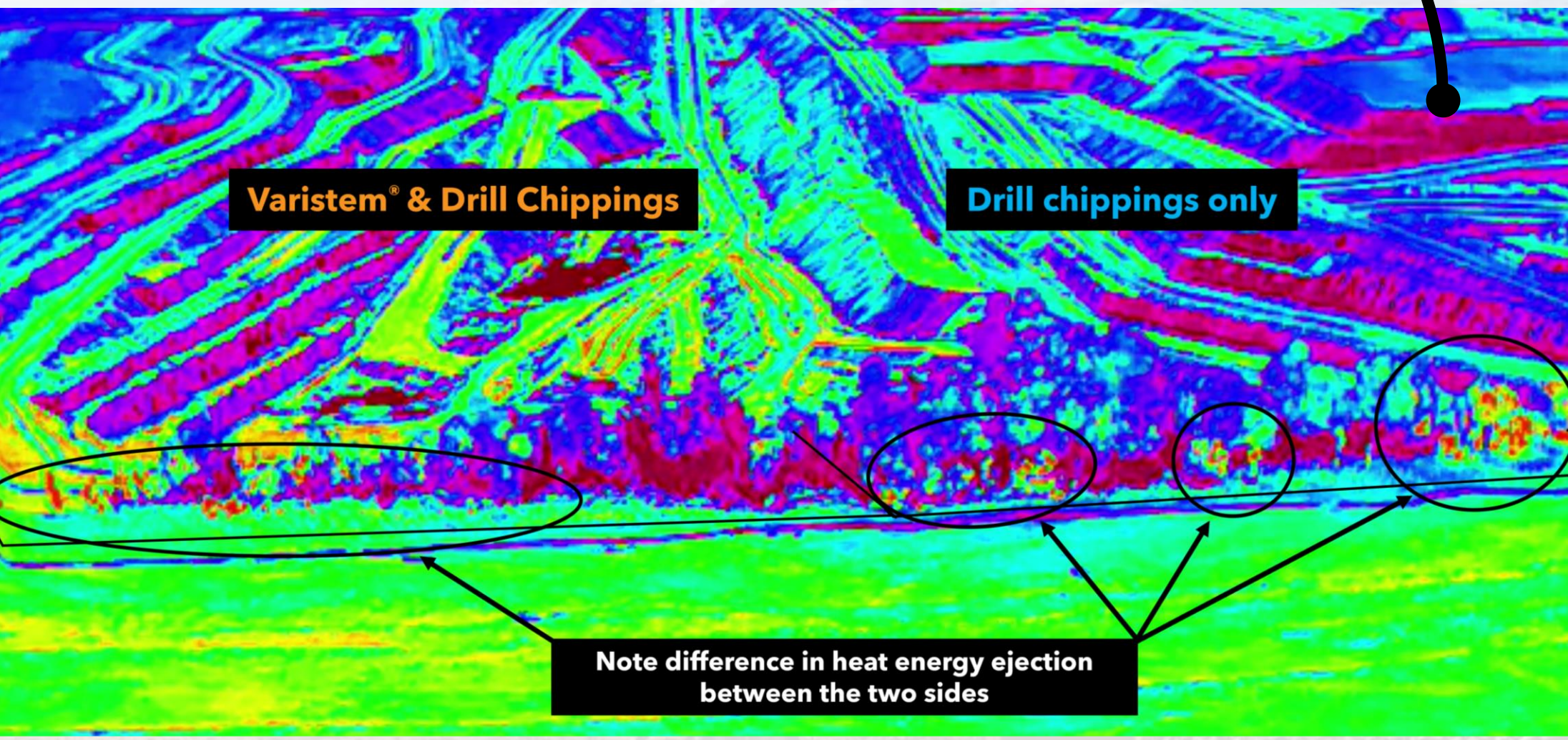
VARISTEM® STEMMING PLUGS + DRILL CHIPPINGS ON ONE SIDE, AND DRILL CHIPPINGS ONLY ON THE OTHER SIDE

THERE WAS A NOTABLE VISUAL DIFFERENCE IN ENERGY RETENTION



SEEN ON THE NORMAL DRONE FOOTAGE

AND THE THERMAL DRONE FOOTAGE



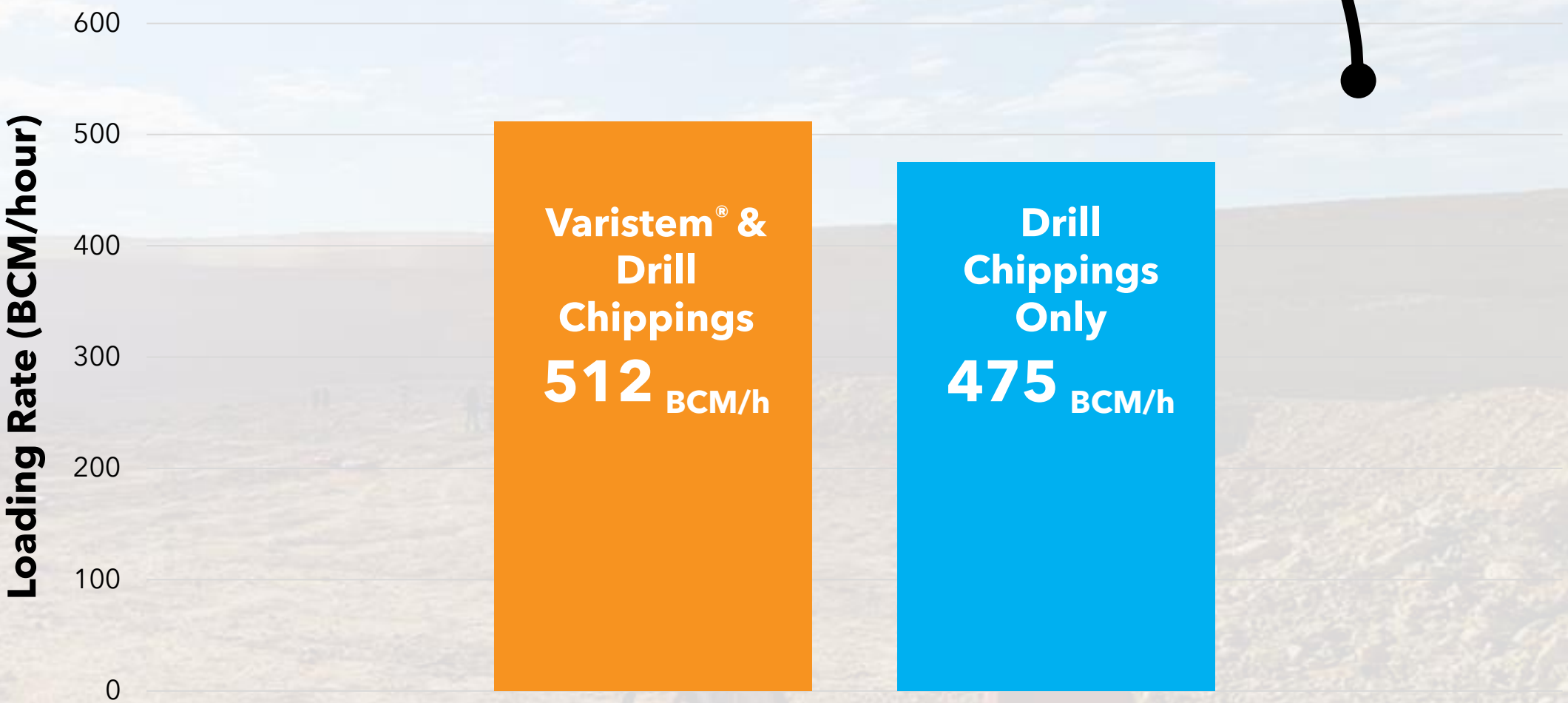
THE VISUALS SHOWED THAT MORE ENERGY WAS BEING CONTAINED

AND THE FRAGMENTATION RESULTS CONFIRMED IT

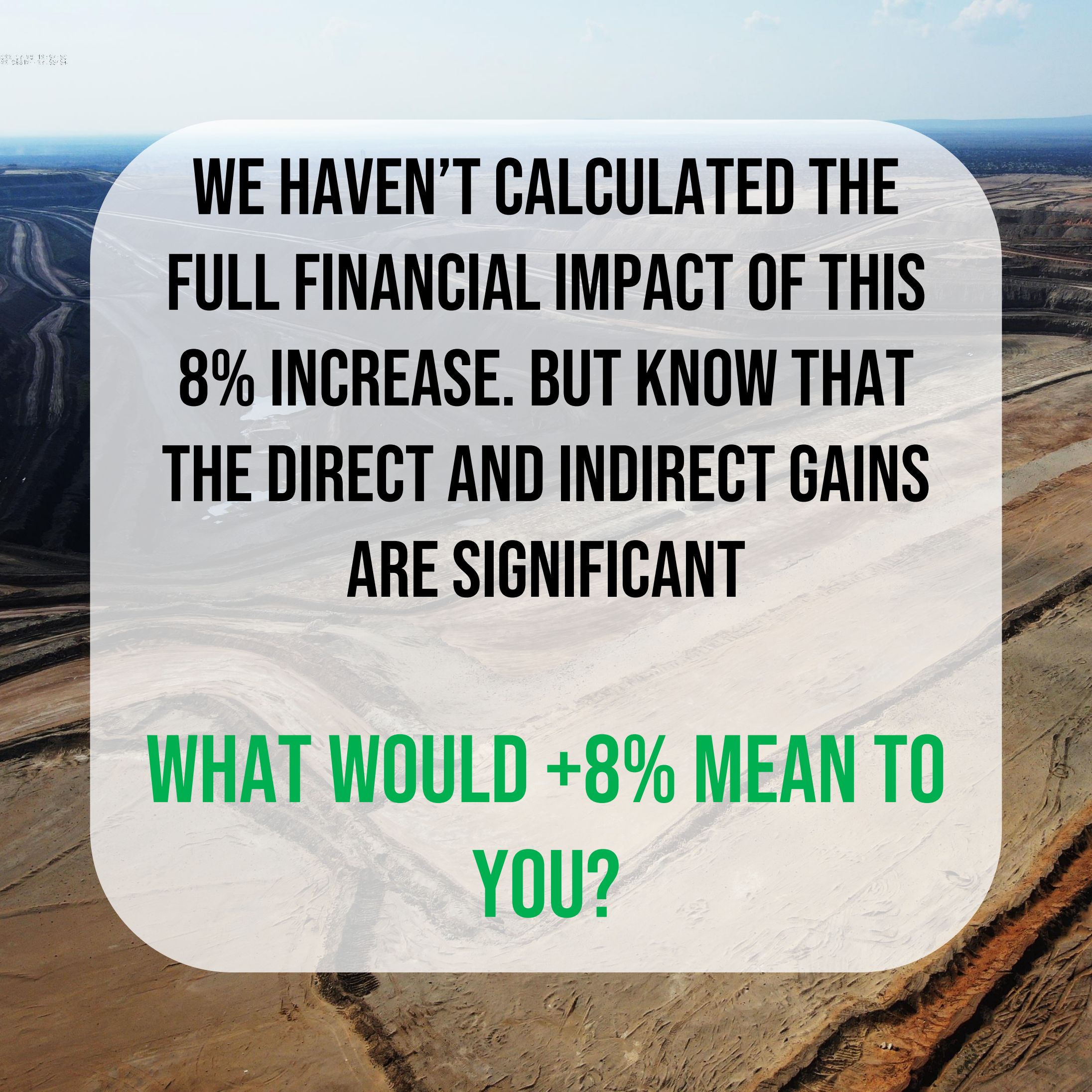
	Varistem® & Drill Chippings	Drill chippings only
P50	4.91cm	7.1cm (**44% larger**)
P80	13.41cm	24.02cm (**79% larger**)
Topsize	27.76cm	84.79cm (**205% larger**)

THE WASTE MATERIAL WAS BLASTED SIGNIFICANTLY FINER

AND THIS IN TURN SHOWED IN THE LOADING RATES



RESULTING IN AN 8% INCREASE IN LOADING RATES


WE HAVEN'T CALCULATED THE FULL FINANCIAL IMPACT OF THIS 8% INCREASE. BUT KNOW THAT THE DIRECT AND INDIRECT GAINS ARE SIGNIFICANT
WHAT WOULD +8% MEAN TO YOU?