

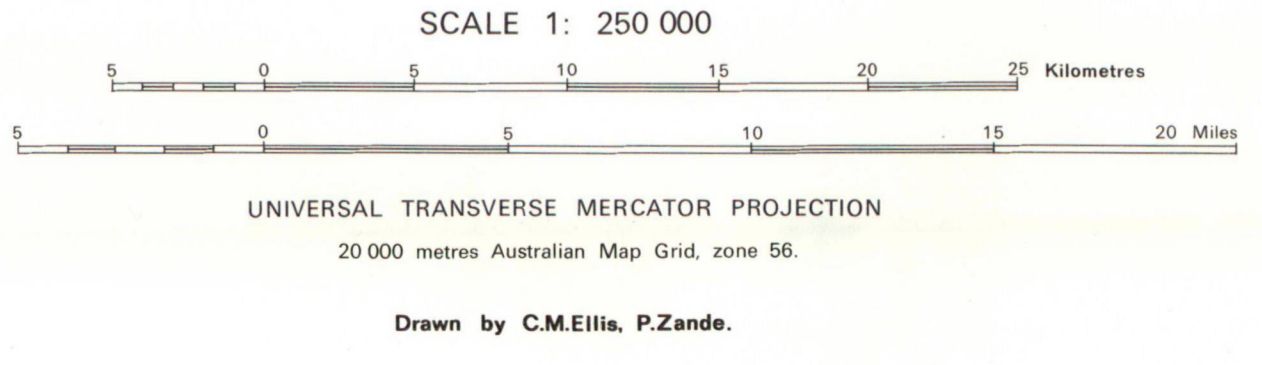
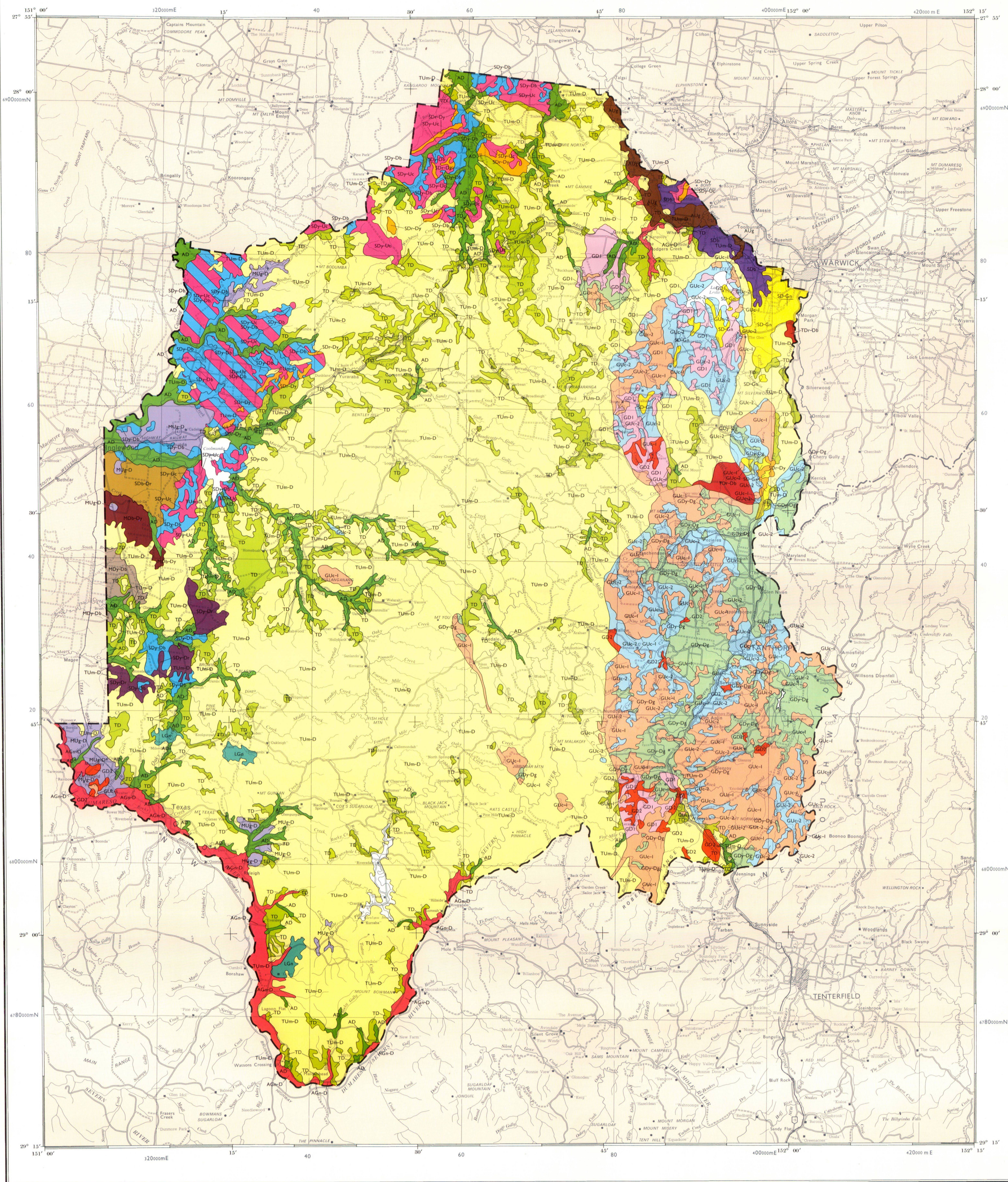


REFERENCE

| MAPPING UNIT                         | DOMINANT SOILS (> 70% OF UNIT)   | MINOR SOILS (< 30% OF UNIT)  |
|--------------------------------------|--|--|
| <b>SOILS DEVELOPED ON ALLUVIUM</b>   |  |  |
| AUg                                  | Dark cracking clays (black earths) Ug 5.17   | Dark loams (alluvial soils) Um 5.52  |
| AGe-D                                | Dark-brown, structured earths (non-calcic brown soils) Dr 2.41, Dr 3.36, Gn 3.42   | Dark, hardsetting clays Uf 6.31, Uf 6.32, Uf 6.33  |
| AD                                   | Dark-brown, texture contrast soils (solodics, solodized solonetz) Db 1.42, Db 1.43, Dy 2.42, Dd 1.43, Dd 3.23                              | Red, acid, texture contrast soils (soloths) Dr 2.41, Dr 4.41, Gn 3.19, Gn 3.55, Gn 3.74, Sandy-loams (alluvial soils) Ua 1.25, Ua 4.22 |
|                                      | Yellowish-brown and brown, neutral to alkaline, texture contrast soils (solodics, solodized solonetz) Dy, Db                               | Brown, grey and dark, cracking clays (brown and grey clays) Ug 5.1, Ug 5.2   |
| <b>SOILS DEVELOPED ON GRANITE</b>    |  |  |
| GUc-1                                | Gritty, siliceous sands amongst rock outcrops (siliceous sands) Uc 2.12, Uc 2.21, Uc 2.34  | Shallow, gritty sands (lithosols) Uc 2.12  |
| GUc-2                                | Gritty, siliceous sands (siliceous sands) Uc 2.12, Uc 2.21   | Yellow, acid, texture contrast soils (yellow podzolics) Dy 4.41, Dy 5.41   |
| GDy-Dg                               | Acid, yellow and grey, mottled, texture contrast soils (yellow podzolics, gleyed podzolics) Dy 3.41, Dy 5.41, Dg 3.41, Dg 4.41             | Gritty siliceous sands (siliceous sands) Uc 2.12, Uc 2.21  |
| GD1                                  | Acid to neutral, texture contrast soils (soloths, solodics, solodized solonetz) Dr, Db, Dg   | Neutral to alkaline, texture contrast soils (solodics, solodized solonetz) Dy 3.42   |
| GD2                                  | Alkaline, texture contrast soils (solodics, solodized solonetz) Dr, Db, Dg   | Bleached, yellow earths Gn 3.64, Gn 3.04, Gn 2.74  |
|                                      |  | Alkaline, texture contrast soils (solodics, solodized solonetz) Dy 5.43  |
|                                      |  | Acid to neutral, texture contrast soils (soloths, solodics, solodized solonetz) Dy 3.41, Dy 2.42, Dy 3.43                              |
| <b>SOILS DEVELOPED ON LIMESTONE</b>  |  |  |
| LGN                                  | Red-brown, structured earths (terra rossa) Gc 3.13, Gc 2.22  | Dark-red, hardsetting, calcareous clay (rendzina) Uf 6.31  |
| <b>SOILS DEVELOPED ON SANDSTONE</b>  |  |  |
| <b>Gravelly soils</b>                |  |  |
| SDy-Dy                               | Shallow, gravelly, acid, texture contrast soils (soloths) Dr 2.11, Dr 2.21, Dr 2.31  | Shallow, stony sands (lithosols) Uc 1.2  |
| SDy-Dr                               | Shallow, gravelly, acid, texture contrast soils (soloths) Dy 3.41, Dy 4.41, Dy 5.41  | Deep sands (siliceous sands) Uc 2.31   |
| SDb-Dr                               | Red-brown, alkaline, texture contrast soils (solodics, solodized solonetz) Dr 2.13, Dr 2.43, Db 1.42                                       | Neutral to alkaline, texture contrast soils (solodics, solodized solonetz) Dy 2.42, Dy 2.43  |
|                                      |  | Acid, texture contrast soils (soloths) Db 2.41   |
| <b>Less gravelly soils</b>           |  |  |
| SDy-Gn                               | Brown, acid, texture contrast soils (soloths, red podzolics, non-calcic brown soils) Dr 2.12, Dr 4.41, Db 2.42, Dy 2.41, Dy 5.41           | Neutral to alkaline, texture contrast soils (solodics, solodized solonetz) Dy 2.42, Dr 1.22  |
|                                      | Red, massive earths (red earths) Gn 2.11, Gn 2.12, Um 5.52   | Brown, hardsetting clays Uf 6.31   |
| SDb                                  | Brown, neutral to alkaline, texture contrast soils (red-brown earth-solodic intergrades) Db 2.33, Db 3.13, Dy 2.22, Dy 2.23                | Grey, brown and dark, cracking clays (grey and brown clays) Ug 5.1, Ug 5.2, Ug 5.3   |
| SDy-Uc                               | Yellow, acid, texture contrast soils (soloths) Dy 2.41, Dy 5.41  | Alkaline, texture contrast soils (solodics, solodized solonetz) Dy 4.42  |
|                                      | Deep, bleached, siliceous sands (siliceous sands) Uc 2.15, Uc 1.23, Uc 2.31, Uc 2.34   | Neutral to alkaline, texture contrast soils (solodics, solodized solonetz) Dy 4.42   |
|                                      |  | Earthy sands (earthy sands) Uc 5.2, Gn 2.34  |
|                                      |  | Red, acid, texture contrast soils (soloths) Dy 2.41  |
| SDy-Db                               | Yellow to brown, neutral to alkaline, texture contrast soils (solodics, solodized solonetz) Db 1.42, Db 1.43, Dy 2.41, Dy 3.43             | Acid, texture contrast soils (soloths) Dy 2.41   |
|                                      |  | Red, hardsetting clays Uf 6.31   |
| <b>SOILS DEVELOPED ON 'TRAPROCK'</b> |  |  |
| TUm-D                                | Shallow, gravelly, loams (lithosols) Um 2.12, K-Um 2.12, Um 2.21, Um 5.51  | Shallow to deep, gravelly earths. Gn 2, Gn 3   |
| TD                                   | Shallow, gravelly, texture contrast soils (soloths, solodized solonetz) Dr, Dy, Db   | Shallow, gravelly clays. Uf 6.31   |
| TD-Db                                | Shallow, gravelly, red-brown, acid to neutral, texture contrast soils (non-calcic brown soils, soloths) Dr 2.11, Dr 2.12, Db 2.12, Dr 2.41 | Deep, gravelly, texture contrast soils (soloths, solodics, solodized solonetz) Dy, Db  |
|                                      |  | Alkaline, texture contrast soils (solodics, solodized solonetz) Dy, Db   |
|                                      |  | Shallow, gravelly loams (lithosols) Um   |
|                                      |  | Brown, structured earths (brown earths) Gn 3.21  |
| <b>SOILS OF MIXED ORIGIN</b>         |  |  |
| MUg-D                                | Grey and brown, cracking clays (grey and brown clays) Ug 5.13, Ug 5.24   | Red, cracking clays (red clays) Ug 5.3, Ug 5.4   |
|                                      | Alkaline, texture contrast soils (solodics, solodized solonetz) Dy 2.13, Dy 4.43, Dy 2.13, Dr 2.43   |  |
| MUc-Dy                               | Gravelly, brown and yellowish-brown, alkaline, texture contrast soils (solodics, solodized solonetz) Dd 1.42, Dy 2.42, Dy 2.43             | Acid, gravelly, texture contrast soils (soloths) Dy, Db  |
|                                      |  | Red, massive earths (red earths) Gn 2.11   |
| MDy-Db                               | Gravelly, brown and yellowish-brown, acid, texture contrast soils (soloths) Db 1.41, Dy 2.41, Dy 2.42                                      | Alkaline, texture contrast soils (solodics, solodized solonetz) Dy, Db   |
|                                      |  | Red, gravelly, acid, texture contrast soils (soloths) Dr 2.41  |

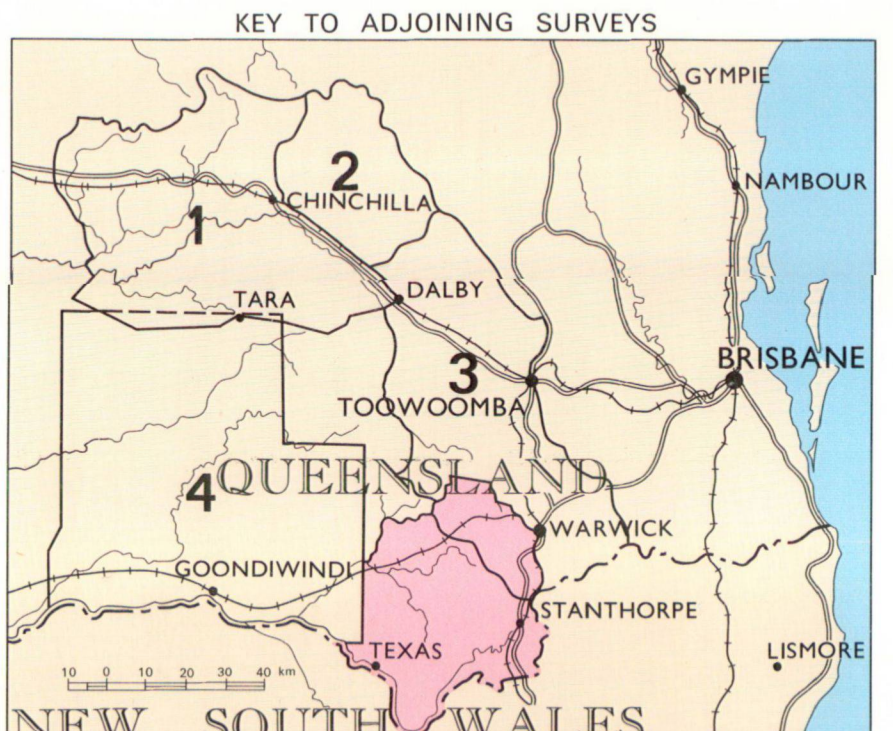
NOTES

'Bleached' denotes the presence of a whitish sub-surface (A<sub>2</sub> horizon).  
Colour, structure and pH terms used for soils with gradational texture profiles (earth) and soils with texture contrast profiles refer to clayey sub-soil characteristics.  
The terms in brackets refer to the approximate Australian Great Soil Group equivalents of the soil profile classes.



KEY TO 1: 250 000 AREAS

|           |             |         |             |
|-----------|-------------|---------|-------------|
| SURAT     | DALBY       | IPSWICH | BRISBANE    |
| ST GEORGE | GOONDIWINDI | WARWICK | TWEED HEADS |
| MOREE     | INVERELL    | GRAFTON | MACLEAN     |



1. Land Inventory and Technical Guide, Miles Area, Queensland, 1972.  
2. Land Inventory and Technical Guide, Jandowae Area, Queensland, 1972.  
3. Land Inventory and Technical Guide, Eastern Downs Area, Queensland, 1972.  
4. The Soils of the Ingelwood - Talwood - Tara - Glenmorgan Region, Queensland, Tech. Bull. No.5, Bureau of Investigation, 1957.

COMPILED BY: Soils survey, mapping and descriptions by B. Powell (Agricultural Chemistry Branch).  
PREPARED BY: Division of Land Utilisation, Queensland Department of Primary Industries.  
CARTOGRAPHIC BASE compiled by Drawing Branch, Department of Mines and Division of Land Utilisation, Department of Primary Industries, Queensland.  
PRINTED BY S.G. Reid, Government Printer, Brisbane, 1975.

DISCLAIMER: This is a scanned image and some detail may be illegible or lost. While every care is taken to ensure the accuracy of this product, the Department of Natural Resources and Mines makes no representation or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the product being inaccurate or incomplete in any way for any reason.