

The same volumes as Vulcan, PointStudio and 12d, from the same data.

A full month-end of five volumes, reconciled to within 0.005% on every production volume, in about ninety seconds.

<0.005%

Net difference vs the package on every production volume

90 sec

The whole month-end in EOMeasy.
The same reconciliation by hand in the packages: at least an hour.

0 uploaded

Every calculation ran locally; no data left the machine

Vulcan and PointStudio were run on the same data and produced identical figures, so throughout this document "the package" is one number, and EOMeasy is measured against it.

Every surface in this study is public-domain, sourced from open elevation data such as elevation.fsd.org.au, or owned outright. Nothing here derives from a client's survey, and no survey data is published with this document.

OVERBURDEN STOCKPILE • MONTHLY CUT

EOMeasy	1,555,283 m ³
Vulcan	1,555,284 m ³
PointStudio	1,555,284 m ³

Δ 0.0001%

RECONCILES

What was tested

A single August 2026 month-end, five volumes chosen to cover the full range of inputs a surveyor actually feeds a reconciliation. The same neutral surfaces and boundaries were fed to both tools; native triangulation settings were held constant; EOMeasy computed every volume on a 0.5 m grid. The only variable is the tool.

Volume	Input	Boundary	What it exercises
Water	Pre-flood surface and water RL, OBJ	Waterline, DXF	Impounded volume to a nominal water level
Stockpile	Scan and base, OBJ	Boundary, DXF	Dense scan against a base surface
Quarry	2009 and 2014 surfaces, OBJ	Complex interface, DXF	Open-cut extraction, irregular boundary
Topsoil strip	Two tins, LandXML from 12d	Strip outline	A civil package's tin, a 100 mm job
Simple	Two pickups, CSV points	Boundary, DXF	Deliberately sparse survey points

Results: net movement

Volume	Package net (m³)	EOMeas net (m³)	Difference
Water	1,350,724.227	1,350,764.704	0.0030%
Stockpile	-1,546,770.555	-1,546,768.966	0.0001%
Quarry	-791,451.777	-791,486.651	0.0044%
Topsoil strip	-2,725.315	-2,725.358	0.0016%
Simple	47.740	47.918	0.37%

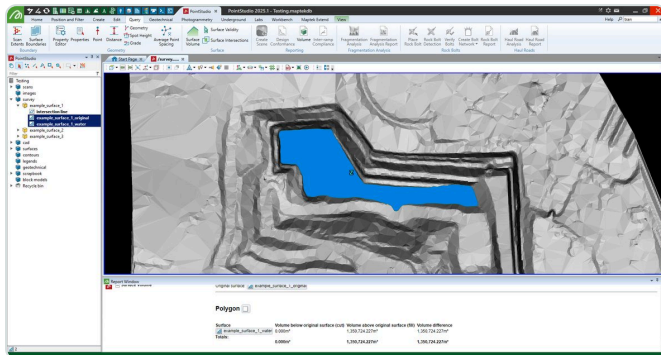
On a million cubic metre movement, EOMeas and a Vulcan seat agree to within a wheelbarrow.

Results: cut and fill in full

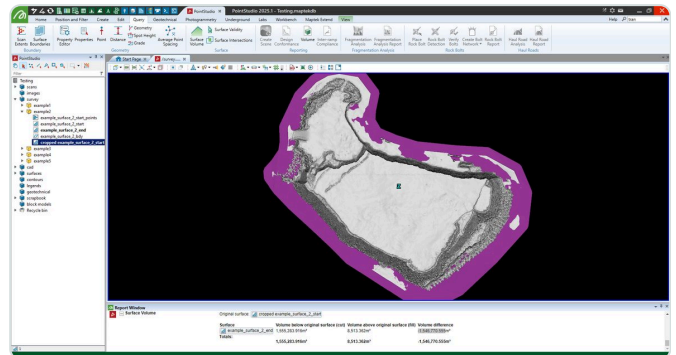
Volume	Package cut / fill (m³)	EOMeas cut / fill (m³)
Water	0.000 / 1,350,724.227	0.000 / 1,350,764.704
Stockpile	1,555,283.916 / 8,513.362	1,555,282.643 / 8,513.677
Quarry	791,802.401 / 350.624	791,836.872 / 350.221
Topsoil strip	2,725.315 / 0.000	2,725.358 / 0.000
Simple	97.552 / 145.292	97.290 / 145.208

The proof, from the packages themselves

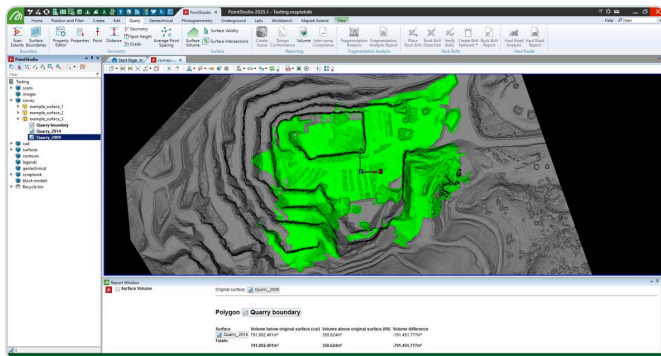
These are the native figures, on screen, in the packages EOMeas is measured against. The totals in each report window are the numbers in the tables above.



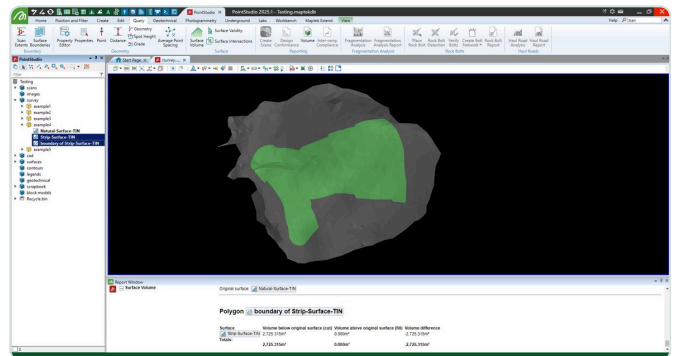
PointStudio, Water. 1,350,724.227 m³ impounded above ground to the water level. EOMeas: 1,350,764.704 (0.0030%).



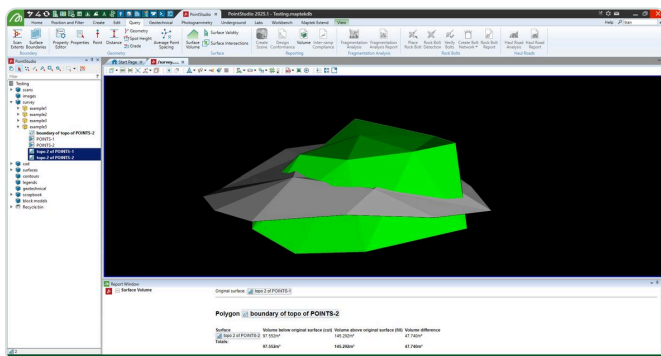
PointStudio, Stockpile. Cut 1,555,283.916, fill 8,513.362. EOMeas: 1,555,282.643 / 8,513.677 (0.0001% / 0.0037%).



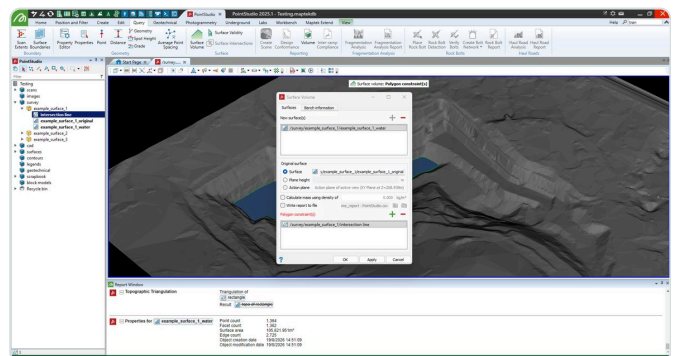
PointStudio, Quarry. Cut 791,802.401, fill 350.624. EOMeas: 791,836.872 / 350.221 (0.0044% on cut).



PointStudio, Topsoil strip. Cut 2,725.315 across roughly 27,000 m². EOMeas: 2,725.358 (0.0016%).

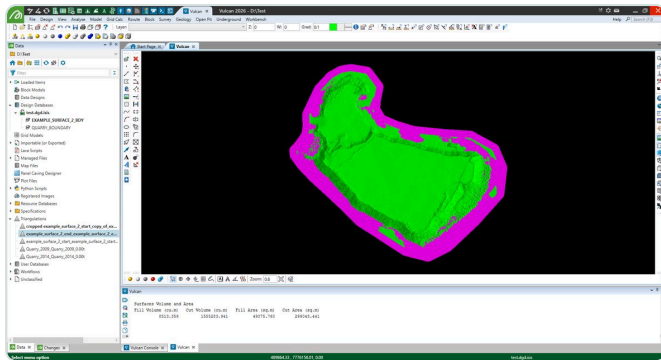


PointStudio, Simple, with boundary. Cut 97.552, fill 145.292. EOMeas: 97.290 / 145.208 (0.06% on fill).

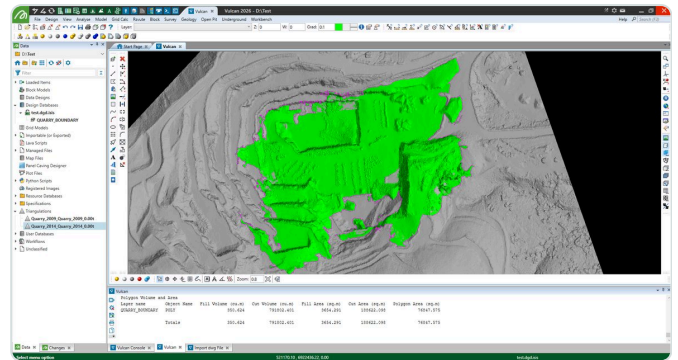


Method. The surface-volume setup: same boundary, same triangulation settings held across volumes.

Vulcan, run on the same data, returns the same figures



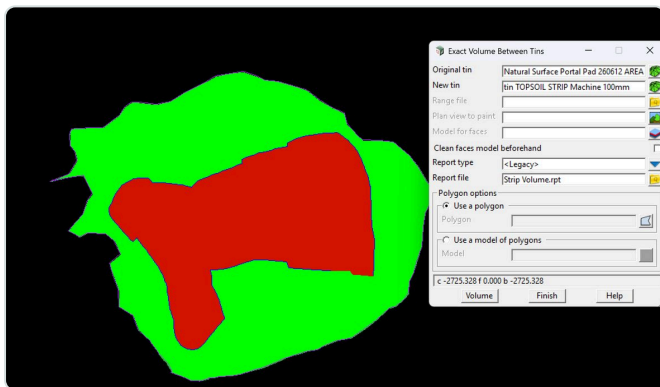
Vulcan, Stockpile. Cut 1,555,283.916, fill 8,513.362. Identical to PointStudio.



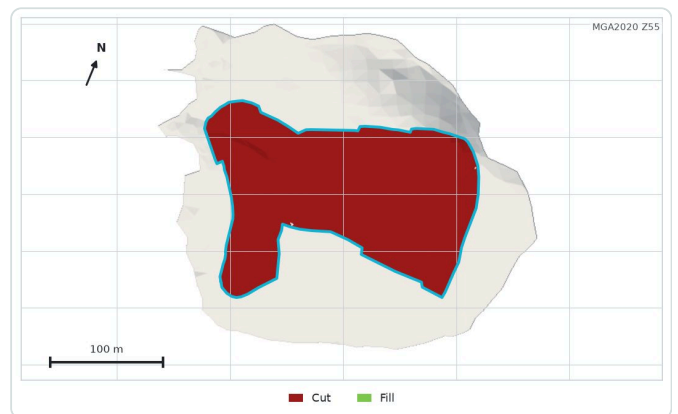
Vulcan, Quarry. Cut 791,802.401. Identical to PointStudio.

The topsoil strip carries a second vendor with it

The topsoil surfaces are 12d Model LandXML tins, read straight into EOMeasy. Measured against PointStudio the strip reconciles to 0.0016%; measured against 12d's own Exact Volume Between Tins figure of 2,725.328, it reconciles to 0.0011%. The same 100 mm strip agrees with two vendors at once, on a civil package's own export, with no 12d seat.



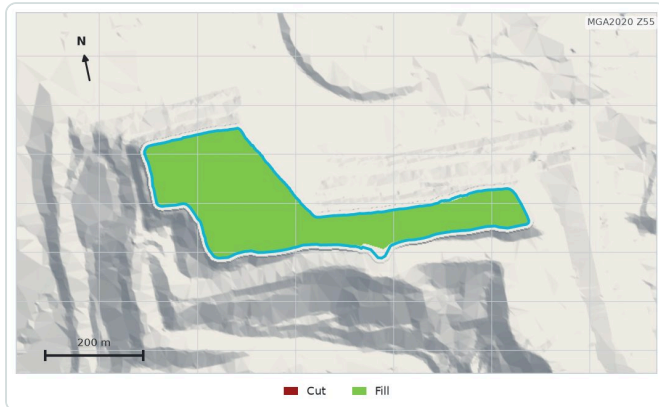
12d Model, Exact Volume Between Tins. Natural surface to machine strip tin, no plan polygon: cut 2,725.328, fill 0.000. EOMeasy, from the same LandXML tins: 2,725.358 (0.0011%). The red area is the strip; the green is the wider natural surface it sits inside.



EOMeasy, the same strip. 2,725 m³ of cut across roughly 27,000 m². A job a tenth of a metre deep, drawn and measured from a civil package's export with no 12d seat.

The same month-end, in EOMeasY

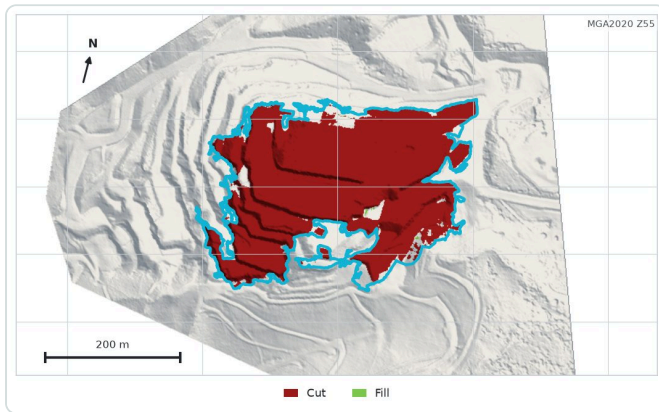
Each volume as EOMeasY renders it: a plan-view context view with cut in dark red and fill in light green over the surveyed ground. The render is illustrative; the audit-grade record is the tables and the CSV.



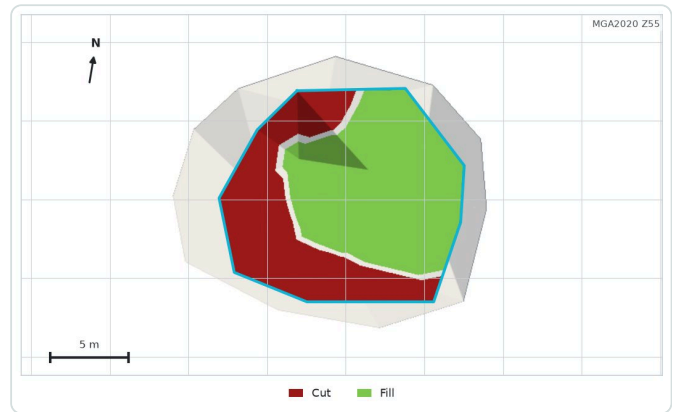
Water (OBJ and water RL). 1,350,765 m³ impounded.



Stockpile (OBJ). Net -1,546,769 m³.



Quarry (OBJ, 2009 to 2014). Net -791,487 m³.



Simple (CSV points, bounded). Net 47.9 m³.

How it computes

EOMeasY is not approximating the package and hoping it is close. It drapes both surfaces on a fine grid across the boundary, takes the height difference at every cell, weights the boundary-straddling cells by their exact clipped area, and integrates. For a point cloud it triangulates to a surface first, the way Vulcan and PointStudio do, then applies the same boundary weighting. On this month-end, that produced the package's own numbers, on an ordinary Windows machine, with no CAD seat and nothing leaving the site. And where the input was too sparse to be trustworthy, the Simple case with no boundary, it warned rather than returning a confident wrong number.

EOMeasY has also been validated in earlier rounds against pre and post interburden blast surfaces, pre and post dragline excavations, and coal roof and floor scans, with the same sub-0.1% agreement. Those surfaces are not shown here.