Supplemental Material for “Revised Wonoka isotopic anomaly in South Australia and Late Ediacaran mass extinction.”

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Fig. S1. Measured sections of palaeosols in the Bonney Sandstone, and Wonoka and Bunyeroo Formations, showing position and development of palaeosols, calcareousness, and Munsell hue. Scales of degree of development and calcareousness are from Retallack (1997).
Fig. S2. Field observations, interpreted soil horizons, grain size and mineral content by point counting, and molecular weathering ratios from XRF chemical analysis of Vulda and Arru pedotypes in upper Wonoka Formation in Brachina Gorge, and Inga, Muru and Yaldati pedotypes of the Bonney Sandstone in Brachina Gorge.
Fig. S3. Field observations, interpreted soil horizons, grain size and mineral content by point counting, and molecular weathering ratios from XRF chemical analysis of Vulda and Arru pedotypes in Bunyeroo Formation at Acraman impact breccia in Bunyeroo Gorge, and the Vidla pedotype of the Wonoka Formation atop palaeo-canyon breccia northeast of Umberatana Station, compared with graded beds of the Ulupa Siltstone northwest of Umberatana Station.
Fig. S4. Depth functions of elemental mass transfer with respect to an element assumed stable (Ti, following Brimhall et al. 1992) for Ediacaran palaeosols of South Australia.

Table S1. Calcic horizon metrics of Flinders Ranges palaeosols.

| Locality            | Formation                | Level (m) | Burial (km) | Age (Ma) | Pedotype | Bk depth (cm) | Bk thickness (cm) | Nodule size (cm) |
|---------------------|--------------------------|-----------|-------------|----------|-----------|---------------|-------------------|------------------|
| Ten Mile Creek      | Grindstone Range Sst.    | 5598.7    | 3.501       | 483.87   | Adla      | 29            | 10                | 2.0              |
| Ten Mile Creek      | Grindstone Range Sst.    | 5593.1    | 3.507       | 483.94   | Adla      | 23            | 8                 | 2.0              |
| Ten Mile Creek      | Grindstone Range Sst.    | 5592.8    | 3.507       | 483.94   | Adla      | 24            | 10                | 3.0              |
| Ten Mile Creek      | Grindstone Range Sst.    | 5584.9    | 3.515       | 484.04   | Adla      | 30            | 7                 | 1.2              |
| Ten Mile Creek      | Grindstone Range Sst.    | 5578.2    | 3.522       | 484.12   | Adla      | 29            | 10                | 0.9              |
| Ten Mile Creek      | Grindstone Range Sst.    | 5572.0    | 3.528       | 484.20   | Adla      | 24            | 6                 | 0.8              |
| Ten Mile Creek      | Grindstone Range Sst.    | 5568.4    | 3.532       | 484.24   | Adla      | 27            | 9                 | 2.0              |
| Balcoracana Creek   | Grindstone Range Sst.    | 5580.8    | 3.519       | 484.51   | Adla      | 31            | 15                | 3.0              |
| Balcoracana Creek   | Grindstone Range Sst.    | 5575.0    | 3.525       | 484.58   | Adla      | 25            | 8                 | 0.9              |
| Balcoracana Creek   | Grindstone Range Sst.    | 5571.4    | 3.529       | 484.62   | Adla      | 23            | 5                 | 0.7              |
| Balcoracana Creek   | Grindstone Range Sst.    | 5570.0    | 3.530       | 484.64   | Adla      | 36            | 15                | 0.8              |
| Balcoracana Creek   | Grindstone Range Sst.    | 5568.5    | 3.532       | 484.66   | Adla      | 33            | 12                | 1.2              |
| Balcoracana Creek   | Grindstone Range Sst.    | 5563.0    | 3.537       | 484.73   | Adla      | 25            | 6                 | 0.8              |
| Balcoracana Creek   | Grindstone Range Sst.    | 5560.4    | 3.540       | 484.76   | Adla      | 29            | 8                 | 1.1              |
| Balcoracana Creek   | Grindstone Range Sst.    | 5556.2    | 3.544       | 484.81   | Adla      | 36            | 11                | 0.8              |
| Balcoracana Creek   | Grindstone Range Sst.    | 5550.3    | 3.550       | 484.89   | Adla      | 33            | 12                | 1.0              |
| Ten Mile Creek      | Grindstone Range Sst.    | 5500.0    | 3.600       | 485.09   | Natala    | 52            | 13                | 1.0              |
| Balcoracana Creek   | Pantapinna Sandstone     | 5494.0    | 3.606       | 485.58   | Viparri   | 55            | 18                | 2.0              |
| Ten Mile Creek      | Pantapinna Sandstone     | 5303.0    | 3.797       | 487.53   | Adla      | 31            | 7                 | 4.0              |
| Ten Mile Creek      | Pantapinna Sandstone     | 5303.0    | 3.797       | 487.53   | Adla      | 29            | 8                 | 2.0              |
| Ten Mile Creek      | Pantapinna Sandstone     | 5302.0    | 3.798       | 487.55   | Adla      | 32            | 10                | 3.0              |
| Ten Mile Creek      | Pantapinna Sandstone     | 5042.1    | 4.058       | 490.77   | Adla      | 26            | 9                 | 0.8              |
| Ten Mile Creek      | Pantapinna Sandstone     | 5041.4    | 4.059       | 490.78   | Adla      | 25            | 8                 | 0.9              |
| Ten Mile Creek      | Pantapinna Sandstone     | 5040.4    | 4.060       | 490.79   | Adla      | 30            | 12                | 1.2              |
| Ten Mile Creek      | Pantapinna Sandstone     | 5034.5    | 4.065       | 490.86   | Adla      | 31            | 15                | 2.4              |
| Ten Mile Creek      | Pantapinna Sandstone     | 5033.6    | 4.066       | 490.87   | Adla      | 26            | 10                | 0.4              |
| Ten Mile Creek      | Pantapinna Sandstone     | 5030.3    | 4.070       | 490.91   | Adla      | 32            | 12                | 1.3              |
| Creek                                | Formation               | Depth (m) | Age (Ma) | Location | Coordinates | Fossils |
|--------------------------------------|-------------------------|-----------|----------|----------|-------------|---------|
| Ten Mile Creek                       | Pantapinna Sandstone    | 5027.5    | 4.073    | Adla     | 5075.5      | 24      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5024.0    | 4.076    | Adla     | 5075.5      | 32      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5022.0    | 4.078    | Adla     | 5075.5      | 31      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5021.1    | 4.079    | Adla     | 5075.5      | 26      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5020.5    | 4.080    | Adla     | 5075.5      | 25      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5019.4    | 4.081    | Adla     | 5075.5      | 30      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5016.8    | 4.083    | Adla     | 5075.5      | 36      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5013.3    | 4.087    | Adla     | 5075.5      | 27      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5012.9    | 4.087    | Adla     | 5075.5      | 26      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5012.2    | 4.088    | Adla     | 5075.5      | 32      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5008.9    | 4.091    | Adla     | 5075.5      | 29      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5008.0    | 4.092    | Adla     | 5075.5      | 27      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5007.0    | 4.093    | Adla     | 5075.5      | 24      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5005.6    | 4.094    | Adla     | 5075.5      | 30      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 5004.5    | 4.095    | Adla     | 5075.5      | 29      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4928.1    | 4.172    | Adla     | 5075.5      | 32      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4904.7    | 4.195    | Adla     | 5075.5      | 28      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4902.4    | 4.198    | Adla     | 5075.5      | 32      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4901.4    | 4.199    | Adla     | 5075.5      | 29      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4750.0    | 4.350    | Adla     | 5075.5      | 32      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4689.3    | 4.411    | Adla     | 5075.5      | 24      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4688.7    | 4.411    | Adla     | 5075.5      | 21      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4687.6    | 4.412    | Adla     | 5075.5      | 32      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4672.7    | 4.427    | Adla     | 5075.5      | 21      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4670.8    | 4.429    | Adla     | 5075.5      | 23      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4670.2    | 4.430    | Adla     | 5075.5      | 31      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4646.6    | 4.453    | Adla     | 5075.5      | 30      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4643.5    | 4.456    | Adla     | 5075.5      | 27      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4641.4    | 4.459    | Adla     | 5075.5      | 31      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4627.8    | 4.472    | Adla     | 5075.5      | 29      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4616.8    | 4.483    | Adla     | 5075.5      | 33      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4300.0    | 4.800    | Adla     | 5075.5      | 39      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4068.6    | 5.031    | Adla     | 4999.9      | 29      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4063.4    | 5.037    | Adla     | 4999.9      | 26      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4062.9    | 5.037    | Adla     | 4999.9      | 33      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4061.5    | 5.039    | Adla     | 4999.9      | 28      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4056.8    | 5.043    | Adla     | 4999.9      | 32      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4039.6    | 5.060    | Adla     | 4999.9      | 29      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4036.1    | 5.064    | Adla     | 4999.9      | 27      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4033.7    | 5.066    | Adla     | 4999.9      | 26      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4032.6    | 5.067    | Adla     | 4999.9      | 32      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4026.8    | 5.073    | Adla     | 4999.9      | 27      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4026.0    | 5.074    | Adla     | 4999.9      | 32      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4024.5    | 5.076    | Adla     | 4999.9      | 29      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4023.7    | 5.076    | Adla     | 4999.9      | 25      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4017.9    | 5.082    | Adla     | 4999.9      | 31      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4003.5    | 5.096    | Adla     | 4999.9      | 30      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 4001.2    | 5.099    | Natala   | 4999.9      | 52      |
| Ten Mile Creek                       | Pantapinna Sandstone    | 3895.0    | 5.205    | Warru    | 4999.9      | 37      |
| Balcoracana Creek                    | Pantapinna Sandstone    | 3908.4    | 5.192    | Natala   | 5052.5      | 54      |
| Location                  | Type                | Longitude | Latitude | Water Temperature | Temperature | Depth (cm) | Age (Ma) |
|---------------------------|---------------------|-----------|----------|------------------|-------------|------------|----------|
| Balcoracana Creek         | Balcoracana Form.   | 3889.6    | 5.210    | 505.48           | 24          | 10         | 0.8      |
| Balcoracana Creek         | Balcoracana Form.   | 3888.4    | 5.212    | 505.49           | 25          | 8          | 0.6      |
| Balcoracana Creek         | Balcoracana Form.   | 3883.9    | 5.216    | 505.55           | 29          | 11         | 0.4      |
| Balcoracana Creek         | Balcoracana Form.   | 3879.4    | 5.221    | 505.61           | 31          | 11         | 0.7      |
| Balcoracana Creek         | Balcoracana Form.   | 3876.2    | 5.224    | 505.65           | 24          | 9          | 0.6      |
| Balcoracana Creek         | Balcoracana Form.   | 3874.9    | 5.225    | 505.66           | 26          | 10         | 0.5      |
| Balcoracana Creek         | Balcoracana Form.   | 3869.0    | 5.231    | 505.73           | 32          | 15         | 2.0      |
| Balcoracana Creek         | Balcoracana Form.   | 3845.6    | 5.254    | 506.02           | 51          | 32         | 1.1      |
| Balcoracana Creek         | Balcoracana Form.   | 3844.0    | 5.256    | 506.04           | 33          | 15         | 0.9      |
| Balcoracana Creek         | Balcoracana Form.   | 3754.7    | 5.345    | 507.15           | 24          | 10         | 0.6      |
| Balcoracana Creek         | Balcoracana Form.   | 3751.0    | 5.349    | 507.20           | 31          | 15         | 0.7      |
| Balcoracana Creek         | Balcoracana Form.   | 3747.7    | 5.352    | 507.24           | 29          | 8          | 0.6      |
| Balcoracana Creek         | Balcoracana Form.   | 3747.1    | 5.353    | 507.25           | 34          | 16         | 1.0      |
| Balcoracana Creek         | Balcoracana Form.   | 3739.6    | 5.360    | 507.34           | 42          | 23         | 0.9      |
| Balcoracana Creek         | Balcoracana Form.   | 3736.1    | 5.364    | 507.38           | 46          | 27         | 1.0      |
| Balcoracana Creek         | Balcoracana Form.   | 3731.9    | 5.368    | 507.43           | 51          | 26         | 1.0      |
| Balcoracana Creek         | Balcoracana Form.   | 3719.0    | 5.382    | 507.61           | 49          | 33         | 1.0      |
| Balcoracana Creek         | Balcoracana Form.   | 3695.5    | 5.404    | 507.89           | 51          | 36         | 2.0      |
| Ten Mile Creek            | Balcoracana Form.   | 3630.5    | 5.470    | 508.27           | 32          | 18         | 3.0      |
| Ten Mile Creek            | Balcoracana Form.   | 3624.4    | 5.476    | 508.35           | 52          | 50         | 2.0      |
| Ten Mile Creek            | Balcoracana Form.   | 3623.5    | 5.477    | 508.36           | 48          | 40         | 1.0      |
| Ten Mile Creek            | Balcoracana Form.   | 3622.0    | 5.478    | 508.38           | 36          | 20         | 2.0      |
| Ten Mile Creek            | Balcoracana Form.   | 3621.7    | 5.478    | 508.38           | 39          | 35         | 4.0      |
| Ten Mile Creek            | Balcoracana Form.   | 3621.1    | 5.479    | 508.39           | 41          | 30         | 3.0      |
| Ten Mile Creek            | Balcoracana Form.   | 3615.5    | 5.485    | 508.46           | 32          | 15         | 1.5      |
| Ten Mile Creek            | Balcoracana Form.   | 3612.2    | 5.488    | 508.50           | 36          | 20         | 0.7      |
| Ten Mile Creek            | Balcoracana Form.   | 3612.0    | 5.488    | 508.50           | 37          | 22         | 0.8      |
| Ten Mile Creek            | Moodlatana Formation| 3602.3    | 5.498    | 508.62           | 39          | 20         | 0.4      |
| Ten Mile Creek            | Moodlatana Formation| 3602.2    | 5.498    | 508.62           | 39          | 23         | 0.4      |
| Ten Mile Creek            | Moodlatana Formation| 3601.8    | 5.498    | 508.63           | 41          | 22         | 0.5      |
| Ten Mile Creek            | Moodlatana Formation| 3601.2    | 5.499    | 508.64           | 49          | 40         | 3.0      |
| Ten Mile Creek            | Moodlatana Formation| 3600.3    | 5.500    | 508.65           | 50          | 35         | 2.0      |
| Ten Mile Creek            | Moodlatana Formation| 3556.1    | 5.544    | 509.19           | 29          | 12         | 0.7      |
| Ten Mile Creek            | Moodlatana Formation| 3554.8    | 5.545    | 509.21           | 26          | 7          | 0.4      |
| Ten Mile Creek            | Moodlatana Formation| 3550.0    | 5.550    | 509.27           | 23          | 8          | 2.4      |
| Ten Mile Creek            | Moodlatana Formation| 3549.2    | 5.551    | 509.28           | 24          | 9          | 3.5      |
| Ten Mile Creek            | Moodlatana Formation| 3544.1    | 5.556    | 509.34           | 28          | 13         | 0.8      |
| Ten Mile Creek            | Moodlatana Formation| 3542.6    | 5.557    | 509.36           | 33          | 15         | 2.0      |
| Ten Mile Creek            | Moodlatana Formation| 3543.6    | 5.565    | 509.46           | 35          | 10         | 0.5      |
| Ten Mile Creek            | Moodlatana Formation| 3534.1    | 5.566    | 509.47           | 56          | 38         | 1.8      |
| Ten Mile Creek            | Moodlatana Formation| 3533.1    | 5.567    | 509.48           | 32          | 15         | 0.8      |
| Ten Mile Creek            | Moodlatana Formation| 3532.3    | 5.568    | 509.49           | 38          | 12         | 1.5      |
| Ten Mile Creek            | Moodlatana Formation| 3531.9    | 5.568    | 509.49           | 57          | 42         | 1.3      |
| Ten Mile Creek            | Moodlatana Formation| 3530.2    | 5.570    | 509.52           | 27          | 16         | 2.4      |
| Ten Mile Creek            | Moodlatana Formation| 3529.9    | 5.570    | 509.52           | 25          | 11         | 2.0      |
| Ten Mile Creek            | Moodlatana Formation| 3529.2    | 5.571    | 509.53           | 26          | 10         | 1.0      |
| Ten Mile Creek            | Moodlatana Formation| 3528.3    | 5.572    | 509.54           | 24          | 12         | 3.0      |
| Ten Mile Creek            | Moodlatana Formation| 3525.6    | 5.574    | 509.57           | 28          | 5          | 5.0      |
| Formation                  | Sample Code | Age (Ma) | Depth (m) | Location | Age Error (Ma) |
|---------------------------|-------------|----------|----------|----------|----------------|
| Ten Mile Creek Moodlatana | 3525.4      | 5.575    | 509.57   | Warru    | 29             | 15  | 1.3 |
| Ten Mile Creek Moodlatana | 3524.8      | 5.575    | 509.58   | Warru    | 24             | 6   | 6.0 |
| Ten Mile Creek Moodlatana | 3516.4      | 5.584    | 509.69   | Warru    | 38             | 12  | 2.0 |
| Ten Mile Creek Moodlatana | 3515.5      | 5.585    | 509.70   | Warru    | 27             | 9   | 1.0 |
| Ten Mile Creek Moodlatana | 3482.4      | 5.618    | 510.11   | Warru    | 28             | 13  | 4.0 |
| Ten Mile Creek Moodlatana | 3478.6      | 5.621    | 510.16   | Warru    | 29             | 10  | 2.0 |
| Ten Mile Creek Moodlatana | 3477.8      | 5.622    | 510.16   | Warru    | 35             | 12  | 3.0 |
| Ten Mile Creek Moodlatana | 3476.3      | 5.624    | 510.18   | Warru    | 36             | 10  | 2.0 |
| Ten Mile Creek Moodlatana | 3473.6      | 5.626    | 510.22   | Warru    | 30             | 15  | 2.0 |
| Ten Mile Creek Moodlatana | 3469.7      | 5.630    | 510.27   | Warru    | 31             | 14  | 2.0 |
| Ten Mile Creek Moodlatana | 3464.1      | 5.636    | 510.34   | Warru    | 29             | 10  | 3.0 |
| Ten Mile Creek Moodlatana | 3461.2      | 5.639    | 510.37   | Warru    | 38             | 10  | 2.0 |
| Ten Mile Creek Moodlatana | 3458.4      | 5.642    | 510.41   | Warru    | 36             | 12  | 2.0 |
| Ten Mile Creek Moodlatana | 3381.2      | 5.719    | 511.36   | Warru    | 24             | 14  | 0.8 |
| Ten Mile Creek Moodlatana | 3373.2      | 5.727    | 511.46   | Warru    | 28             | 11  | 1.0 |
| Ten Mile Creek Moodlatana | 3362.9      | 5.737    | 511.59   | Warru    | 32             | 12  | 2.0 |
| Ten Mile Creek Moodlatana | 3360.7      | 5.739    | 511.62   | Warru    | 32             | 15  | 0.6 |
| Ten Mile Creek Moodlatana | 3359.9      | 5.740    | 511.63   | Warru    | 26             | 8   | 0.7 |
| Ten Mile Creek Moodlatana | 3355.4      | 5.745    | 511.68   | Warru    | 23             | 10  | 0.6 |
| Ten Mile Creek Moodlatana | 3349.8      | 5.750    | 511.75   | Warru    | 24             | 12  | 0.8 |
| Ten Mile Creek Moodlatana | 3347.0      | 5.753    | 511.79   | Warru    | 34             | 14  | 1.1 |
| Ten Mile Creek Moodlatana | 3344.8      | 5.755    | 511.81   | Warru    | 32             | 13  | 0.8 |
| Ten Mile Creek Moodlatana | 3342.4      | 5.758    | 511.84   | Warru    | 21             | 8   | 0.6 |
| Ten Mile Creek Moodlatana | 3341.6      | 5.758    | 511.85   | Warru    | 31             | 12  | 0.8 |
| Ten Mile Creek Moodlatana | 3336.2      | 5.764    | 511.92   | Warru    | 21             | 10  | 0.7 |
| Ten Mile Creek Moodlatana | 3329.5      | 5.770    | 512.00   | Warru    | 29             | 12  | 0.8 |
| Ten Mile Creek Moodlatana | 3325.2      | 5.775    | 512.06   | Warru    | 29             | 12  | 0.3 |
| Ten Mile Creek Moodlatana | 3323.1      | 5.777    | 512.08   | Warru    | 31             | 17  | 0.9 |
| Ten Mile Creek Moodlatana | 3317.4      | 5.783    | 512.15   | Warru    | 32             | 15  | 0.8 |
| Ten Mile Creek Moodlatana | 3313.6      | 5.786    | 512.20   | Warru    | 25             | 12  | 1.2 |
| Ten Mile Creek Moodlatana | 3309.7      | 5.790    | 512.25   | Warru    | 26             | 8   | 0.7 |
| Ten Mile Creek Moodlatana | 3306.7      | 5.793    | 512.29   | Warru    | 31             | 11  | 0.6 |
| Ten Mile Creek Moodlatana | 3305.4      | 5.795    | 512.30   | Warru    | 36             | 10  | 0.5 |
| Ten Mile Creek Moodlatana | 3302.0      | 5.798    | 512.35   | Warru    | 23             | 6   | 0.3 |
| Ten Mile Creek Moodlatana | 3298.0      | 5.802    | 512.40   | Warru    | 26             | 8   | 0.3 |
| Ten Mile Creek Moodlatana | 3297.3      | 5.803    | 512.40   | Warru    | 24             | 6   | 0.3 |
| Ten Mile Creek Moodlatana | 3294.6      | 5.805    | 512.44   | Warru    | 23             | 5   | 0.4 |
| Ten Mile Creek Moodlatana | 3289.3      | 5.811    | 512.50   | Warru    | 27             | 8   | 0.5 |
| Ten Mile Creek Moodlatana | 3287.9      | 5.812    | 512.52   | Warru    | 37             | 11  | 0.4 |
| Ten Mile Creek Moodlatana | 3284.7      | 5.815    | 512.56   | Warru    | 32             | 10  | 0.3 |
| Ten Mile Creek Moodlatana | 3280.5      | 5.819    | 512.61   | Warru    | 28             | 8   | 0.5 |
| Ten Mile Creek Moodlatana | 3280.1      | 5.820    | 512.62   | Warru    | 34             | 12  | 1.0 |
| Ten Mile Creek Moodlatana | 3278.5      | 5.821    | 512.64   | Viparri  | 58             | 47  | 2.0 |
| Ten Mile Creek Moodlatana | 3272.8      | 5.827    | 512.71   | Warru    | 31             | 18  | 1.0 |
| Ten Mile Creek Moodlatana | 3271.9      | 5.828    | 512.72   | Warru    | 34             | 12  | 1.0 |
| Ten Mile Creek Moodlatana | 3269.9      | 5.830    | 512.74   | Viparri  | 41             | 22  | 2.0 |
| Ten Mile Creek Moodlatana | 3261.1      | 5.839    | 512.85   | Viparri  | 56             | 41  | 2.0 |
| Ten Mile Creek Moodlatana | 3243.6      | 5.856    | 513.07   | Warru    | 25             | 18  | 1.0 |
| Ten Mile Creek Moodlatana | 3242.3      | 5.858    | 513.09   | Warru    | 29             | 12  | 1.0 |
| Ten Mile Creek Moodlatana | 3241.6      | 5.858    | 513.09   | Warru    | 41             | 21  | 21.0 |
| Formation                  | X   | Y   | Z   | Depth | Width | Depth | Width |
|---------------------------|-----|-----|-----|-------|-------|-------|-------|
| Ten Mile Creek            | 3239.1 | 5.861 | 513.13 | Warru | 30 | 15 | 0.8 |
| Ten Mile Creek            | 3236.2 | 5.864 | 513.16 | Warru | 22 | 7 | 0.5 |
| Ten Mile Creek            | 3235.7 | 5.864 | 513.17 | Warru | 23 | 8 | 0.5 |
| Ten Mile Creek            | 3232.9 | 5.867 | 513.20 | Warru | 32 | 15 | 1.3 |
| Ten Mile Creek            | 3231.0 | 5.869 | 513.23 | Warru | 22 | 7 | 0.3 |
| Ten Mile Creek            | 3230.2 | 5.870 | 513.24 | Warru | 26 | 10 | 0.4 |
| Ten Mile Creek            | 3226.9 | 5.873 | 513.28 | Warru | 36 | 18 | 0.5 |
| Ten Mile Creek            | 3222.8 | 5.877 | 513.33 | Warru | 25 | 13 | 0.7 |
| Ten Mile Creek            | 3221.5 | 5.879 | 513.34 | Warru | 33 | 19 | 0.8 |
| Ten Mile Creek            | 3216.9 | 5.883 | 513.40 | Warru | 22 | 8 | 0.4 |
| Ten Mile Creek            | 3216.3 | 5.884 | 513.41 | Warru | 23 | 7 | 0.4 |
| Ten Mile Creek            | 3214.2 | 5.886 | 513.43 | Warru | 34 | 19 | 0.3 |
| Ten Mile Creek            | 3212.6 | 5.887 | 513.45 | Warru | 23 | 10 | 0.9 |
| Ten Mile Creek            | 3211.6 | 5.888 | 513.47 | Warru | 25 | 12 | 0.8 |
| Ten Mile Creek            | 3210.2 | 5.890 | 513.48 | Warru | 37 | 18 | 0.4 |
| Ten Mile Creek            | 3207.3 | 5.893 | 513.52 | Warru | 27 | 10 | 0.5 |
| Ten Mile Creek            | 3205.5 | 5.894 | 513.54 | Warru | 29 | 12 | 1.0 |
| Ten Mile Creek            | 3204.0 | 5.896 | 513.56 | Warru | 27 | 18 | 2.0 |
| Ten Mile Creek            | 3202.0 | 5.898 | 513.59 | Warru | 23 | 15 | 1.0 |
| Ten Mile Creek            | 3201.2 | 5.899 | 513.60 | Warru | 22 | 12 | 1.0 |
| Ten Mile Creek            | 3201.3 | 5.900 | 513.61 | Warru | 24 | 8 | 2.0 |
| Ten Mile Creek            | 3184.2 | 5.916 | 513.81 | Warru | 48 | 17 | 1.2 |
| Ten Mile Creek            | 3178.4 | 5.922 | 513.88 | Warru | 34 | 10 | 1.5 |
| Ten Mile Creek            | 3176.8 | 5.923 | 513.90 | Warru | 51 | 18 | 1.2 |
| Ten Mile Creek            | 3175.8 | 5.924 | 513.91 | Warru | 34 | 8 | 0.5 |
| Ten Mile Creek            | 3167.7 | 5.932 | 514.01 | Warru | 36 | 10 | 0.4 |
| Ten Mile Creek            | 3163.0 | 5.937 | 514.07 | Warru | 51 | 16 | 0.5 |
| Ten Mile Creek            | 2895.2 | 6.205 | 517.39 | Warru | 26 | 8 | 0.7 |
| Ten Mile Creek            | 2874.3 | 6.226 | 517.65 | Warru | 25 | 9 | 0.4 |
| Ten Mile Creek            | 2852.9 | 6.247 | 517.91 | Warru | 23 | 8 | 0.8 |
| Ten Mile Creek            | 2852.3 | 6.248 | 517.92 | Warru | 22 | 5 | 0.7 |
| Ten Mile Creek            | 2850.9 | 6.249 | 517.94 | Warru | 27 | 15 | 2.3 |
| Ten Mile Creek            | 2845.0 | 6.255 | 518.01 | Warru | 23 | 8 | 0.9 |
| Ten Mile Creek            | 2838.8 | 6.261 | 518.09 | Warru | 32 | 13 | 0.8 |
| Ten Mile Creek            | 2830.6 | 6.269 | 518.19 | Warru | 22 | 7 | 0.4 |
| Ten Mile Creek            | 2830.2 | 6.270 | 518.20 | Warru | 31 | 15 | 0.7 |
| Ten Mile Creek            | 2812.9 | 6.287 | 518.41 | Warru | 21 | 7 | 0.4 |
| Ten Mile Creek            | 2805.7 | 6.294 | 518.50 | Warru | 24 | 9 | 0.9 |
| Ten Mile Creek            | 2804.7 | 6.295 | 518.51 | Warru | 31 | 17 | 0.8 |
| Ten Mile Creek            | 2803.7 | 6.296 | 518.52 | Warru | 25 | 15 | 0.6 |
| Ten Mile Creek            | 2403.6 | 6.696 | 523.49 | Warru | 34 | 24 | 2.0 |
| Ten Mile Creek            | 2403.1 | 6.697 | 523.49 | Warru | 26 | 18 | 1.0 |
| Ten Mile Creek            | 2402.7 | 6.697 | 523.50 | Warru | 24 | 16 | 3.0 |
| Ten Mile Creek            | 2402.4 | 6.698 | 523.50 | Warru | 32 | 24 | 2.1 |
| Ten Mile Creek            | 2401.6 | 6.698 | 523.51 | Warru | 23 | 21 | 1.1 |
| Ten Mile Creek            | 2401.2 | 6.699 | 523.52 | Warru | 22 | 20 | 1.3 |
| Wilkatana 1 core          | 1053.2 | 8.047 | 536.98 | Watuna | 38 | 11 | 0.6 |
| Wilkatana 1 core          | 1052.6 | 8.047 | 536.99 | Watuna | 36 | 9 | 0.6 |
| Wilkatana 1 core          | 1052.0 | 8.048 | 536.99 | Watuna | 24 | 13 | 0.6 |
| Parachilna Gorge          | 1086.3 | 8.014 | 539.82 | Arrari | 22 | 10 | 5.1 |
| Location          | Formation          | Depth (m) | Age (Ma) | Location     | Depth (m) | Age (Ma) |
|-------------------|--------------------|-----------|----------|--------------|-----------|----------|
| Parachilna Gorge  | Parachilna Formation | 1085.0  | 8.015    | Arrari       | 539.84    | 25       |
| Parachilna Gorge  | Parachilna Formation | 1084.4  | 8.016    | Arrari       | 539.84    | 23       |
| Parachilna Gorge  | Parachilna Formation | 1083.5  | 8.017    | Watuna       | 539.85    | 25       |
| Brachina Gorge    | Parachilna Formation | 1082.4  | 8.018    | Mata         | 539.87    | 32       |
| Brachina Gorge    | Parachilna Formation | 1081.4  | 8.019    | Mata         | 539.88    | 31       |
| Parachilna Gorge  | Parachilna Formation | 1080.7  | 8.019    | Mata         | 539.89    | 35       |
| Parachilna Gorge  | Parachilna Formation | 1080.4  | 8.020    | Watuna       | 539.91    | 27       |
| Brachina Gorge    | Parachilna Formation | 1079.4  | 8.021    | Watuna       | 539.91    | 59       |
| Parachilna Gorge  | Parachilna Formation | 1078.8  | 8.021    | Watuna       | 539.91    | 24       |
| Parachilna Gorge  | Parachilna Formation | 1078.7  | 8.021    | Watuna       | 539.91    | 28       |
| Parachilna Gorge  | Parachilna Formation | 1078.2  | 8.022    | Mata         | 539.92    | 54       |
| Parachilna Gorge  | Parachilna Formation | 1078.0  | 8.022    | Vidnapa      | 539.95    | 29       |
| Parachilna Gorge  | Parachilna Formation | 1076.2  | 8.024    | Vidnapa      | 539.95    | 37       |
| Parachilna Gorge  | Parachilna Formation | 1075.6  | 8.024    | Vidnapa      | 539.95    | 28       |
| Parachilna Gorge  | Parachilna Formation | 1074.4  | 8.026    | Watuna       | 539.97    | 31       |
| Parachilna Gorge  | Parachilna Formation | 1072.9  | 8.027    | Watuna       | 539.99    | 32       |
| Parachilna Gorge  | Parachilna Formation | 1072.3  | 8.028    | Watuna       | 539.99    | 25       |
| Parachilna Gorge  | Parachilna Formation | 1071.4  | 8.029    | Watuna       | 540.00    | 26       |
| Parachilna Gorge  | Parachilna Formation | 1070.4  | 8.030    | Watuna       | 540.02    | 31       |
| Parachilna Gorge  | Parachilna Formation | 1069.8  | 8.030    | Watuna       | 540.02    | 27       |
| Parachilna Gorge  | Parachilna Formation | 1068.9  | 8.031    | Watuna       | 540.04    | 29       |
| Parachilna Gorge  | Parachilna Formation | 1067.8  | 8.032    | Watuna       | 540.05    | 33       |
| Parachilna Gorge  | Parachilna Formation | 1066.1  | 8.034    | Watuna       | 540.07    | 25       |
| Parachilna Gorge  | Parachilna Formation | 1065.2  | 8.035    | Watuna       | 540.08    | 35       |
| Parachilna Gorge  | Parachilna Formation | 1064.7  | 8.035    | Watuna       | 540.09    | 30       |
| Parachilna Gorge  | Parachilna Formation | 1062.2  | 8.038    | Watuna       | 540.12    | 22       |
| Parachilna Gorge  | Parachilna Formation | 1061.1  | 8.039    | Arrari       | 540.13    | 19       |
| Parachilna Gorge  | Parachilna Formation | 1059.7  | 8.040    | Arrari       | 540.15    | 25       |
| Parachilna Gorge  | Parachilna Formation | 1055.5  | 8.045    | Arrari       | 540.20    | 21       |
| Parachilna Gorge  | Parachilna Formation | 1054.7  | 8.045    | Arrari       | 540.21    | 27       |
| Parachilna Gorge  | Parachilna Formation | 1053.5  | 8.047    | Arrari       | 540.23    | 22       |
| Parachilna Gorge  | Parachilna Formation | 1053.0  | 8.047    | Arrari       | 540.23    | 26       |
| Parachilna Gorge  | Parachilna Formation | 1052.0  | 8.048    | Arrari       | 540.25    | 33       |
| Brachina Gorge    | Rawnsley Quartzite | 5034.8   | 4.065    | Mura         | 541.42    | 26       |
| Brachina Gorge    | Rawnsley Quartzite | 5025.6   | 4.074    | Mura         | 541.69    | 22       |
| Brachina Gorge    | Rawnsley Quartzite | 5023.7   | 4.076    | Mura         | 541.75    | 25       |
| Brachina Gorge    | Rawnsley Quartzite | 5023.2   | 4.077    | Mura         | 541.76    | 28       |
| Brachina Gorge    | Rawnsley Quartzite | 4958.5   | 4.142    | Mura         | 543.68    | 21       |
| Brachina Gorge    | Rawnsley Quartzite | 4953.2   | 4.147    | Mura         | 543.83    | 26       |
| Brachina Gorge    | Rawnsley Quartzite | 4948.7   | 4.151    | Mura         | 543.97    | 24       |
| Brachina Gorge    | Rawnsley Quartzite | 4947.5   | 4.152    | Mura         | 544.00    | 26       |
| Brachina Gorge    | Ediacara Member    | 4765.5   | 3.978    | Mura         | 549.39    | 22       |
| Brachina Gorge    | Ediacara Member    | 4764.8   | 3.979    | Mura         | 549.41    | 25       |
| Brachina Gorge    | Ediacara Member    | 4764.4   | 3.979    | Mura         | 549.42    | 29       |
| Brachina Gorge    | Ediacara Member    | 4764.3   | 3.979    | Warrutu      | 549.43    | 49       |
| Brachina Gorge    | Ediacara Member    | 4764.2   | 3.979    | Mura         | 549.43    | 25       |
| Brachina Gorge    | Ediacara Member    | 4761.0   | 3.983    | Yaldati      | 549.52    | 24       |
| Brachina Gorge    | Ediacara Member    | 4754.3   | 3.989    | Yaldati      | 549.72    | 32       |
| Brachina Gorge    | Ediacara Member    | 4753.8   | 3.990    | Yaldati      | 549.74    | 28       |
| Brachina Gorge    | Ediacara Member    | 4753.4   | 3.990    | Yaldati      | 549.75    | 26       |
| Location                          | Member          | Depth (m) | Age (Ma) | Location   | Depth (m) | Age (Ma) |
|----------------------------------|-----------------|-----------|----------|------------|-----------|----------|
| Brachina Gorge                   | Ediacara Member | 4746.3    | 3.997    | Yaldati    | 27        | 15       | 0.7      |
| Brachina Gorge                   | Ediacara Member | 4740.0    | 4.004    | Yaldati    | 25        | 18       | 0.4      |
| Brachina Gorge                   | Ediacara Member | 4735.8    | 4.008    | Yaldati    | 24        | 17       | 0.3      |
| Brachina Gorge                   | Breakfast Time Creek | 4723.2 | 4.377    | Yaldati    | 23        | 18       | 0.9      |
| Brachina Gorge                   | Breakfast Time Creek | 4721.9 | 4.378    | Yaldati    | 29        | 21       | 1.1      |
| Brachina Gorge                   | Breakfast Time Creek | 4720.1 | 4.380    | Yaldati    | 28        | 18       | 0.8      |
| Brachina Gorge                   | Breakfast Time Creek | 4704.6 | 4.395    | Yaldati    | 28        | 19       | 0.8      |
| Brachina Gorge                   | Breakfast Time Creek | 4695.0 | 4.405    | Yaldati    | 24        | 18       | 1.2      |
| Brachina Gorge                   | Breakfast Time Creek | 4693.1 | 4.407    | Yaldati    | 28        | 21       | 1.1      |
| Brachina Gorge                   | Breakfast Time Creek | 4688.3 | 4.412    | Yaldati    | 25        | 19       | 2.1      |
| Brachina Gorge                   | Breakfast Time Creek | 4683.6 | 4.416    | Yaldati    | 29        | 21       | 1.1      |
| Brachina Gorge                   | Breakfast Time Creek | 4667.8 | 4.432    | Yaldati    | 22        | 12       | 0.8      |
| Brachina Gorge                   | Breakfast Time Creek | 4662.0 | 4.438    | Yaldati    | 24        | 13       | 0.9      |
| Brachina Gorge                   | Breakfast Time Creek | 4660.7 | 4.439    | Yaldati    | 27        | 18       | 1.1      |
| Brachina Gorge                   | Breakfast Time Creek | 4649.6 | 4.450    | Yaldati    | 25        | 19       | 2.1      |
| Brachina Gorge                   | Breakfast Time Creek | 4649.2 | 4.451    | Yaldati    | 24        | 18       | 2.2      |
| Brachina Gorge                   | Breakfast Time Creek | 4648.8 | 4.451    | Yaldati    | 29        | 15       | 3.2      |
| Brachina Gorge                   | Breakfast Time Creek | 4648.1 | 4.452    | Yaldati    | 22        | 16       | 0.6      |
| Brachina Gorge                   | Breakfast Time Creek | 4646.8 | 4.453    | Yaldati    | 24        | 18       | 0.3      |
| Brachina Gorge                   | Chace Quartzite | 4632.5    | 4.467    | Yaldati    | 22        | 17       | 0.4      |
| Brachina Gorge                   | Chace Quartzite | 4620.3    | 4.480    | Yaldati    | 25        | 16       | 0.8      |
| Brachina Gorge                   | Chace Quartzite | 4613.4    | 4.487    | Yaldati    | 24        | 18       | 0.9      |
| Brachina Gorge                   | Chace Quartzite | 4608.1    | 4.492    | Yaldati    | 22        | 16       | 1.1      |
| Brachina Gorge                   | Chace Quartzite | 4606.8    | 4.493    | Yaldati    | 24        | 16       | 0.1      |
| Brachina Gorge                   | Chace Quartzite | 4583.0    | 4.517    | Yaldati    | 28        | 17       | 1.1      |
| Brachina Gorge                   | Bonney Sandstone | 4504.0   | 4.596    | Yaldati    | 34        | 23       | 1.2      |
| Brachina Gorge                   | Bonney Sandstone | 4500.5   | 4.600    | Yaldati    | 29        | 19       | 3.2      |
| Brachina Gorge                   | Bonney Sandstone | 4499.0   | 4.601    | Yaldati    | 25        | 21       | 1.2      |
| Brachina Gorge                   | Bonney Sandstone | 4498.0   | 4.602    | Yaldati    | 28        | 23       | 3.2      |
| Brachina Gorge                   | Bonney Sandstone | 4496.5   | 4.604    | Yaldati    | 21        | 16       | 1.1      |
| Brachina Gorge                   | Bonney Sandstone | 4495.8   | 4.604    | Yaldati    | 29        | 25       | 1.8      |
| Brachina Gorge                   | Bonney Sandstone | 4494.8   | 4.605    | Yaldati    | 23        | 18       | 1.0      |
| Brachina Gorge                   | Bonney Sandstone | 4471.8   | 4.628    | Yaldati    | 27        | 18       | 1.0      |
| Brachina Gorge                   | Bonney Sandstone | 4368.8   | 4.731    | Yaldati    | 31        | 18       | 1.2      |
| Brachina Gorge                   | Bonney Sandstone | 4363.6   | 4.736    | Yaldati    | 23        | 18       | 0.4      |
| Brachina Gorge                   | Bonney Sandstone | 4359.1   | 4.741    | Vulda      | 24        | 19       | 0.3      |
| Brachina Gorge                   | Bonney Sandstone | 4351.8   | 4.748    | Vulda      | 30        | 21       | 0.2      |
| Brachina Gorge                   | Bonney Sandstone | 4351.2   | 4.749    | Vulda      | 31        | 22       | 0.3      |
| Brachina Gorge                   | Bonney Sandstone | 4346.1   | 4.754    | Vulda      | 29        | 21       | 0.4      |
| Brachina Gorge                   | Bonney Sandstone | 4343.4   | 4.757    | Vulda      | 23        | 17       | 0.7      |
| Brachina Gorge                   | Bonney Sandstone | 4337.6   | 4.762    | Vulda      | 22        | 18       | 0.4      |
| Brachina Gorge                   | Bonney Sandstone | 4327.6   | 4.772    | Vulda      | 19        | 13       | 0.3      |
| Brachina Gorge                   | Bonney Sandstone | 4323.1   | 4.777    | Vulda      | 22        | 14       | 0.6      |
| Brachina Gorge                   | Bonney Sandstone | 4321.7   | 4.778    | Vulda      | 19        | 12       | 0.2      |
| Brachina Gorge                   | Bonney Sandstone | 4306.0   | 4.794    | Vulda      | 22        | 17       | 0.3      |
| Brachina Gorge                   | Bonney Sandstone | 4304.7   | 4.795    | Vulda      | 24        | 16       | 0.5      |
| Brachina Gorge                   | Bonney Sandstone | 4304.1   | 4.796    | Vulda      | 21        | 18       | 0.4      |
| Brachina Gorge                   | Bonney Sandstone | 4269.7   | 4.830    | Yaldati    | 29        | 21       | 2.2      |
| Brachina Gorge                   | Bonney Sandstone | 4261.1   | 4.839    | Yaldati    | 22        | 17       | 1.6      |
| Formation                  | Depth     | Age (Ma) | Location | Latitude | Longitude |
|---------------------------|-----------|----------|----------|----------|-----------|
| Brachina Gorge Bonney Sandstone | 4260.7    | 564.33   | Yaldati  | 19       | 12        |
| Brachina Gorge Bonney Sandstone | 4260.3    | 564.34   | Vulda    | 21       | 10        |
| Brachina Gorge Bonney Sandstone | 4252.7    | 564.57   | Yaldati  | 19       | 4         |
| Brachina Gorge Bonney Sandstone | 4243.6    | 564.84   | Vulda    | 19       | 16        |
| Brachina Gorge Bonney Sandstone | 4243.2    | 564.85   | Vulda    | 22       | 17        |
| Brachina Gorge Bonney Sandstone | 4208.1    | 565.89   | Vulda    | 19       | 18        |
| Brachina Gorge Bonney Sandstone | 4196.6    | 566.23   | Vulda    | 29       | 17        |
| Brachina Gorge Bonney Sandstone | 4195.6    | 566.26   | Vulda    | 31       | 18        |
| Brachina Gorge Bonney Sandstone | 4180.4    | 566.71   | Vulda    | 19       | 15        |
| Brachina Gorge Bonney Sandstone | 4179.7    | 566.73   | Vulda    | 18       | 12        |
| Brachina Gorge Bonney Sandstone | 4176.9    | 566.82   | Vulda    | 29       | 10        |
| Brachina Gorge Bonney Sandstone | 4176.3    | 566.83   | Vulda    | 20       | 11        |
| Brachina Gorge Bonney Sandstone | 4175.8    | 566.85   | Vulda    | 22       | 15        |
| Brachina Gorge Bonney Sandstone | 4174.5    | 566.88   | Vulda    | 25       | 13        |
| Brachina Gorge Bonney Sandstone | 4173.9    | 566.90   | Vulda    | 19       | 12        |
| Brachina Gorge Bonney Sandstone | 4173.3    | 566.92   | Vulda    | 22       | 15        |
| Brachina Gorge Bonney Sandstone | 4141.5    | 567.86   | Vulda    | 30       | 20        |
| Brachina Gorge Bonney Sandstone | 4140.7    | 567.89   | Vulda    | 24       | 18        |
| Brachina Gorge Bonney Sandstone | 4136.7    | 568.00   | Vulda    | 18       | 10        |
| Brachina Gorge Bonney Sandstone | 4136.2    | 568.02   | Vulda    | 19       | 12        |
| Brachina Gorge Bonney Sandstone | 4134.5    | 568.07   | Vulda    | 31       | 19        |
| Brachina Gorge Bonney Sandstone | 4133.9    | 568.09   | Vulda    | 24       | 18        |
| Brachina Gorge Bonney Sandstone | 4133.4    | 568.10   | Vulda    | 19       | 12        |
| Brachina Gorge Bonney Sandstone | 4133.0    | 568.11   | Vulda    | 21       | 13        |
| Bunyeroo Gorge Wonoka Formation | 3965.7    | 573.07   | Yaldati  | 16       | 8         |
| Bunyeroo Gorge Wonoka Formation | 3965.5    | 573.07   | Yaldati  | 15       | 7         |
| Bunyeroo Gorge Wonoka Formation | 3958.3    | 573.28   | Vulda    | 16       | 11        |
| Bunyeroo Gorge Wonoka Formation | 3957.8    | 573.30   | Yaldati  | 15       | 8         |
| Bunyeroo Gorge Wonoka Formation | 3957.7    | 573.30   | Vulda    | 17       | 10        |
| Bunyeroo Gorge Wonoka Formation | 3929.7    | 574.13   | Vulda    | 18       | 12        |
| Bunyeroo Gorge Wonoka Formation | 3897.4    | 575.09   | Vulda    | 16       | 11        |
| Bunyeroo Gorge Wonoka Formation | 3896.4    | 575.12   | Vulda    | 15       | 11        |
| Bunyeroo Gorge Wonoka Formation | 3896.1    | 575.12   | Vulda    | 16       | 13        |
| Bunyeroo Gorge Wonoka Formation | 3895.3    | 575.15   | Vulda    | 18       | 10        |
| Bunyeroo Gorge Wonoka Formation | 3895.0    | 575.16   | Vulda    | 19       | 12        |
| Bunyeroo Gorge Wonoka Formation | 3894.7    | 575.17   | Vulda    | 18       | 11        |
| Bunyeroo Gorge Wonoka Formation | 3894.3    | 575.18   | Vulda    | 22       | 12        |
| Bunyeroo Gorge Wonoka Formation | 3893.7    | 575.20   | Yaldati  | 19       | 10        |
| Bunyeroo Gorge Wonoka Formation | 3860.9    | 575.39   | Vulda    | 17       | 12        |
| Bunyeroo Gorge Wonoka Formation | 3857.9    | 576.26   | Vulda    | 16       | 10        |
| Bunyeroo Gorge Wonoka Formation | 3856.7    | 576.29   | Vulda    | 17       | 11        |
| Bunyeroo Gorge Wonoka Formation | 3856.4    | 576.30   | Vulda    | 17       | 9         |
| Bunyeroo Gorge Wonoka Formation | 3855.3    | 576.33   | Vulda    | 18       | 10        |
| Bunyeroo Gorge Wonoka Formation | 3854.8    | 576.35   | Vulda    | 18       | 9         |
| Bunyeroo Gorge Wonoka Formation | 3851.6    | 576.44   | Vulda    | 20       | 10        |
| Bunyeroo Gorge Wonoka Formation | 3851.0    | 576.46   | Vulda    | 21       | 11        |
| Bunyeroo Gorge Wonoka Formation | 3850.0    | 576.49   | Vulda    | 19       | 13        |
| Bunyeroo Gorge Wonoka Formation | 3849.5    | 576.50   | Vulda    | 18       | 12        |
| Bunyeroo Gorge Wonoka Formation | 3849.0    | 576.52   | Vulda    | 16       | 10        |
| Bunyeroo Gorge Wonoka Formation | 3843.8    | 576.67   | Vulda    | 21       | 14        |
| Location               | Formation               | Depth   | Age (Ma)   | Sample | Type | Age (Ma) |
|------------------------|-------------------------|---------|------------|--------|------|----------|
| Bunyeroo Gorge         | Bunyeroo Formation      | 3841.8  | 576.73     | Vulda  | 19   | 0.3      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3840.8  | 576.76     | Vulda  | 25   | 0.4      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3840.4  | 576.77     | Vulda  | 21   | 0.4      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3839.1  | 576.81     | Vulda  | 19   | 0.3      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3837.6  | 576.86     | Vulda  | 21   | 0.4      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3835.8  | 576.91     | Vulda  | 22   | 0.8      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3835.6  | 576.92     | Vulda  | 24   | 0.5      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3368.2  | 590.75     | Vulda  | 30   | 0.5      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3367.5  | 590.77     | Vulda  | 23   | 0.3      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3367.2  | 590.78     | Vulda  | 19   | 0.4      |
| Brachina Creek         | Bunyeroo Formation      | 3366.3  | 590.81     | Vulda  | 24   | 0.6      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3366.0  | 590.82     | Vulda  | 27   | 0.4      |
| Brachina Creek         | Bunyeroo Formation      | 3365.9  | 590.82     | Vulda  | 29   | 0.4      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3365.4  | 590.83     | Vulda  | 32   | 0.5      |
| Brachina Creek         | Bunyeroo Formation      | 3365.1  | 590.84     | Vulda  | 25   | 0.4      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3364.7  | 590.86     | Vulda  | 24   | 0.3      |
| Brachina Creek         | Bunyeroo Formation      | 3364.6  | 590.86     | Vulda  | 26   | 0.4      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3364.1  | 590.87     | Vulda  | 25   | 0.4      |
| Brachina Creek         | Bunyeroo Formation      | 3363.7  | 590.88     | Vulda  | 23   | 0.3      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3363.2  | 590.90     | Vulda  | 32   | 0.6      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3362.5  | 590.92     | Vulda  | 18   | 0.3      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3362.2  | 590.93     | Vulda  | 23   | 0.5      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3361.5  | 590.95     | Vulda  | 24   | 0.4      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3361.2  | 590.96     | Vulda  | 36   | 0.5      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3360.5  | 590.98     | Vulda  | 24   | 0.3      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3360.0  | 590.99     | Vulda  | 23   | 0.4      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3359.5  | 591.01     | Vulda  | 25   | 0.5      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3358.7  | 591.03     | Vulda  | 35   | 0.4      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3358.2  | 591.05     | Vulda  | 26   | 0.9      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3357.6  | 591.07     | Vulda  | 23   | 0.2      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3357.1  | 591.08     | Vulda  | 25   | 0.3      |
| Bunyeroo Gorge         | Bunyeroo Formation      | 3356.5  | 591.10     | Vulda  | 34   | 0.5      |
| Blinman                | Bunyeroo Formation      | 3300.5  | 592.76     | Vulda  | 29   | 2.5      |
| Blinman                | Bunyeroo Formation      | 3300.0  | 592.77     | Vulda  | 33   | 2.0      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3217.2  | 595.22     | Vulda  | 29   | 0.5      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3216.3  | 595.25     | Vulda  | 27   | 0.6      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3215.2  | 595.28     | Vulda  | 33   | 0.5      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3214.5  | 595.30     | Vulda  | 23   | 0.4      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3214.1  | 595.31     | Vulda  | 27   | 0.3      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3212.9  | 595.35     | Vulda  | 31   | 0.3      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3212.4  | 595.36     | Vulda  | 24   | 0.5      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3211.7  | 595.38     | Vulda  | 18   | 0.3      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3141.2  | 597.47     | Vulda  | 29   | 0.6      |
| Wilkatana 1 core       | Bunyeroo Formation      | 3125.2  | 597.94     | Vulda  | 33   | 0.8      |
| Enorama Creek          | Brachina Formation      | 2720.8  | 609.91     | Alpa   | 23   | 0.4      |
| Enorama Creek          | Brachina Formation      | 2707.1  | 610.32     | Yaldati| 18   | 0.3      |
| Enorama Creek          | Nuccaleena Formation    | 1894.4  | 634.38     | Alpa   | 27   | 0.8      |
| Enorama Creek          | Nuccaleena Formation    | 1893.8  | 634.39     | Alpa   | 23   | 0.7      |
| Enorama Creek          | Nuccaleena Formation    | 1893.3  | 634.41     | Alpa   | 24   | 0.7      |
| Enorama Creek          | Nuccaleena Formation    | 1892.5  | 634.43     | Alpa   | 29   | 0.8      |
Table S2. Petrographic textures (volume %) of selected Ediacaran palaeosols.

| Pedotype | Horizon | Sample | Gravel | Sand  | Silt  | Clay  | Soil fabric      | Soil texture |
|----------|---------|--------|--------|-------|-------|-------|------------------|--------------|
| Muru     | A       | R3245  | 0      | 76.5  | 12.2  | 11.4  | Granular silasepic | Sandy loam   |
| Muru     | A       | R3246  | 0      | 88.8  | 4.8   | 6.4   | Granular silasepic | sand         |
| Muru     | A       | R3247  | 0      | 91.0  | 2.8   | 6.2   | Granular silasepic | sand         |
| Muru     | By      | R3248  | 0      | 92.8  | 3.0   | 4.2   | Granular silasepic | sand         |
| Muru     | By      | R3249  | 0.2    | 92.4  | 2.0   | 5.4   | Granular silasepic | sand         |
| none     | above   | R3233  | 0      | 80.2  | 2.8   | 17.2  | Granular silasepic | Loamy sand   |
| Inga     | A       | R3234  | 0      | 75.8  | 1.0   | 23.2  | Granular silasepic | Sandy clay loam |
| Inga     | By      | R3235  | 0.4    | 75.4  | 3.2   | 21.0  | Granular silasepic | Sandy clay loam |
| Inga     | C       | R3236  | 0.4    | 28.4  | 3.4   | 17.8  | Granular silasepic | Sandy loam   |
| Yaldati  | A       | R3237  | 0      | 80.2  | 3.8   | 16.0  | Granular silasepic | Sandy loam   |
| Yaldati  | A       | R3238  | 0      | 79.2  | 6.6   | 14.2  | Granular silasepic | Sandy loam   |
| Yaldati  | Bk      | R3240  | 0.2    | 80.8  | 5.6   | 13.4  | Granular silasepic | Sandy loam   |
| Yaldati  | Bk      | R3241  | 0      | 79.8  | 8.2   | 12.0  | Granular silasepic | Sandy loam   |

Note: Stratigraphic levels are for a composite section from Mawson (1939a, b).
Table S3. Petrographic composition (volume %) of selected Ediacaran palaeosols.

| Pedotype | Horizon | Sample | quartz | feldspar | clay | opaque | mica | rock fragments | sparry calcite | micritic |
|----------|---------|--------|--------|----------|------|--------|------|---------------|----------------|---------|
| Muru A   | R3245   | 63.0   | 22.4   | 9.0      | 0    | 0.4    | 4.4  | 0.8           | 0              | 0       |
| Muru A   | R3246   | 83.6   | 12.8   | 7.6      | 0.2  | 0      | 2.8  | 0             | 0              | 0       |
| Muru A   | R3247   | 77.8   | 13.8   | 5.0      | 1.2  | 0      | 2.2  | 0             | 0              | 0       |
| Muru By  | R3248   | 81.6   | 12.0   | 3.4      | 0    | 0      | 2.0  | 0.2           | 0              | 0       |
| Muru By  | R3249   | 79.4   | 14.0   | 6.2      | 0.2  | 0      | 0.2  | 0             | 0              | 0       |
| Muru By  | R3250   | 76.4   | 17.4   | 4.6      | 1.6  | 0      | 0    | 0             | 0              | 0       |
| none above R3233 | 68.0 | 16.8   | 14.4   | 0       | 0    | 0      | 0.8  | 0             | 0              | 0       |
| Inga A   | R3234   | 64.2   | 15.6   | 18.0    | 1.8  | 0      | 0    | 0             | 0              | 0.4     |
| Inga By  | R3235   | 63.8   | 19.4   | 14.4    | 0.8  | 0.2    | 1.4  | 0             | 0              | 0       |
| Inga C   | R3236   | 62.4   | 19.2   | 16.8    | 1.2  | 0.2    | 0.2  | 0             | 0              | 0       |
| Yaldati A | R3237  | 68.4   | 15.4   | 7.4     | 8.4  | 0      | 0.4  | 0             | 0              | 0       |
| Yaldati A | R3238  | 71.2   | 13.2   | 4.4     | 11.0 | 0.2    | 0    | 0             | 0              | 0       |
| Yaldati Bk R3240 | 69.6 | 19.8   | 11.4   | 3.4     | 0    | 0.8    | 0    | 0             | 0              | 0       |
| Yaldati Bk R3241 | 60.8 | 17.6   | 11.4   | 7.4     | 0.2  | 0.6    | 0    | 2.0           | 0              | 0       |
| Yaldati Bk R3242 | 65.6 | 21.6   | 6.2    | 5.4     | 0    | 1.2    | 0    | 0             | 0              | 0       |
| none above R3474 | 69.2 | 17.4   | 5.0    | 8.2     | 0.2  | 0      | 0    | 0             | 0              | 0       |
| Valda A  | R3475   | 53.0   | 12.2   | 24.2    | 9.8  | 0.6    | 0.2  | 0             | 0              | 0       |
| Valda A  | R3476   | 49.4   | 18.0   | 19.4    | 13.6 | 0      | 0    | 0             | 0              | 0       |
| Valda Bk R3477 | 50.4 | 13.8   | 25.6   | 9.6     | 0.6  | 0      | 0    | 0             | 0              | 0       |
| Valda C  | R3478   | 64.6   | 24.6   | 5.2     | 5.0  | 0.4    | 0    | 0             | 0              | 0.2     |
| Pedotype  | Sample | SiO₂ | Al₂O₃ | Fe₂O₃ | FeO | CaO | MgO | Na₂O | K₂O | TiO₂ | MnO | P₂O₅ | SrO | BaO | LOI | Total Density g cm⁻³ |
|----------|--------|------|-------|-------|-----|-----|-----|------|-----|------|-----|------|-----|-----|-----|-------------------|
| Inga R3234 | 87.47  | 5.57 | 1.06  | 0.51  | 0.06 | 0.44 | 0.14 | 3.08 | 0.19 | 0.01 | 0.03 | 0.01 | 0.07 | 0.95 | 99.10 | 2.46 |
| Inga R3235 | 87.96  | 5.02 | 1.07  | 0.44  | 0.09 | 0.39 | 0.14 | 2.84 | 0.09 | 0.01 | 0.02 | 0.01 | 0.07 | 1.01 | 98.74 | 2.42 |
| Yaldati R3236 | 86.51  | 5.77 | 1.55  | 0.38  | 0.06 | 0.45 | 0.15 | 3.14 | 0.27 | 0.01 | 0.03 | 0.01 | 0.07 | 1.00 | 99.40 | 2.41 |
| Yaldati R3237 | 85.12  | 6.20 | 1.70  | 0.51  | 0.14 | 0.49 | 0.16 | 3.27 | 0.20 | 0.01 | 0.06 | 0.01 | 0.08 | 0.94 | 98.98 | 2.51 |
| Yaldati R3239 | 86.97  | 5.37 | 1.41  | 0.25  | 0.13 | 0.40 | 0.14 | 2.96 | 0.13 | 0.01 | 0.03 | 0.01 | 0.14 | 1.05 | 98.76 | 2.47 |
| Yaldati R3240 | 85.77  | 5.90 | 1.23  | 0.64  | 0.07 | 0.46 | 0.15 | 3.20 | 0.14 | 0.01 | 0.03 | 0.01 | 0.08 | 1.18 | 98.28 | 2.46 |
| Yaldati R3241 | 86.41  | 5.94 | 1.49  | 0.10  | 0.46 | 0.17 | 3.20 | 0.22 | 0.01 | 0.03 | 0.01 | 0.09 | 1.21 | 98.37 | 2.46 |
| Yaldati R3242 | 85.67  | 5.89 | 1.06  | 0.32  | 0.09 | 0.44 | 0.14 | 3.21 | 0.17 | 0.01 | 0.05 | 0.01 | 0.09 | 1.30 | 98.13 | 2.48 |
| Muru R3245 | 91.78  | 4.25 | 0.74  | 0.51  | 0.24 | 0.17 | 0.01 | 1.31 | 0.05 | 0.01 | 0.01 | 0.04 | 1.35 | 99.97 | 2.58 |
| Muru R3246 | 93.22  | 3.03 | 0.70  | 0.45  | 0.25 | 0.09 | 0.02 | 1.60 | 0.05 | 0.01 | 0.02 | 0.01 | 0.04 | 0.72 | 99.76 | 2.59 |
| Muru R3247 | 95.11  | 2.58 | 0.79  | 0.58  | 0.13 | 0.01 | 0.01 | 0.53 | 0.05 | 0.01 | 0.01 | 0.02 | 0.81 | 100.00 | 2.59 |
| Muru R3249 | 95.69  | 2.10 | 0.64  | 0.58  | 0.06 | 0.01 | 0.01 | 1.18 | 0.03 | 0.01 | 0.01 | 0.03 | 0.26 | 100.00 | 2.60 |
| Muru R3250 | 92.21  | 3.80 | 0.70  | 0.51  | 0.16 | 0.06 | 0.05 | 1.80 | 0.06 | 0.01 | 0.02 | 0.01 | 0.05 | 1.06 | 99.98 | 2.48 |
| Vida R3475 | 72.15  | 11.92 | 5.19 | 1.74  | 0.25 | 1.60 | 0.62 | 4.49 | 0.47 | 0.02 | 0.09 | 0.01 | 0.06 | 2.68 | 99.56 | 2.64 |
| Vida R3476 | 76.90  | 10.47 | 3.45 | 1.29  | 0.23 | 1.40 | 0.88 | 4.09 | 0.31 | 0.02 | 0.08 | 0.01 | 0.06 | 2.09 | 99.99 | 2.64 |
| Vida R3477 | 76.00  | 10.80 | 3.86 | 1.16  | 0.19 | 1.40 | 0.64 | 4.34 | 0.34 | 0.02 | 0.06 | 0.01 | 0.06 | 2.33 | 100.05 | 2.62 |
| Vida R3478 | 84.39  | 6.88  | 1.95 | 0.64  | 0.39 | 0.50 | 0.73 | 3.08 | 0.24 | 0.02 | 0.05 | 0.01 | 0.06 | 1.46 | 99.76 | 2.62 |
| Vida R3653 | 14.80  | 2.57 | 1.80  | 0.10  | 0.10 | 0.04 | 0.46 | 0.12 | 0.13 | 0.05 | 0.02 | 0.03 | 35.10 | 98.55 | 2.69 |
| Vida R3654 | 26.75  | 5.86 | 2.14  | 1.55  | 31.39 | 2.45 | 1.04 | 1.15 | 0.28 | 0.13 | 0.09 | 0.01 | 0.08 | 27.00 | 98.37 | 2.68 |
| Vida R3655 | 23.61  | 5.31 | 1.92  | 1.48 | 34.02 | 1.94 | 1.09 | 1.06 | 0.27 | 0.12 | 0.11 | 0.01 | 0.04 | 28.60 | 98.11 | 2.75 |
| Vida R3656 | 17.82  | 3.53 | 1.19  | 1.10  | 39.41 | 1.36 | 0.77 | 0.61 | 0.18 | 0.13 | 0.06 | 0.02 | 0.03 | 33.10 | 98.21 | 2.75 |
| Vida R3657 | 58.60  | 14.97 | 7.73 | 5.78  | 5.80 | 5.56 | 1.47 | 3.90 | 0.72 | 0.08 | 0.18 | 0.01 | 0.13 | 4.75 | 99.92 | 2.80 |
| Vida R3658 | 13.89  | 2.78 | 1.40  | 1.29 | 43.12 | 1.09 | 0.43 | 0.57 | 0.13 | 0.14 | 0.04 | 0.01 | 0.04 | 35.00 | 98.65 | 2.80 |
| siltstone R3660 | 61.42 | 16.73 | 8.57 | 5.75 | 0.79 | 2.32 | 1.09 | 4.41 | 1.13 | 0.05 | 0.16 | 0.01 | 0.25 | 2.55 | 99.50 | 2.84 |
| siltstone R3660U | 60.72 | 16.56 | 9.29 | 6.49 | 0.91 | 2.54 | 1.12 | 4.35 | 1.14 | 0.06 | 0.17 | 0.01 | 0.24 | 2.62 | 99.74 | 2.81 |

Note: All samples are shown on Figs. 6-7. Volumes are from counting 500 points in petrographic thin sections cut perpendicular to bedding using a Swift automated stage and counter. Error is ±2% for common (>10%) components (Murphy, 1983).

Table S4. Chemical analyses (wt%) and bulk density (g cm⁻³) of Ediacaran palaeosols.
| location    | Formation                  | level (m) | Ma   | δ¹³Ccarb %‰ | δ¹⁸Ocarb %‰ | author       |
|-------------|----------------------------|-----------|------|--------------|--------------|--------------|
| Ten Mile Creek Moodlatana Formation | 7668.6 | 507.70 | -0.31 | -8.66        | Retallack 2008 |
| Ten Mile Creek Moodlatana Formation | 7668.6 | 507.70 | -0.31 | -8.77        | Retallack 2008 |
| Ten Mile Creek Wirrealpa Limestone | 7231.0 | 513.08 | -1.79 | -10.08       | Retallack 2008 |
| Ten Mile Creek Wirrealpa Limestone | 7231.0 | 513.08 | -1.80 | -10.13       | Retallack 2008 |
| Ten Mile Creek Wilkawillina Limestone | 6641.5 | 533.25 | 0.28  | -9.82        | Singh 1986   |
| Wirrealpa Hill Wilkawillina Limestone | 6641.5 | 533.25 | -0.39 | -11.84       | Singh 1986   |
| Wirrealpa Hill Wilkawillina Limestone | 6641.5 | 533.25 | 3.03  | -6.85        | Singh 1986   |
| Ten Mile Creek Edewoe Limestone | 6391.0 | 523.41 | 2.58  | -10.34       | Retallack 2008 |
| Ten Mile Creek Edewoe Limestone | 6391.0 | 523.41 | 2.56  | -10.30       | Retallack 2008 |
| Mt Scott Range Ajax Limestone | 5874.7 | 516.56 | 0.72  | -8.56        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 516.56 | 0.76  | -8.69        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 516.56 | 0.47  | -9.55        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 516.56 | 0.72  | -9.02        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 516.56 | 0.76  | -8.35        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 516.56 | 0.72  | -6.46        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.63  | -7.73        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.65  | -7.59        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.61  | -7.72        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.48  | -7.58        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.53  | -7.59        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.27  | -8.42        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.34  | -8.27        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.44  | -9.52        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.66  | -14.54       | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.93  | -11.27       | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.79  | -7.20        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.83  | -7.14        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.45  | -8.79        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.64  | -7.81        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.60  | -8.91        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.64  | -9.35        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.64  | -9.25        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5874.7 | 517.36 | 0.69  | -9.12        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5847.673 | 517.36 | 0.63  | -9.19        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5847.673 | 517.36 | 0.62  | -8.70        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5847.673 | 517.36 | 0.64  | -8.75        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5847.673 | 517.36 | 0.50  | -7.92        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5847.673 | 517.36 | 0.58  | -9.18        | Surge 1996   |
| Mt Scott Range Ajax Limestone | 5847.673 | 517.36 | 0.53  | -8.48        | Surge 1996   |

Note: Specimen locations are shown in Figs. 6-7. Analyses are by XR on glass disc, with FeO by Pratt titration and C by Leco analyzer from ALS Chemex of Vancouver, BC, Canada, using Canadian Certified Reference Materials Project standard SY-4 (diorite gneiss from near Bancroft, Ontario). Errors (2σ) are from 89 replicate analyses of the standard in the same laboratory.
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.57$ | $-8.00$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.60$ | $-7.54$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.63$ | $-7.67$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.60$ | $-7.75$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.65$ | $-7.47$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.51$ | $-8.65$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.44$ | $-8.74$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.46$ | $-8.89$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.51$ | $-8.17$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.51$ | $-9.19$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.52$ | $-9.23$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.59$ | $-7.81$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.36$ | $-7.78$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.35$ | $-8.00$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.48$ | $-8.16$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.72$ | $-7.52$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.55$ | $-7.61$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.62$ | $-7.45$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.59$ | $-7.77$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.45$ | $-7.81$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.40$ | $-7.79$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5847.673$ | $517.36$ | $0.49$ | $-7.18$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.57$ | $-8.41$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.77$ | $-7.75$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.58$ | $-8.04$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.63$ | $-8.31$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.43$ | $-7.37$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.40$ | $-7.18$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.44$ | $-7.28$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $1.03$ | $-12.87$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.68$ | $-7.81$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.60$ | $-8.11$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.51$ | $-7.05$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.45$ | $-7.04$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.85$ | $-10.02$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.86$ | $-10.08$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5845.673$ | $517.42$ | $0.64$ | $-8.04$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5819.673$ | $518.19$ | $0.21$ | $-7.88$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5819.673$ | $518.19$ | $-0.01$ | $-8.99$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5819.673$ | $518.19$ | $0.18$ | $-8.79$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5819.673$ | $518.19$ | $0.21$ | $-8.59$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5819.673$ | $518.19$ | $0.30$ | $-9.42$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.04$ | $-8.26$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.12$ | $-7.89$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.07$ | $-7.64$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.58$ | $-14.84$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.96$ | $-14.03$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.06$ | $-8.28$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.06$ | $-8.76$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.14$ | $-7.78$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.01$ | $-8.50$ | Surge 1996 |
| Mt Scott Range Ajax Limestone | $5794.673$ | $518.93$ | $0.09$ | $-7.99$ | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.05 | -8.07 | Surge 1996 |
|----------------|----------------|----------|-------|-----|------|-----------|
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.08 | -7.89 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.06 | -8.45 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.09 | -7.81 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.26 | -7.34 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.24 | -7.00 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.22 | -7.18 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.23 | -7.42 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.04 | -13.98 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.25 | -8.71 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.04 | -7.70 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.03 | -7.80 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.06 | -8.15 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.08 | -6.82 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.11 | -8.38 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.15 | -8.47 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.04 | -9.15 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.03 | -9.54 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.17 | -7.19 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.18 | -7.14 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | -0.08 | -7.44 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.37 | -8.61 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.37 | -8.25 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.29 | -8.94 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.28 | -8.82 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.30 | -8.98 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.30 | -8.84 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.33 | -8.76 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.17 | -8.29 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.21 | -7.81 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.49 | -14.52 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.18 | -8.26 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.92 | -14.41 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.85 | -14.09 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.96 | -14.18 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.94 | -13.48 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.49 | -14.87 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.45 | -15.18 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.77 | -14.11 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.08 | -7.29 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.16 | -8.28 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.28 | -6.39 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.01 | -8.08 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.09 | -8.29 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.06 | -15.19 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.00 | -13.46 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.30 | -6.99 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.24 | -6.89 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 0.16 | -7.05 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 1.22 | -14.39 | Surge 1996 |
| Mt Scott Range | Ajax Limestone | 5794.673 | 518.93 | 1.34 | -14.34 | Surge 1996 |
| Location                        | Formation            | Longitude | Latitude | Elevation | Age     |
|--------------------------------|----------------------|-----------|----------|-----------|---------|
| Mt Scott Range                 | Ajax Limestone       | 5794.673  | 518.93   | -15.89    | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -9.29     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -9.45     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -8.50     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -9.17     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -8.68     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -9.52     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -9.55     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -8.85     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.39     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.92     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.10     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.02     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.66     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.51     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -8.33     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -8.40     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.52     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.50     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.87     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.75     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.58     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.27     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.21     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.50     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -9.27     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -9.84     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -9.41     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.30     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.01     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.69     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.97     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.44     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.42     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -14.89    | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -8.18     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -8.68     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.55     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -6.91     | Surge 1996 |
| Mt Scott Range                 | Ajax Limestone       | 5771.673  | 519.61   | -7.48     | Surge 1996 |
| Wilkawillina Gorge             | Wilkawillina Limestone | 5709.67  | 521.44   | -8.30     | Tucker 1991 |
| Wilkawillina Gorge             | Wilkawillina Limestone | 5688.67  | 522.07   | -11.10    | Tucker 1991 |
| Wilkawillina Gorge             | Wilkawillina Limestone | 5681.67  | 522.27   | -10.80    | Tucker 1991 |
| Wilkawillina Gorge             | Wilkawillina Limestone | 5677.67  | 522.39   | -12.90    | Tucker 1991 |
| Back Range                     | Wonoka Formation     | 4207.079  | 565.92   | -11.52    |Urwin 1992 |
| First Hill                     | Wonoka Formation     | 4203.528  | 566.03   | -7.43     |Calver 2000 |
| First Hill                     | Wonoka Formation     | 4203.528  | 566.03   | -7.43     | Calver 2000 |
| Brachina Gorge                 | Wonoka Formation     | 4202      | 566.07   | -8.04     | herein|
| Brachina Gorge                 | Wonoka Formation     | 4202      | 566.07   | -8.04     | herein|
| Brachina Gorge                 | Mayo Limestone       | 4200      | 566.13   | -10.50    | Singh 1986|
| Brachina Gorge                 | Mayo Limestone       | 4200      | 566.13   | -7.15     | Singh 1986|
| Bunyeroo Gorge                 | Mayo Limestone       | 4200      | 566.13   | -8.19     | Singh 1986|
| Location                          | Formation                | Age (Ma) | Depth (m) | Latitude  | Longitude | Reference          |
|----------------------------------|--------------------------|----------|-----------|-----------|-----------|--------------------|
| Bunyeroo Gorge                   | Mayo Limestone           | 4200     | 566.13    | -11.55    | Singh 1986    |
| Bunyeroo Gorge                   | Mayo Limestone           | 4200     | 566.13    | -7.57     | Singh 1986    |
| Brachina Gorge                   | Bonney Formation         | 4199.379 | 566.15    | -3.50     | Calver 2000   |
| Back Range                       | Wonoka Formation         | 4192.079 | 566.36    | -11.86    | Urwin 1992    |
| Brachina Gorge                   | Wonoka Formation         | 4158.579 | 567.36    | -6.95     | Calver 2000   |
| Brachina Gorge                   | Wonoka Formation         | 4151.579 | 567.56    | -5.49     | Calver 2000   |
| Brachina Gorge                   | Wonoka Formation         | 4147.079 | 567.70    | -5.89     | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4146.623 | 567.71    | -8.34     | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4145.736 | 567.74    | -4.47     | Calver 2000   |
| Brachina Gorge                   | Wonoka Formation         | 4158.579 | 567.36    | -3.50     | Calver 2000   |
| Brachina Gorge                   | Wonoka Formation         | 4151.579 | 567.56    | -5.49     | Calver 2000   |
| Brachina Gorge                   | Wonoka Formation         | 4147.079 | 567.70    | -5.89     | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4146.623 | 567.71    | -8.34     | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4145.736 | 567.74    | -4.47     | Calver 2000   |
| Brachina Gorge                   | Wonoka Formation         | 4143.079 | 567.81    | -12.35    | Urwin 1992    |
| Bunyeroo Gorge                   | Wonoka Formation         | 4135.534 | 568.04    | -9.73     | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4132.252 | 568.14    | -11.20    | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4131.099 | 568.17    | -12.28    | Calver 2000   |
| Old Station Creek                | Wonoka canyon fill       | 4116     | 568.62    | -14.85    | Calver 2000   |
| Old Station Creek                | Wonoka canyon fill       | 4116     | 568.62    | -14.85    | Calver 2000   |
| Umberatana                       | Wonoka Formation         | 4116     | 568.62    | -13.7     | Eickoff et al. 1988 |
| Umberatana                       | Wonoka Formation         | 4116     | 568.62    | -11.8     | Eickoff et al. 1988 |
| Umberatana                       | Wonoka Formation         | 4116     | 568.62    | -8.40     | Eickoff et al. 1988 |
| Umberatana                       | Wonoka Formation         | 4116     | 568.62    | -1.40     | Eickoff et al. 1988 |
| Bunyeroo Gorge                   | Wonoka Formation         | 4106.26  | 568.90    | -12.50    | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4100.937 | 569.06    | -11.80    | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4083.195 | 569.59    | -11.23    | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4076.986 | 569.77    | -11.39    | Calver 2000   |
| Bunyeroo Gorge                   | Wonoka Formation         | 4076.986 | 569.77    | -11.68    | Calver 2000   |
| Back Range                       | Wonoka Formation         | 4076.079 | 569.77    | -13.22    | Urwin 1992    |
| Back Range                       | Wonoka Formation         | 4053.079 | 570.48    | -13.36    | Urwin 1992    |
| Back Range                       | Wonoka Formation         | 4029.079 | 571.19    | -14.30    | Urwin 1992    |
| Wearing Gorge                    | Bunyeroo Formation       | 3452.679 | 588.25    | -1.23     | Young 1995    |
| Wearing Gorge                    | Bunyeroo Formation       | 3439.079 | 588.65    | -7.27     | Young 1995    |
| Wearing Gorge                    | Bunyeroo Formation       | 3421.079 | 589.19    | -8.70     | Young 1995    |
| Mallee Water                     | Enorama Shale            | 1385.5   | 649.44    | -3.40     | McKirdy et al. 2001 |
| Mallee Water                     | Enorama Shale            | 1384.5   | 649.47    | -3.20     | McKirdy et al. 2001 |
| Mallee Water                     | Enorama Shale            | 1383.5   | 649.50    | -8.60     | McKirdy et al. 2001 |
| Mallee Water                     | Enorama Shale            | 1382.5   | 649.53    | -4.70     | McKirdy et al. 2001 |
| Mallee Water                     | Enorama Shale            | 1381.5   | 649.56    | -1.00     | McKirdy et al. 2001 |
| Mallee Water                     | Enorama Shale            | 1380.5   | 649.59    | -2.60     | McKirdy et al. 2001 |
| Mallee Water                     | Enorama Shale            | 1379.5   | 649.62    | -2.60     | McKirdy et al. 2001 |
| Mallee Water                     | Enorama Shale            | 1378.5   | 649.65    | -4.20     | McKirdy et al. 2001 |
| Mallee Water                     | Enorama Shale            | 1377.5   | 649.68    | -4.50     | McKirdy et al. 2001 |
| Dedman's bore                    | Enorama Shale            | 1376.5   | 649.71    | -11.80    | McKirdy et al. 2001 |
| Dedman's bore                    | Enorama Shale            | 1375.5   | 649.74    | -9.70     | McKirdy et al. 2001 |
| Dedman's bore                    | Enorama Shale            | 1363.5   | 650.09    | -5.90     | McKirdy et al. 2001 |
| Gum Creek                        | Wundowie Limestone       | 1123.6   | 657.19    | -12.70    | McKirdy et al. 2001 |
| Gum Creek                        | Wundowie Limestone       | 1123.6   | 657.19    | -12.50    | McKirdy et al. 2001 |
| Gum Creek                        | Wundowie Limestone       | 1123.6   | 657.19    | -12.60    | McKirdy et al. 2001 |
| Location                           | Formation        | Depth   | Temperature | Nitrate | Reference                  |
|-----------------------------------|------------------|---------|-------------|---------|-----------------------------|
| Dedman's bore                     | Wundowie Limestone | 1123.6  | 657.19      | 6.50    | -11.00 M'Kirdy et al. 2001 |
| Pope's Paddock                    | Etina Formation  | 938.6   | 658.93      | 9.40    | -8.20 M'Kirdy et al. 2001   |
| Enorama Creek                     | Etina Formation  | 929.6   | 662.93      | 5.90    | -13.20 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 928.1   | 662.98      | 6.10    | -13.00 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 927.1   | 663.01      | 6.00    | -12.90 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 926.0   | 663.04      | 6.50    | -12.90 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 925.3   | 663.06      | 7.20    | -13.00 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 924.2   | 663.09      | 7.50    | -12.60 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 923.3   | 663.12      | 7.80    | -12.80 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 922.3   | 663.15      | 7.90    | -12.50 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 912.8   | 663.43      | 7.70    | -11.40 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 911.8   | 663.46      | 8.10    | -12.00 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 910.7   | 663.49      | 7.90    | -11.50 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 908.3   | 663.56      | 8.10    | -14.20 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 907.2   | 663.60      | 7.40    | -12.80 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 905.6   | 659.90      | 8.80    | -9.00 M'Kirdy et al. 2001   |
| Enorama Creek                     | Etina Formation  | 905.2   | 663.66      | 8.30    | -12.20 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 904.1   | 663.39      | 8.40    | -12.50 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 903.1   | 663.72      | 8.10    | -12.30 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 900.6   | 663.79      | 7.90    | -10.90 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 899.7   | 663.82      | 8.70    | -11.70 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 898.7   | 663.85      | 8.90    | -11.10 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 897.5   | 663.88      | 9.00    | -11.40 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 896.2   | 663.92      | 9.10    | -11.30 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 895.1   | 663.96      | 8.70    | -11.50 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 894.1   | 663.98      | 9.00    | -11.50 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 893.0   | 664.02      | 8.70    | -11.90 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 892.0   | 664.05      | 8.70    | -12.00 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 891.0   | 664.08      | 8.70    | -12.40 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 888.8   | 664.14      | 7.10    | -12.20 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 887.7   | 664.17      | 6.50    | -11.90 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 886.5   | 664.21      | 5.10    | -10.90 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 882.6   | 660.58      | 7.90    | -10.80 M'Kirdy et al. 2001 |
| Pope's Paddock                    | Etina Formation  | 858.6   | 661.29      | 9.50    | -10.70 M'Kirdy et al. 2001   |
| Enorama Creek                     | Etina Formation  | 856.0   | 665.11      | 9.30    | -11.00 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 855.0   | 665.14      | 9.20    | -11.00 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 853.9   | 665.17      | 8.90    | -10.70 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 852.9   | 665.20      | 9.30    | -10.50 Swanson-Hysell et al. 2010 |
| Pope's Paddock                    | Etina Formation  | 851.6   | 661.50      | 8.90    | -10.30 M'Kirdy et al. 2001   |
| Enorama Creek                     | Etina Formation  | 851.5   | 665.25      | 9.40    | -11.30 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 850.5   | 665.28      | 9.40    | -11.90 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 849.5   | 665.30      | 9.10    | -11.90 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 837.7   | 665.65      | 7.90    | -11.40 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 837.6   | 665.67      | 7.80    | -11.70 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 835.6   | 665.71      | 7.20    | -9.50 Swanson-Hysell et al. 2010 |
| Enorama Creek                     | Etina Formation  | 834.7   | 665.74      | 6.90    | -9.90 Swanson-Hysell et al. 2010 |
| Pope's Paddock                    | Etina Formation  | 827.6   | 662.21      | 6.90    | -11.10 M'Kirdy et al. 2001   |
| Pope's Paddock                    | Etina Formation  | 825.6   | 662.27      | 4.20    | -9.50 M'Kirdy et al. 2001   |
| Location            | Formation         | Depth (m) | Age (Ma) | SW | SWHysell et al. 2010 |
|---------------------|-------------------|-----------|----------|----|----------------------|
| Enorama Creek       | Etina Formation   | 790.1     | 6.60     | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 789.1     | 7.10     | -11.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 788.1     | 7.30     | -10.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 787.1     | 7.80     | -11.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 784.9     | 8.30     | -11.00 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 783.9     | 8.20     | -10.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 782.9     | 7.60     | -9.60  | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 781.6     | 4.40     | -9.20  | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 780.6     | 9.00     | -10.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 779.4     | 9.10     | -9.40  | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 778.1     | 8.10     | -9.60  | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 777.2     | 2.30     | -9.50  | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 776.5     | 5.30     | -9.80  | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 775.5     | 8.50     | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 774.5     | 8.40     | -12.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 773.3     | 9.20     | -11.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 772.2     | 9.00     | -10.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 771.6     | 0.70     | -7.80  | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 770.4     | 9.90     | -9.20  | Swanson-Hysell et al. 2010 |
| Pope's Paddock      | Etina Formation   | 768.6     | 3.00     | -8.40  | M'Kirdy et al. 2001    |
| Pope's Paddock      | Etina Formation   | 768.6     | 3.00     | -8.40  | M'Kirdy et al. 2001    |
| Enorama Creek       | Etina Formation   | 768.1     | 9.10     | -9.40  | M'Kirdy et al. 2001    |
| Enorama Creek       | Etina Formation   | 767.2     | 8.50     | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 766.2     | 9.20     | -11.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 765.1     | 5.30     | -9.80  | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 758.5     | 1.10     | -8.60  | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 757.7     | 9.20     | -12.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 755.6     | 8.50     | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 754.6     | 8.40     | -12.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 752.6     | 9.00     | -7.60  | M'Kirdy et al. 2001    |
| Enorama Creek       | Etina Formation   | 750.6     | 9.60     | -8.30  | M'Kirdy et al. 2001    |
| Enorama Creek       | Etina Formation   | 727.6     | 9.30     | -8.50  | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 701.6     | 9.40     | -6.70  | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 696.6     | 7.70     | -13.30 | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 682.6     | 9.20     | -8.10  | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 681.6     | 9.80     | -9.50  | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 664.6     | 8.90     | -7.90  | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 653.6     | 9.00     | -8.30  | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 652.6     | 10.30    | -10.00 | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 636.6     | 8.60     | -8.40  | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 630.6     | 4.90     | -12.10 | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 585.6     | 8.30     | -12.00 | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 585.6     | 9.40     | -7.40  | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 581.6     | 9.80     | -10.00 | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 561.6     | 7.80     | -11.40 | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 559.6     | 3.20     | -7.00  | M'Kirdy et al. 2001    |
| First Spring        | Etina Formation   | 529.6     | 8.40     | -9.70  | M'Kirdy et al. 2001    |
| Enorama Creek       | Etina Formation   | 526.9     | 6.70     | -12.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek       | Etina Formation   | 525.9     | 7.90     | -11.90 | Swanson-Hysell et al. 2010 |
| Location          | Formation       | Depth  | Temperature | Oxygen | Source                        |
|-------------------|-----------------|--------|-------------|--------|-------------------------------|
| Enorama Creek     | Etina Formation | 524.9  | 674.91      | 7.50   | -12.10 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 523.8  | 674.95      | 8.00   | -11.90 Swanson-Hysell et al. 2010 |
| First Spring      | Etina Formation | 523.6  | 674.95      | 9.60   | -9.20 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 522.8  | 674.98      | 8.10   | -11.90 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 521.8  | 675.00      | 8.00   | -11.10 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 520.8  | 675.03      | 8.40   | -11.60 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 519.4  | 675.08      | 8.10   | -10.40 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 518.6  | 675.10      | 8.70   | -12.10 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 517.6  | 675.13      | 8.50   | -11.50 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 515.9  | 675.18      | 8.50   | -11.40 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 514    | 675.24      | 8.40   | -11.10 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 513    | 675.27      | 8.10   | -10.80 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 512    | 675.29      | 8.90   | -11.00 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 511.7  | 675.30      | 9.10   | -9.50 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 510.2  | 675.35      | 9.10   | -10.20 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 509.3  | 675.37      | 6.90   | -10.30 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 508.5  | 675.40      | 9.20   | -9.20 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 507.5  | 675.43      | 8.90   | -10.30 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 506.5  | 675.46      | 8.40   | -9.00 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 505.5  | 675.49      | 7.70   | -10.00 Swanson-Hysell et al. 2010 |
| Pope's Paddock    | Etina Formation | 503.6  | 671.80      | 4.60   | -10.70 M'Kirdy et al. 2001    |
| Pope's Paddock    | Etina Formation | 503.6  | 671.80      | 4.80   | -11.40 M'Kirdy et al. 2001    |
| Enorama Creek     | Etina Formation | 501.6  | 675.60      | 6.80   | -9.30 Swanson-Hysell et al. 2010 |
| First Spring      | Etina Formation | 499.6  | 675.66      | 8.40   | -10.90 M'Kirdy et al. 2001    |
| Enorama Creek     | Etina Formation | 498.9  | 675.68      | 9.20   | -10.70 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 497.9  | 675.71      | 8.80   | -9.90 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 497.3  | 675.73      | 8.70   | -10.70 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 496.3  | 675.76      | 9.30   | -9.80 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 495    | 675.80      | 8.90   | -8.60 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 494    | 675.83      | 9.70   | -8.70 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 493.9  | 675.83      | 8.40   | -7.60 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 493.1  | 675.85      | 8.60   | -7.90 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 492.2  | 675.88      | 7.70   | -7.20 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 491.2  | 675.91      | 6.80   | -6.30 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 490.1  | 675.94      | 8.90   | -8.40 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 489.3  | 675.97      | 8.70   | -8.60 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 488.3  | 676.00      | 8.80   | -8.60 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 487.2  | 676.03      | 6.90   | -8.20 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 486.3  | 676.06      | 7.20   | -8.40 Swanson-Hysell et al. 2010 |
| First Spring      | Etina Formation | 485.6  | 676.08      | 8.80   | -10.50 M'Kirdy et al. 2001    |
| Enorama Creek     | Etina Formation | 485.3  | 676.09      | 7.80   | -7.30 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 483.9  | 676.13      | 7.90   | -7.70 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 483.1  | 676.15      | 9.00   | -8.50 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 480.1  | 676.24      | 8.90   | -8.00 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 479    | 676.27      | 8.10   | -8.30 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 478    | 676.30      | 9.20   | -8.40 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 477.5  | 676.32      | 8.90   | -7.90 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 476.5  | 676.35      | 8.80   | -8.20 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 475.5  | 676.38      | 8.40   | -7.90 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 474.7  | 676.40      | 9.10   | -7.80 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 472.7  | 676.46      | 9.50   | -7.80 Swanson-Hysell et al. 2010 |
| Enorama Creek     | Etina Formation | 471.7  | 676.49      | 9.80   | -8.10 Swanson-Hysell et al. 2010 |
| Location          | Formation        | Depth (m) | Age (Ma) | Thickness (m) | Reference                          |
|-------------------|------------------|-----------|----------|---------------|------------------------------------|
| First Spring      | Etina Formation  | 471.6     | 7.80     | -12.40        | M'Kirdy et al. 2001                |
| Enorama Creek     | Etina Formation  | 470.7     | 9.80     | -8.70         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 467.2     | 8.60     | -6.50         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 465.6     | 8.50     | -7.20         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 464.5     | 8.60     | -8.30         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 462.9     | 9.30     | -8.60         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 461.9     | 8.70     | -8.90         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 461       | 9.00     | -8.30         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 460       | 9.30     | -8.70         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 459.8     | 8.90     | -7.90         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 457       | 9.70     | -8.80         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 455.6     | 9.80     | -9.00         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 454.6     | 9.80     | -9.40         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 453.6     | 9.40     | -9.50         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 452.2     | 9.40     | -9.70         | Swanson-Hysell et al. 2010         |
| Pope's Paddock    | Etina Formation  | 451.6     | 8.40     | -10.50        | M'Kirdy et al. 2001                |
| Enorama Creek     | Etina Formation  | 450.6     | 8.30     | -10.00        | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 449.8     | 7.70     | -11.80        | Swanson-Hysell et al. 2010         |
| Pope's Paddock    | Etina Formation  | 430.6     | 8.80     | -8.60         | M'Kirdy et al. 2001                |
| Pope's Paddock    | Etina Formation  | 401.6     | 9.20     | -10.30        | M'Kirdy et al. 2001                |
| First Spring      | Etina Formation  | 388.6     | 2.70     | -11.20        | M'Kirdy et al. 2001                |
| Pope's Paddock    | Etina Formation  | 388.6     | 9.40     | -10.50        | M'Kirdy et al. 2001                |
| Enorama Creek     | Etina Formation  | 388.6     | 6.10     | -11.50        | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 387.6     | 8.30     | -9.50         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 386.5     | 8.40     | -8.80         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 385.1     | 8.30     | -8.80         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 383.7     | 1.30     | -11.00        | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 382.4     | 8.90     | -8.60         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 381.4     | 8.70     | -7.70         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 380.4     | 9.60     | -8.10         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 379.2     | 9.90     | -7.80         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 378.5     | 9.60     | -7.20         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 377.7     | 9.70     | -6.20         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 376.9     | 9.60     | -6.00         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 374.8     | 9.70     | -6.30         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 373.8     | 6.30     | -6.40         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 372.5     | 9.20     | -5.50         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 371.5     | 9.40     | -5.90         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 370.4     | 9.30     | -5.30         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 369.4     | 9.50     | -5.60         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 368.1     | 9.20     | -5.00         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 367.1     | 9.10     | -4.70         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 366       | 9.10     | -4.90         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 364.9     | 9.40     | -4.30         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 363.8     | 9.20     | -5.00         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 362.6     | 9.10     | -4.80         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 361.2     | 8.60     | -4.90         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 360.2     | 4.40     | -5.60         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 359.2     | 8.80     | -4.50         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 355.8     | 9.00     | -6.60         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 354.8     | 8.40     | -7.30         | Swanson-Hysell et al. 2010         |
| Enorama Creek     | Etina Formation  | 353      | 1.30     | -6.10         | Swanson-Hysell et al. 2010         |
| Location               | Formation | Metric | Latitude | Longitude | Depth | Swanson-Hysell et al. 2010 |
|------------------------|-----------|--------|----------|-----------|-------|-----------------------------|
| Enorama Creek          | Etina Formation | 351.8  | 680.04   | 5.30      | -4.40 | Swanson-Hysell et al. 2010  |
| First Spring           | Etina Formation | 348.6  | 680.13   | 2.00      | -9.30 | McKirdy et al. 2001         |
| Enorama Creek          | Etina Formation | 346.2  | 680.20   | 8.30      | -3.20 | Swanson-Hysell et al. 2010  |
| First Spring           | Etina Formation | 343.8  | 680.27   | 8.70      | -4.00 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 343.6  | 680.28   | 6.30      | -11.80| McKirdy et al. 2001         |
| Enorama Creek          | Etina Formation | 342.7  | 680.31   | 8.40      | -3.10 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 338.6  | 680.43   | 8.60      | -3.20 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 337.5  | 680.46   | 9.10      | -3.20 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 336.5  | 680.49   | 8.70      | -3.90 | Swanson-Hysell et al. 2010  |
| First Spring           | Etina Formation | 335.6  | 680.52   | 6.60      | -11.70| McKirdy et al. 2001         |
| Enorama Creek          | Etina Formation | 335.5  | 680.52   | 8.50      | -5.20 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 334.5  | 680.55   | 8.30      | -5.60 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 333.4  | 680.58   | 9.00      | -6.80 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 332.3  | 680.61   | 9.40      | -5.30 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 332.1  | 680.62   | 9.30      | -5.00 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 331.5  | 680.64   | 8.50      | -5.00 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 330.5  | 680.67   | 9.00      | -6.10 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 329.6  | 680.69   | 9.50      | -6.50 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 328.6  | 680.72   | 8.40      | -6.30 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 328.4  | 680.73   | 7.90      | -6.50 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 327.4  | 680.76   | 8.00      | -5.10 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 326    | 680.80   | 9.50      | -6.40 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 324.9  | 680.83   | 7.50      | -6.80 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 324    | 680.86   | 7.50      | -6.90 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 323.6  | 680.87   | 5.30      | -11.40| McKirdy et al. 2001         |
| Enorama Creek          | Etina Formation | 322.8  | 680.90   | 7.10      | -6.90 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 321.8  | 680.92   | 7.00      | -6.10 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 320.7  | 680.96   | 8.30      | -5.60 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 319.7  | 680.99   | 9.20      | -6.40 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 318.7  | 681.02   | 5.60      | -6.60 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 317.7  | 681.05   | 7.30      | -7.00 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 316.5  | 681.08   | 9.00      | -6.90 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 315.7  | 681.11   | 8.10      | -6.30 | Swanson-Hysell et al. 2010  |
| Pope's Paddock         | Etina Formation | 314.6  | 677.40   | 7.80      | -12.30| McKirdy et al. 2001         |
| Enorama Creek          | Etina Formation | 314.2  | 681.15   | 8.20      | -5.60 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 312.8  | 681.19   | 9.00      | -6.70 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 312    | 681.21   | 8.60      | -6.10 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 310.9  | 681.25   | 9.50      | -7.20 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 309.9  | 681.28   | 8.70      | -6.30 | Swanson-Hysell et al. 2010  |
| First Spring           | Etina Formation | 308.6  | 681.32   | 3.30      | -11.80| McKirdy et al. 2001         |
| Enorama Creek          | Etina Formation | 307.4  | 681.35   | 8.80      | -6.20 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 306.1  | 681.39   | 9.30      | -7.00 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 305.1  | 681.42   | 9.00      | -6.80 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 303.9  | 681.45   | 9.30      | -7.10 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 302.7  | 681.49   | 9.20      | -6.80 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 301.8  | 681.52   | 8.80      | -6.70 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 300.9  | 681.54   | 9.00      | -6.80 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 299.6  | 681.58   | 7.80      | -4.90 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 294.5  | 681.73   | 8.60      | -6.60 | Swanson-Hysell et al. 2010  |
| Enorama Creek          | Etina Formation | 293.6  | 681.76   | 8.80      | -6.20 | Swanson-Hysell et al. 2010  |
| Pope's Paddock         | Etina Formation | 292.6  | 678.05   | 5.70      | -11.6 | McKirdy et al. 2001         |
| Enorama Creek          | Etina Formation | 292.3  | 681.80   | 7.60      | -5.10 | Swanson-Hysell et al. 2010  |
| Location                  | Formation      | Depth  | Height | Temperature | Other Information |
|---------------------------|----------------|--------|--------|-------------|-------------------|
| Enorama Creek             | Etina Formation| 291.2  | 681.83 | 8.30        | -5.10            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 290.2  | 681.86 | 8.10        | -5.00            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 289.1  | 681.89 | 9.00        | -4.70            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 288.1  | 681.92 | 9.00        | -4.70            | Swanson-Hysell et al. 2010 |
| First Spring              | Etina Formation| 287.6  | 681.94 | 6.80        | -10.3            | McKirdy et al. 2001 |
| Enorama Creek             | Etina Formation| 287.1  | 681.95 | 8.40        | -4.50            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 286.3  | 681.98 | 8.90        | -4.40            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 285.1  | 682.01 | 8.30        | -5.00            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 284.3  | 682.03 | 4.50        | -6.40            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 283.3  | 682.06 | 9.00        | -3.80            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 282.3  | 682.09 | 8.60        | -3.70            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 281.2  | 682.13 | 8.90        | -4.50            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 280.0  | 682.16 | 8.10        | -5.40            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 278.7  | 682.20 | 8.90        | -4.20            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 277.5  | 682.24 | 8.30        | -4.20            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 276.3  | 682.27 | 8.90        | -3.50            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 275.3  | 682.30 | 5.60        | -5.40            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 274.0  | 682.34 | 6.10        | -5.20            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 272.6  | 682.38 | 8.20        | -6.70            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 271.2  | 682.42 | 8.60        | -6.40            | Swanson-Hysell et al. 2010 |
| First Spring              | Etina Formation| 270.6  | 682.44 | 3.60        | -9.50            | McKirdy et al. 2001 |
| Enorama Creek             | Etina Formation| 269.5  | 682.47 | 8.20        | -6.50            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 268.5  | 682.50 | 7.00        | -7.40            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 267.7  | 682.53 | 8.20        | -7.00            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 266.4  | 682.56 | 0.40        | -9.20            | Swanson-Hysell et al. 2010 |
| Mt Emily                  | Etina Formation| 264.6  | 682.62 | 8.10        | -12.60           | McKirdy et al. 2001 |
| Enorama Creek             | Etina Formation| 261.8  | 682.70 | 5.40        | -10.70           | Swanson-Hysell et al. 2010 |
| First Spring              | Etina Formation| 221.6  | 683.89 | 9.10        | -8.80            | McKirdy et al. 2001 |
| Enorama Creek             | Etina Formation| 207.4  | 684.31 | 3.50        | -5.50            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 203.7  | 684.42 | 8.30        | -9.60            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 203.2  | 684.44 | 7.90        | -9.00            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 201.2  | 684.49 | 8.00        | -9.90            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 200.2  | 684.52 | 0.20        | -7.30            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 199.9  | 684.53 | 6.60        | -8.50            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 198.8  | 684.57 | 8.50        | -6.90            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 197.8  | 684.60 | 8.60        | -7.80            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 196.6  | 684.63 | 8.30        | -8.20            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 195.8  | 684.65 | 8.40        | -8.50            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 195.0  | 684.68 | 7.50        | -7.90            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 193.4  | 684.73 | 7.80        | -5.50            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 192.0  | 684.77 | 9.00        | -5.80            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 190.9  | 684.80 | 9.00        | -4.20            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 189.9  | 684.83 | 9.00        | -4.70            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 189.4  | 684.84 | 8.90        | -5.60            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 188.4  | 684.87 | 9.10        | -5.00            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 187.3  | 684.91 | 9.10        | -3.30            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 186.4  | 684.93 | 8.40        | -7.20            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 185.4  | 684.96 | 8.20        | -6.90            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 184.4  | 684.99 | 8.20        | -5.50            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 183.7  | 685.01 | 8.70        | -4.80            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 182.7  | 685.04 | 9.40        | -4.40            | Swanson-Hysell et al. 2010 |
| Enorama Creek             | Etina Formation| 181.7  | 685.07 | 9.50        | -5.00            | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina Formation | Depth (m) | Age (Ma) | Error (Ma) | Reference |
|--------------|----------------|----------|----------|-----------|-----------|
| 180.8        | 685.10         | 9.50     | -4.10    | Swanson-Hysell et al. 2010 |
| 179.8        | 685.13         | 9.60     | -3.80    | Swanson-Hysell et al. 2010 |
| 178.6        | 685.16         | 9.60     | -4.20    | Swanson-Hysell et al. 2010 |
| 177.5        | 685.20         | 9.50     | -4.20    | Swanson-Hysell et al. 2010 |
| 176.5        | 685.23         | 9.00     | -4.50    | Swanson-Hysell et al. 2010 |
| 175.5        | 685.26         | 9.40     | -4.40    | Swanson-Hysell et al. 2010 |
| 174.5        | 685.28         | 9.20     | -6.20    | Swanson-Hysell et al. 2010 |
| 173.2        | 685.32         | 9.30     | -6.70    | Swanson-Hysell et al. 2010 |
| 172.2        | 685.35         | 9.30     | -6.20    | Swanson-Hysell et al. 2010 |
| 171.0        | 685.39         | 9.20     | -6.60    | Swanson-Hysell et al. 2010 |
| 169.8        | 685.42         | 8.70     | -6.70    | Swanson-Hysell et al. 2010 |
| 168.8        | 685.45         | 9.40     | -5.60    | Swanson-Hysell et al. 2010 |
| 167.4        | 685.49         | 9.60     | -4.90    | Swanson-Hysell et al. 2010 |
| 166.1        | 685.53         | 9.50     | -4.90    | Swanson-Hysell et al. 2010 |
| 165.7        | 685.55         | 9.50     | -4.60    | Swanson-Hysell et al. 2010 |
| 163.6        | 685.61         | 9.50     | -4.30    | Swanson-Hysell et al. 2010 |
| 163.5        | 685.61         | 9.70     | -4.30    | Swanson-Hysell et al. 2010 |
| 164.3        | 685.64         | 9.60     | -4.10    | Swanson-Hysell et al. 2010 |
| 161.4        | 685.67         | 9.70     | -4.00    | Swanson-Hysell et al. 2010 |
| 160.0        | 685.71         | 9.80     | -4.90    | Swanson-Hysell et al. 2010 |
| 158.7        | 685.75         | 9.90     | -4.50    | Swanson-Hysell et al. 2010 |
| 157.6        | 685.79         | 8.70     | -6.00    | Swanson-Hysell et al. 2010 |
| 156.6        | 685.81         | 8.10     | -6.10    | Swanson-Hysell et al. 2010 |
| 155.5        | 685.85         | 7.90     | -6.80    | Swanson-Hysell et al. 2010 |
| 154.6        | 685.87         | 9.20     | -9.40    | Swanson-Hysell et al. 2010 |
| 153.4        | 685.91         | 8.90     | -9.20    | Swanson-Hysell et al. 2010 |
| 152.4        | 685.94         | 8.80     | -10.20   | Swanson-Hysell et al. 2010 |
| 151.5        | 685.97         | 8.60     | -10.40   | Swanson-Hysell et al. 2010 |
| 149.5        | 686.02         | 8.60     | -10.40   | Swanson-Hysell et al. 2010 |
| 147.1        | 686.10         | 8.30     | -10.30   | Swanson-Hysell et al. 2010 |
| 146.3        | 686.12         | 9.60     | -10.40   | Swanson-Hysell et al. 2010 |
| 145.1        | 686.16         | 9.90     | -9.10    | Swanson-Hysell et al. 2010 |
| 143.9        | 686.19         | 9.70     | -8.20    | Swanson-Hysell et al. 2010 |
| 142.7        | 686.23         | 9.80     | -6.60    | Swanson-Hysell et al. 2010 |
| 141.3        | 686.27         | 9.40     | -8.40    | Swanson-Hysell et al. 2010 |
| 140.0        | 686.31         | 9.80     | -8.30    | Swanson-Hysell et al. 2010 |
| 138.8        | 686.34         | 6.00     | -9.70    | Swanson-Hysell et al. 2010 |
| 131.2        | 686.57         | 7.30     | -11.00   | Swanson-Hysell et al. 2010 |
| 130.8        | 686.58         | 7.80     | -10.80   | Swanson-Hysell et al. 2010 |
| 116.4        | 687.00         | 5.80     | -11.00   | Swanson-Hysell et al. 2010 |
| 115.2        | 687.04         | 7.30     | -11.10   | Swanson-Hysell et al. 2010 |
| 114.3        | 687.07         | 5.50     | -10.70   | Swanson-Hysell et al. 2010 |
| 112.3        | 687.13         | 6.90     | -9.00    | Swanson-Hysell et al. 2010 |
| 111.4        | 687.15         | 6.20     | -10.60   | Swanson-Hysell et al. 2010 |
| 109.7        | 687.20         | 5.90     | -8.00    | Swanson-Hysell et al. 2010 |
| 108.7        | 687.23         | 6.70     | -11.60   | Swanson-Hysell et al. 2010 |
| 107.7        | 687.26         | 6.30     | -10.30   | Swanson-Hysell et al. 2010 |
| 106.0        | 687.31         | 6.80     | -10.90   | Swanson-Hysell et al. 2010 |
| 105.0        | 687.34         | 8.20     | -10.60   | Swanson-Hysell et al. 2010 |
| 103.9        | 687.37         | 8.50     | -10.60   | Swanson-Hysell et al. 2010 |
| 103.6        | 687.38         | 5.90     | -14.10   | McKirdy et al. 2001 |
| 102.2        | 687.42         | 8.50     | -10.60   | Swanson-Hysell et al. 2010 |
| Location                  | Formation          | Level (m) | Ma  | $\delta^{13}$C$_{\text{carb}}$ ‰ | $\delta^{18}$O$_{\text{carb}}$ ‰ | Reference                  |
|--------------------------|--------------------|-----------|-----|---------------------------------|---------------------------------|-----------------------------|
| Parachilna Gorge         | Woodendina Dolomite| 5716.0    | 516.72 | -3.48                           | -5.70                           | Tucker 1991                 |
| Parachilna Gorge         | Woodendina Dolomite| 5712.0    | 516.84 | -3.35                           | -7.10                           | Tucker 1991                 |
| Parachilna Gorge         | Woodendina Dolomite| 5684.0    | 517.68 | -1.62                           | -6.00                           | Tucker 1991                 |

Note: Levels are in combined section of Mawson (1939a, 1939b). New analyses are by Jim Palandri of University of Oregon laboratory of Ilya Bindeman. All analyses are to the Vienna Peedee Belemnite standard NGS 19. Errors (2σ) are from 10 replicate analyses of the sample.

Table S6. Stable isotopic analyses (%) of palaeokarst carbonate, Flinders Ranges.
| Location                        | Formation                     | Depth (m) | Age (Ma) | Reference  |
|--------------------------------|-------------------------------|-----------|----------|------------|
| Parachilna Gorge               | Woodendina Dolomite           | 5678.0    | 517.85   | -2.72      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5671.0    | 518.06   | -3.79      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5664.0    | 518.27   | -5.05      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5657.0    | 518.48   | -5.88      | Tucker 1991 |
| Fountain Spring                | Woodendina Dolomite           | 5653.0    | 519.19   | -1.12      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5633.0    | 519.37   | -3.08      | Tucker 1991 |
| Fountain Spring                | Woodendina Dolomite           | 5627.0    | 519.49   | -1.37      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5623.0    | 519.69   | -4.72      | Tucker 1991 |
| Fountain Spring                | Woodendina Dolomite           | 5613.0    | 519.78   | -1.72      | Tucker 1991 |
| Fountain Spring                | Woodendina Dolomite           | 5604.0    | 520.05   | -2.08      | Tucker 1991 |
| Fountain Spring                | Woodendina Dolomite           | 5603.0    | 520.08   | -3.07      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5599.0    | 520.26   | -3.33      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5596.0    | 520.29   | -4.21      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5594.0    | 520.35   | -3.97      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5591.0    | 520.44   | -3.98      | Tucker 1991 |
| Wirrealpa Hill                 | Wilkawilla Limestone          | 5583.0    | 520.67   | -2.44      | Singh 1986  |
| Wirrealpa Hill                 | Wilkawilla Limestone          | 5583.0    | 520.67   | -5.05      | Singh 1986  |
| Wirrealpa Hill                 | Wilkawilla Limestone          | 5583.0    | 520.67   | -4.14      | Singh 1986  |
| Wirrealpa Hill                 | Wilkawilla Limestone          | 5583.0    | 520.67   | -3.82      | Singh 1986  |
| Wirrealpa Hill                 | Wilkawilla Limestone          | 5583.0    | 520.67   | -2.36      | Singh 1986  |
| Wirrealpa Hill                 | Wilkawilla Limestone          | 5583.0    | 520.67   | -7.35      | Singh 1986  |
| Parachilna Gorge               | Woodendina Dolomite           | 5582.0    | 520.70   | -4.22      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5580.0    | 520.76   | -4.98      | Tucker 1991 |
| Parachilna Gorge               | Woodendina Dolomite           | 5560.0    | 521.36   | -4.81      | Tucker 1991 |
| Parachilna Gorge               | Parachilna Formation          | 5556.0    | 521.48   | -4.76      | Tucker 1991 |
| Parachilna Gorge               | Parachilna Formation          | 5545.0    | 521.80   | -3.16      | Tucker 1991 |
| Parachilna Gorge               | Parachilna Formation          | 5541.0    | 521.92   | -1.47      | Tucker 1991 |
| Parachilna Gorge               | Parachilna Formation          | 5530.0    | 522.25   | -2.85      | Tucker 1991 |
| Parachilna Gorge               | Parachilna Formation          | 5526.0    | 522.37   | -2.01      | Tucker 1991 |
| First Hill                     | Wonoka Formation              | 4162.7    | 562.86   | -3.04      | Calver 2000 |
| First Hill                     | Wonoka Formation              | 4144.2    | 563.41   | -4.18      | Calver 2000 |
| North Mt Goddard               | Wonoka Formation              | 4133.1    | 563.74   | -4.81      | Urlwin 1992 |
| First Hill                     | Wonoka Formation              | 4123.8    | 564.01   | -4.68      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -6.74      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -7.18      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -7.33      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -7.32      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -1.99      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -7.52      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -7.05      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -6.77      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -7.85      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -7.43      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -8.18      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -7.85      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -6.80      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -9.00      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -6.74      | Calver 2000 |
| Umberatana                     | Wonoka palaeocanyon           | 4116.0    | 564.24   | -4.40      | Eickoff et al. 1988 |

The table lists various geological formations and their depths and ages, along with references to the original works.
| Location                     | Formation          | Longitude | Latitude | Elevation | Reference     |
|------------------------------|--------------------|-----------|----------|-----------|---------------|
| Umberatana                   | Wonoka palaeocanyon| 41.16     | 56.24    | -2.10     | Eickoff et al. 1988 |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -7.76     | Ayliffe 1992   |
| Richmond Valley              | Wonoka palaeocanyon| 41.16     | 56.24    | -7.45     | Ayliffe 1992   |
| Waukarie Creek               | Wonoka palaeocanyon| 41.16     | 56.24    | -7.89     | Ayliffe 1992   |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -9.90     | Ayliffe 1992   |
| Richmond Valley              | Wonoka palaeocanyon| 41.16     | 56.24    | -7.37     | Ayliffe 1992   |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -7.36     | Ayliffe 1992   |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -7.48     | Ayliffe 1992   |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -7.53     | Ayliffe 1992   |
| Waukarie Creek               | Wonoka palaeocanyon| 41.16     | 56.24    | -7.77     | Ayliffe 1992   |
| Bunyeroo Gorge               | Wonoka palaeocanyon| 41.16     | 56.24    | -8.09     | Ayliffe 1992   |
| Richmond Valley              | Wonoka palaeocanyon| 41.16     | 56.24    | -7.55     | Ayliffe 1992   |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -8.03     | Ayliffe 1992   |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -7.64     | Ayliffe 1992   |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -7.92     | Ayliffe 1992   |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -8.02     | Ayliffe 1992   |
| Richmond Valley              | Wonoka palaeocanyon| 41.16     | 56.24    | -7.98     | Ayliffe 1992   |
| Waukarie Creek               | Wonoka palaeocanyon| 41.16     | 56.24    | -8.41     | Ayliffe 1992   |
| Pichi Richi Pass             | Wonoka palaeocanyon| 41.16     | 56.24    | -7.80     | Ayliffe 1992   |
| North Mt Goddard             | Wonoka Formation   | 40.83     | 56.22    | -5.16     | Urlwin 1992    |
| Bunyeroo Gorge               | Wonoka Formation   | 40.66     | 56.72    | -4.00     | Calver 2000    |
| Bunyeroo Gorge               | Wonoka Formation   | 40.60     | 56.90    | -5.25     | Jansyn 1990    |
| Bunyeroo Gorge               | Wonoka Formation   | 40.44     | 56.38    | -6.03     | Calver 2000    |
| Bunyeroo Gorge               | Wonoka Formation   | 40.33     | 56.69    | -5.74     | Jansyn 1990    |
| Bunyeroo Gorge               | Wonoka Formation   | 40.20     | 56.09    | -6.27     | Calver 2000    |
| Bunyeroo Gorge               | Wonoka Formation   | 40.06     | 56.48    | -6.87     | Jansyn 1990    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.99     | 56.70    | -6.36     | Calver 2000    |
| North Mt Goddard             | Wonoka Formation   | 39.96     | 56.75    | -6.04     | Urlwin 1992    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.87     | 56.06    | -6.82     | Calver 2000    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.80     | 56.28    | -6.77     | Jansyn 1990    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.78     | 56.33    | -7.08     | Calver 2000    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.53     | 56.07    | -7.36     | Jansyn 1990    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.52     | 56.09    | -7.74     | Calver 2000    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.27     | 56.86    | -6.51     | Jansyn 1990    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.20     | 57.04    | -7.77     | Calver 2000    |
| Black Range Springs          | Wonoka Formation   | 39.20     | 57.06    | -4.91     | Urlwin 1992    |
| North Mt Goddard             | Wonoka Formation   | 39.18     | 57.12    | -6.43     | Urlwin 1992    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.03     | 57.57    | -7.45     | Calver 2000    |
| Black Range Springs          | Wonoka Formation   | 39.01     | 57.63    | -6.30     | Urlwin 1992    |
| Bunyeroo Gorge               | Wonoka Formation   | 39.00     | 57.65    | -7.62     | Jansyn 1990    |
| Bunyeroo Gorge               | Wonoka Formation   | 38.85     | 57.09    | -7.67     | Calver 2000    |
| Bunyeroo Gorge               | Wonoka Formation   | 38.73     | 57.44    | -8.62     | Jansyn 1990    |
| Black Range Springs          | Wonoka Formation   | 38.69     | 57.58    | -6.14     | Urlwin 1992    |
| Bunyeroo Gorge               | Wonoka Formation   | 38.53     | 57.04    | -7.72     | Calver 2000    |
| Bunyeroo Gorge               | Wonoka Formation   | 38.47     | 57.23    | -7.79     | Jansyn 1990    |
| North Mt Goddard             | Wonoka Formation   | 38.28     | 57.80    | -7.54     | Urlwin 1992    |
| Devils Peak                  | Wonoka Formation   | 38.21     | 57.30    | -1.82     | Ayliffe 1992   |
| Devils Peak                  | Wonoka Formation   | 38.21     | 57.00    | -0.89     | Ayliffe 1992   |
| Bunyeroo Gorge               | Wonoka Formation   | 38.20     | 57.02    | -7.41     | Jansyn 1990    |
| Bunyeroo Gorge               | Wonoka Formation   | 38.14     | 57.20    | -7.45     | Calver 2000    |
| Bunyeroo Gorge               | Wonoka Formation   | 37.97     | 57.70    | -7.49     | Calver 2000    |
| Location                  | Formation         | X   | Y   | Z    | W    | Year | Author   |
|---------------------------|-------------------|-----|-----|------|------|------|----------|
| Bunyeroo Gorge            | Wonoka Formation  | 3794.0 | 573.81 | -7.64 | -12.48 | Jansyn 1990 |
| Devils Peak               | Wonoka Formation  | 3784.2 | 574.10 | -1.17 | -12.13 | Ayliffe 1992 |
| Bunyeroo Gorge            | Wonoka Formation  | 3767.4 | 574.60 | -7.62 | -12.71 | Calver 2000 |
| Devils Peak               | Wonoka Formation  | 3759.1 | 574.85 | -2.49 | -11.56 | Ayliffe 1992 |
| Devils Peak               | Wonoka Formation  | 3759.1 | 574.85 | -2.50 | -11.39 | Ayliffe 1992 |
| Black Range Springs       | Wonoka Formation  | 3753.1 | 575.02 | -6.94 | -14.15 | Uilwin 1992 |
| Bunyeroo Gorge            | Wonoka Formation  | 3740.8 | 575.39 | -7.56 | -12.79 | Jansyn 1990 |
| Bunyeroo Gorge            | Wonoka Formation  | 3738.6 | 575.45 | -7.51 | -13.12 | Calver 2000 |
| Devils Peak               | Wonoka Formation  | 3717.1 | 576.09 | -0.81 | -7.51  | Ayliffe 1992 |
| Devils Peak               | Wonoka Formation  | 3717.1 | 576.09 | -1.37 | -10.45 | Ayliffe 1992 |
| Bunyeroo Gorge            | Wonoka Formation  | 3714.2 | 576.18 | -7.42 | -12.84 | Jansyn 1990 |
| Bunyeroo Gorge            | Wonoka Formation  | 3708.8 | 576.34 | -8.00 | -13.19 | Calver 2000 |
| Devils Peak               | Wonoka Formation  | 3702.6 | 576.52 | -1.12 | -12.56 | Ayliffe 1992 |
| Bunyeroo Gorge            | Wonoka Formation  | 3696.4 | 576.71 | -7.59 | -12.89 | Jansyn 1990 |
| Bunyeroo Gorge            | Wonoka Formation  | 3687.5 | 576.97 | -7.66 | -12.64 | Jansyn 1990 |
| Bunyeroo Gorge            | Wonoka Formation  | 3686.7 | 577.00 | -8.10 | -13.70 | Calver 2000 |
| Bunyeroo Gorge            | Wonoka Formation  | 3686.7 | 577.00 | -8.00 | -13.53 | Calver 2000 |
| Bunyeroo Gorge            | Wonoka Formation  | 3686.7 | 577.00 | -7.98 | -13.54 | Calver 2000 |
| Bunyeroo Gorge            | Wonoka Formation  | 3675.1 | 577.34 | -8.26 | -13.89 | Calver 2000 |
| First Hill                | Wonoka Formation  | 3663.7 | 577.68 | -7.71 | -13.24 | Calver 2000 |
| Bunyeroo Gorge            | Wonoka Formation  | 3660.9 | 577.76 | -7.52 | -12.89 | Jansyn 1990 |
| Bunyeroo Gorge            | Wonoka Formation  | 3660.0 | 577.79 | -8.52 | -13.89 | Calver 2000 |
| Black Range Springs       | Wonoka Formation  | 3655.1 | 577.93 | -6.30 | -14.20 | Uilwin 1992 |
| Devils Peak               | Wonoka Formation  | 3655.1 | 577.93 | -3.91 | -10.89 | Ayliffe 1992 |
| Bunyeroo Gorge            | Wonoka Formation  | 3636.1 | 578.50 | -9.13 | -14.21 | Calver 2000 |
| Bunyeroo Gorge            | Wonoka Formation  | 3634.3 | 578.55 | -7.92 | -13.97 | Jansyn 1990 |
| Devils Peak               | Wonoka Formation  | 3631.1 | 578.65 | -3.87 | -12.02 | Ayliffe 1992 |
| First Hill                | Wonoka Formation  | 3625.6 | 578.81 | -7.95 | -12.88 | Calver 2000 |
| Bunyeroo Gorge            | Wonoka Formation  | 3625.5 | 578.81 | -9.47 | -14.52 | Calver 2000 |
| Devils Peak               | Wonoka Formation  | 3615.1 | 579.12 | -4.19 | -11.02 | Ayliffe 1992 |
| Mayo Hut                  | Wonoka Formation  | 3613.1 | 579.18 | -2.16 | -6.69  | Dixon 1999 |
| Mayo Hut                  | Wonoka Formation  | 3613.1 | 579.18 | -7.27 | -10.86 | Dixon 1999 |
| Mayo Hut                  | Wonoka Formation  | 3613.1 | 579.18 | -2.60 | -7.07  | Dixon 1999 |
| Bunyeroo Gorge            | Wonoka Formation  | 3613.0 | 579.18 | -10.07 | -14.62 | Calver 2000 |
| Devils Peak               | Wonoka Formation  | 3600.5 | 579.56 | -5.80 | -12.73 | Ayliffe 1992 |
| Bunyeroo Gorge            | Wonoka Formation  | 3598.8 | 579.60 | -11.19 | -14.98 | Calver 2000 |
| Black Range Springs       | Wonoka Formation  | 3583.1 | 580.07 | -7.55 | -14.89 | Uilwin 1992 |
| First Hill                | Wonoka Formation  | 3571.8 | 580.41 | -8.85 | -13.83 | Calver 2000 |
| Mayo Hut                  | Wonoka Formation  | 3564.1 | 580.64 | -1.46 | -7.44  | Dixon 1999 |
| Mayo Hut                  | Wonoka Formation  | 3564.1 | 580.64 | -7.73 | -6.62  | Dixon 1999 |
| Mayo Hut                  | Wonoka Formation  | 3564.1 | 580.64 | -2.01 | -7.56  | Dixon 1999 |
| Devils Peak               | Wonoka Formation  | 3560.9 | 580.73 | -7.45 | -14.11 | Ayliffe 1992 |
| SCYW1a core               | Wonoka Formation  | 3551.4 | 581.01 | -1.93 | -7.93  | Calver 2000 |
| SCYW1a core               | Wonoka Formation  | 3551.4 | 581.01 | -1.95 | -7.60  | Calver 2000 |
| First Hill                | Wonoka Formation  | 3529.2 | 581.67 | -10.46 | -14.25 | Calver 2000 |
| Mayo Hut                  | Wonoka Formation  | 3529.2 | 581.67 | -9.77 | -13.35 | Calver 2000 |
| Mayo Hut                  | Wonoka Formation  | 3526.1 | 581.77 | -3.88 | -8.88  | Dixon 1999 |
| Mayo Hut                  | Wonoka Formation  | 3526.1 | 581.77 | -6.74 | -13.56 | Dixon 1999 |
| Mayo Hut                  | Wonoka Formation  | 3526.1 | 581.77 | -4.00 | -9.17  | Dixon 1999 |
| Bunyeroo Gorge            | Wonoka Formation  | 3519.5 | 581.96 | -3.46 | -7.90  | Calver 2000 |
| Pichi Richi Pass          | Wonoka Formation  | 3518.1 | 582.00 | -3.41 | -8.27  | Dixon 1999 |
| Location              | Formation          | Depth (m) | Age (Ma) | Error (Ma) | Reference  |
|-----------------------|--------------------|-----------|----------|------------|------------|
| Pichi Richi Pass      | Wonoka Formation   | 3518.1    | 582.00   | -6.76      | Dixon 1999 |
| Pamatta Pass          | Wonoka Formation   | 3513.1    | 582.15   | -9.86      | Higgins 1997 |
| Pamatta Pass          | Wonoka Formation   | 3513.1    | 582.15   | -7.46      | Higgins 1997 |
| Pamatta Pass          | Wonoka Formation   | 3513.1    | 582.15   | -7.45      | Higgins 1997 |
| Pamatta Pass          | Wonoka Formation   | 3513.1    | 582.15   | -8.05      | Higgins 1997 |
| Pamatta Pass          | Wonoka Formation   | 3513.1    | 582.15   | -8.31      | Higgins 1997 |
| Pamatta Pass          | Wonoka Formation   | 3513.1    | 582.15   | -7.66      | Higgins 1997 |
| First Hill            | Wonoka Formation   | 3511.5    | 582.20   | -10.93     | Calver 2000 |
| First Hill            | Wonoka Formation   | 3511.5    | 582.20   | -11.33     | Calver 2000 |
| Devils Peak           | Wonoka Formation   | 3508.2    | 582.30   | -7.35      | Ayliffe 1992 |
| Mayo Hut              | Wonoka Formation   | 3466.1    | 583.55   | -6.00      | Dixon 1999 |
| First Hill            | Wonoka Formation   | 3453.2    | 583.93   | -2.90      | Calver 2000 |
| Bunyeroo Gorge        | Bunyeroo Formation | 3430.3    | 584.61   | -2.43      | Jansyn 1990 |
| BWM1a-1 core          | Nuccaleena Formation | 1887.1 | 630.44   | -2.85      | Calver 2000 |
| BWM1a-1 core          | Nuccaleena Formation | 1887.0 | 630.45   | -2.51      | Calver 2000 |
| SCYW1a core           | Nuccaleena Formation | 1882.7 | 630.57   | -3.06      | Calver 2000 |
| SCYW1a core           | Nuccaleena Formation | 1882.7 | 630.57   | -3.06      | Calver 2000 |
| Umberatana            | Nuccaleena Formation | 1882.2 | 630.59   | -3.75      | Calver 2000 |
| Parachilna Gorge      | Nuccaleena Formation | 1882.0 | 630.59   | -2.02      | Smith 2001 |
| Parachilna Gorge      | Nuccaleena Formation | 1880.7 | 630.63   | -1.99      | Smith 2001 |
| BWM1a-1 core          | Nuccaleena Formation | 1879.5 | 630.67   | -1.92      | Smith 2001 |
| Parachilna Gorge      | Nuccaleena Formation | 1879.0 | 630.68   | -2.19      | Smith 2001 |
| Parachilna Gorge      | Nuccaleena Formation | 1879.0 | 630.68   | -2.38      | Smith 2001 |
| Parachilna Gorge      | Nuccaleena Formation | 1878.6 | 630.70   | -1.83      | Smith 2001 |
| Parachilna Gorge      | Nuccaleena Formation | 1878.2 | 630.71   | -1.98      | Smith 2001 |
| Enorama Creek GSSP    | Nuccaleena Formation | 1877.4 | 630.73   | -3.30      | Knoll et al. 2006 |
| Enorama Creek GSSP    | Nuccaleena Formation | 1877.4 | 630.73   | -3.50      | Knoll et al. 2006 |
| Parachilna Gorge      | Nuccaleena Formation | 1877.3 | 630.73   | -2.12      | Smith 2001 |
| Parachilna Gorge      | Nuccaleena Formation | 1876.8 | 630.75   | -1.83      | Smith 2001 |
| Umberatana            | Nuccaleena Formation | 1876.2 | 630.77   | -2.59      | Calver 2000 |
| Parachilna Gorge      | Nuccaleena Formation | 1876.0 | 630.77   | -1.48      | Smith 2001 |
| Enorama Creek GSSP    | Nuccaleena Formation | 1875.5 | 630.79   | -2.80      | Knoll et al. 2006 |
| BWM1a-1 core          | Nuccaleena Formation | 1875.4 | 630.79   | -1.43      | Calver 2000 |
| Enorama Creek GSSP    | Nuccaleena Formation | 1875.0 | 630.80   | -2.70      | Knoll et al. 2006 |
| Enorama Creek GSSP    | Nuccaleena Formation | 1874.9 | 630.81   | -2.60      | Knoll et al. 2006 |
| Parachilna Gorge      | Nuccaleena Formation | 1874.4 | 630.82   | -1.65      | Smith 2001 |
| Enorama Creek GSSP    | Nuccaleena Formation | 1874.0 | 630.83   | -2.60      | Knoll et al. 2006 |
| Parachilna Gorge      | Nuccaleena Formation | 1873.7 | 630.84   | -1.58      | Smith 2001 |
| Parachilna Gorge      | Nuccaleena Formation | 1873.5 | 630.85   | -1.54      | Smith 2001 |
| Parachilna Gorge      | Nuccaleena Formation | 1873.5 | 630.85   | -1.31      | Smith 2001 |
| Enorama Creek GSSP    | Nuccaleena Formation | 1873.3 | 630.85   | -2.60      | Knoll et al. 2006 |
| Parachilna Gorge      | Nuccaleena Formation | 1873.2 | 630.86   | -1.06      | Smith 2001 |
| Enorama Creek GSSP    | Nuccaleena Formation | 1873.1 | 630.86   | -2.40      | Knoll et al. 2006 |
| Parachilna Gorge      | Nuccaleena Formation | 1872.5 | 630.88   | -1.65      | White 2001 |
| Enorama Creek GSSP    | Nuccaleena Formation | 1872.3 | 630.88   | -2.50      | Knoll et al. 2006 |
| Parachilna Gorge      | Nuccaleena Formation | 1872.3 | 630.88   | -1.74      | Smith 2001 |
| Umberatana            | Nuccaleena Formation | 1872.2 | 630.89   | -2.24      | Calver 2000 |
| BWM1a-1 core          | Nuccaleena Formation | 1871.7 | 630.90   | -1.27      | Calver 2000 |
| Parachilna Gorge      | Nuccaleena Formation | 1871.4 | 630.91   | -1.45      | Smith 2001 |
| Location             | Formation      | Depth (m)  | Thickness (m) | Juxtaposition | Author(s)                |
|----------------------|----------------|------------|---------------|---------------|--------------------------|
| Parachilna Gorge     | Nuccaleena     | 1871.2     | -2.20         | n/a           | Knoll et al. 2006        |
| UB17 core            | Nuccaleena     | 1870.4     | -1.28         | -8.18         | Calver 2000              |
| UB17 core            | Nuccaleena     | 1862.9     | -2.78         | -8.62         | Calver 2000              |
| Bunyeroo Gorge       | Nuccaleena     | 1862.3     | -3.49         | -8.24         | Calver 2000              |
| Bunyeroo Gorge       | Nuccaleena     | 1861.2     | -3.07         | -8.28         | Calver 2000              |
| Bunyeroo Gorge       | Nuccaleena     | 1859.7     | -2.76         | -7.76         | Calver 2000              |
| Bunyeroo Gorge       | Nuccaleena     | 1857.0     | -2.44         | -8.37         | Calver 2000              |
| Bunyeroo Gorge       | Nuccaleena     | 1856.1     | -2.25         | -8.23         | Calver 2000              |
| Bunyeroo Gorge       | Nuccaleena     | 1855.2     | -1.97         | -7.84         | Calver 2000              |
| Bulls Gap            | Trezona        | 1846.0     | -2.70         | -11.03        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1846.0     | -2.81         | -11.26        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1846.0     | -2.90         | -13.89        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1846.0     | -4.01         | -10.81        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1814.0     | -3.89         | -10.67        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1814.0     | -3.52         | -11.10        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1814.0     | -3.12         | -8.50         | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1814.0     | -3.96         | -14.74        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1814.0     | -3.84         | -9.85         | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1814.0     | -3.00         | -13.25        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1757.0     | 5.00          | -9.60         | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1752.0     | -6.45         | -12.64        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1728.6     | -3.50         | -12.70        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1728.4     | -3.40         | -12.60        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1727.4     | -3.40         | -12.50        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1726.4     | -3.80         | -12.20        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1725.9     | -3.60         | -11.10        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1725.4     | -3.40         | -11.00        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1724.3     | -3.30         | -10.90        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1723.8     | -3.30         | -10.90        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1723.5     | -3.30         | -10.80        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1723.2     | -3.30         | -10.60        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1722.2     | -3.20         | -10.60        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1721.4     | -3.40         | -10.70        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1720.6     | -3.50         | -9.60         | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1719.7     | -3.10         | -10.70        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1718.7     | -2.90         | -10.60        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1718.0     | -3.50         | -10.80        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1716.6     | -3.30         | -10.20        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1715.4     | -3.10         | -10.10        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1714.5     | -3.30         | -10.00        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1713.7     | -3.10         | -10.40        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1712.6     | -3.40         | -10.40        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1712.0     | -4.30         | -10.50        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1711.0     | -3.70         | -10.20        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1709.9     | -3.60         | -10.20        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1708.9     | -3.60         | -10.40        | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1707.9     | -3.40         | -9.30         | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1706.9     | -3.90         | -9.80         | Swanson-Hysell et al. 2010 |
| Enorama Creek        | Trezona        | 1706.0     | -7.30         | -11.02        | Singh 1986; McKirdy et al. 2001 |
| Enorama Creek        | Trezona        | 1706.0     | -7.11         | -12.01        | Singh 1986; McKirdy et al. 2001 |
| Location         | Formation          | Depth (m) | Latitude | Longitude | Reference                                      |
|------------------|--------------------|-----------|----------|-----------|-----------------------------------------------|
| Enorama Creek    | Trezona Formation  | 1706.0    | 635.82   | -7.23     | Singh 1986; McKirdy et al. 2001               |
| Enorama Creek    | Trezona Formation  | 1706.0    | 635.82   | -7.35     | Singh 1986; McKirdy et al. 2001               |
| Werta            | Trezona Formation  | 1706.0    | 635.82   | -7.84     | Singh 1986; McKirdy et al. 2001               |
| Enorama Creek    | Trezona Formation  | 1705.9    | 635.82   | -3.60     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1704.9    | 635.85   | -3.50     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1704.2    | 635.88   | -3.70     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1703.0    | 635.91   | -3.60     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1702.0    | 635.94   | -3.60     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1701.0    | 635.97   | -3.70     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1699.3    | 636.02   | -3.80     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1698.1    | 636.06   | -3.70     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1696.7    | 636.10   | -3.70     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1695.5    | 636.13   | -3.90     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1694.5    | 636.16   | -4.10     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1693.5    | 636.19   | -4.10     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1692.2    | 636.23   | -4.20     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1691.5    | 636.25   | -4.20     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1691.0    | 636.27   | -4.10     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1690.3    | 636.29   | -4.10     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1689.1    | 636.32   | -4.70     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1688.1    | 636.35   | -4.20     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1686.3    | 636.41   | -4.70     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1685.8    | 636.42   | -4.50     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1685.1    | 636.44   | -4.50     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1683.9    | 636.48   | -4.90     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1681.9    | 636.54   | -4.50     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1681.7    | 636.54   | -4.50     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1681.4    | 636.55   | -5.20     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1680.5    | 636.58   | -4.50     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1679.5    | 636.61   | -4.70     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1678.1    | 636.65   | -4.60     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1676.8    | 636.69   | -4.90     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1674.9    | 636.75   | -5.10     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1673.9    | 636.75   | -5.30     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1673.1    | 636.80   | -5.50     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1672.1    | 636.83   | -4.80     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1671.2    | 636.86   | -5.30     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1670.5    | 636.88   | -4.80     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1669.8    | 636.90   | -4.80     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1669.1    | 636.92   | -5.00     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1668.1    | 636.95   | -4.70     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1666.6    | 636.99   | -3.50     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1665.5    | 637.02   | -3.40     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1664.5    | 637.05   | -3.40     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1663.7    | 637.08   | -5.10     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1663.6    | 637.08   | -6.20     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1662.1    | 637.13   | -5.60     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1661.1    | 637.16   | -5.70     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1660.1    | 637.19   | -5.20     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1658.9    | 637.22   | -5.50     | Swanson-Hysell et al. 2010                    |
| Enorama Creek    | Trezona Formation  | 1658.7    | 637.23   | -5.30     | Swanson-Hysell et al. 2010                    |
| Enorama Creek Trezona Formation | 1657.8 | 637.25 | -5.50 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1656.7 | 637.29 | -5.40 | -8.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1655.8 | 637.31 | -5.50 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1654.6 | 637.35 | -5.50 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1654.1 | 637.36 | -5.50 | -9.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1653.8 | 637.37 | -5.90 | -9.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1652.1 | 637.42 | -5.70 | -8.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1651.1 | 637.45 | -5.70 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1650.3 | 637.48 | -5.90 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1650.0 | 637.49 | -5.90 | -9.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1649.5 | 637.50 | -5.80 | -9.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1648.7 | 637.52 | -5.60 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1647.6 | 637.56 | -5.50 | -9.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1646.7 | 637.58 | -5.70 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1645.4 | 637.62 | -5.90 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1644.0 | 637.66 | -6.10 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1643.3 | 637.68 | -6.10 | -9.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1642.3 | 637.71 | -6.20 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1641.6 | 637.73 | -6.20 | -9.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1640.6 | 637.76 | -5.80 | -8.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1639.4 | 637.80 | -5.90 | -8.80 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1638.2 | 637.84 | -5.70 | -8.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1638.0 | 637.84 | -5.90 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1637.6 | 637.85 | -5.90 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1636.0 | 637.90 | -5.80 | -9.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1634.8 | 637.94 | -6.00 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1633.5 | 637.98 | -6.00 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1632.4 | 638.01 | -6.20 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1632.3 | 638.01 | -6.00 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1632.1 | 638.02 | -6.30 | -9.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1631.1 | 638.05 | -6.10 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1630.1 | 638.08 | -6.10 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1629.4 | 638.10 | -6.10 | -9.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1628.4 | 638.13 | -6.40 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1627.5 | 638.15 | -6.40 | -9.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1626.8 | 638.17 | -6.40 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1625.4 | 638.22 | -6.90 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1624.6 | 638.24 | -6.30 | -9.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1624.3 | 638.25 | -6.40 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1623.4 | 638.28 | -6.50 | -9.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1622.7 | 638.30 | -6.50 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1619.9 | 638.38 | -6.20 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1619.3 | 638.40 | -6.40 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1618.0 | 638.44 | -6.70 | -9.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1617.5 | 638.45 | -6.60 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1616.9 | 638.47 | -6.60 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1615.5 | 638.51 | -6.70 | -9.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1614.7 | 638.53 | -6.70 | -9.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1614.2 | 638.55 | -6.80 | -9.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1613.7 | 638.56 | -6.80 | -9.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1613.4 | 638.57 | -7.30 | -9.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1612.7 | 638.59 | -7.40 | -7.60 | Swanson-Hysell et al. 2010 |
| Formation         | Depth  | Age   | -Dw | -Sw  | Author                      |
|------------------|--------|-------|-----|------|----------------------------|
| Enorama Creek Trezona Formation | 1612.0 | 638.61 | -7.30 | -8.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1610.8 | 638.65 | -7.40 | -8.80 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1609.2 | 638.70 | -7.70 | -8.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1607.2 | 638.76 | -7.90 | -8.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1605.3 | 638.81 | -8.60 | -10.00 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1599.7 | 638.98 | -9.00 | -11.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1596.6 | 639.07 | -9.20 | -11.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1595.6 | 639.10 | -9.40 | -11.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1595.1 | 639.12 | -9.60 | -11.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1594.0 | 639.15 | -9.80 | -11.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1593.8 | 639.15 | -10.00 | -11.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1593.0 | 639.18 | -10.20 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1592.2 | 639.20 | -10.40 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1591.2 | 639.23 | -10.60 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1590.1 | 639.26 | -10.80 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1589.5 | 639.28 | -11.00 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1588.6 | 639.31 | -11.20 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1587.8 | 639.33 | -11.40 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1586.8 | 639.36 | -11.60 | -11.70 | Swanson-Hysell et al. 2010 |
| Brachina Road Trezona Formation | 1586.0 | 639.39 | -11.80 | -11.70 | Swanson-Hysell et al. 2010 |
| Brachina Road Trezona Formation | 1585.6 | 639.40 | -12.00 | -11.70 | Swanson-Hysell et al. 2010 |
| Brachina Road Trezona Formation | 1584.8 | 639.42 | -12.20 | -11.70 | Swanson-Hysell et al. 2010 |
| Brachina Road Trezona Formation | 1584.0 | 639.45 | -12.40 | -11.70 | Swanson-Hysell et al. 2010 |
| Brachina Road Trezona Formation | 1583.6 | 639.46 | -12.60 | -11.70 | Swanson-Hysell et al. 2010 |
| Brachina Road Trezona Formation | 1582.8 | 639.48 | -12.80 | -11.70 | Swanson-Hysell et al. 2010 |
| Brachina Road Trezona Formation | 1581.8 | 639.51 | -13.00 | -11.70 | Swanson-Hysell et al. 2010 |
| Brachina Road Trezona Formation | 1580.1 | 639.53 | -13.20 | -11.70 | Swanson-Hysell et al. 2010 |
| Brachina Road Trezona Formation | 1579.4 | 639.58 | -13.40 | -11.70 | Swanson-Hysell et al. 2010 |
| Bulls Gap Trezona Formation | 1577.0 | 639.65 | -13.60 | -11.70 | Swanson-Hysell et al. 2010 |
| Bulls Gap Trezona Formation | 1576.0 | 639.68 | -13.80 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1575.4 | 639.70 | -14.00 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1575.0 | 639.71 | -14.20 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1574.8 | 639.72 | -14.40 | -11.70 | Swanson-Hysell et al. 2010 |
| Bulls Gap Trezona Formation | 1574.0 | 639.74 | -14.60 | -11.70 | Swanson-Hysell et al. 2010 |
| Bulls Gap Trezona Formation | 1573.0 | 639.77 | -14.80 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1566.0 | 639.88 | -15.00 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1565.3 | 640.00 | -15.20 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1564.4 | 640.03 | -15.40 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1563.5 | 640.05 | -15.60 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1560.8 | 640.13 | -15.80 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1558.4 | 640.21 | -16.00 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1557.7 | 640.23 | -16.20 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1557.1 | 640.24 | -16.40 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1556.2 | 640.27 | -16.60 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1555.2 | 640.30 | -16.80 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1554.0 | 640.34 | -8.60 | -11.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1551.6 | 640.41 | -8.70 | -11.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1550.7 | 640.43 | -8.70 | -11.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1548.5 | 640.50 | -8.60 | -11.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1546.4 | 640.56 | -8.90 | -11.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1544.3 | 640.62 | -8.30 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1539.6 | 640.76 | -9.40 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1539.3 | 640.77 | -8.90 | -12.00 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1538.5 | 640.80 | -8.80 | -11.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1538.2 | 640.81 | -8.90 | -10.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1537.5 | 640.83 | -8.30 | -11.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1534.9 | 640.92 | -8.50 | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1534.0 | 640.93 | -8.30 | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1533.5 | 640.95 | -8.20 | -12.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1532.3 | 640.98 | -8.10 | -11.80 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1531.5 | 641.00 | -8.50 | -12.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1530.3 | 641.04 | -8.30 | -12.00 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1529.9 | 641.05 | -8.70 | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1528.9 | 641.08 | -8.10 | -11.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1525.6 | 641.18 | -8.80 | -11.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1524.9 | 641.20 | -8.50 | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1524.1 | 641.22 | -8.60 | -12.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1521.9 | 641.29 | -9.50 | -11.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1520.8 | 641.32 | -8.80 | -12.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1520.4 | 641.33 | -9.70 | -12.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1518.7 | 641.38 | -8.60 | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1516.4 | 641.45 | -9.00 | -11.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1514.7 | 641.50 | -8.30 | -12.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1513.3 | 641.54 | -8.80 | -12.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1513.2 | 641.55 | -8.80 | -11.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1513.2 | 641.55 | -8.30 | -12.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1512.9 | 641.56 | -8.60 | -12.20 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1511.8 | 641.59 | -8.40 | -11.80 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1505.3 | 641.78 | -8.80 | -12.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1504.7 | 641.80 | -8.70 | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1503.5 | 641.84 | -8.50 | -12.80 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1495.3 | 642.08 | -9.50 | -12.10 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1493.4 | 642.14 | -8.70 | -12.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1493.1 | 642.14 | -8.60 | -11.80 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1491.8 | 642.18 | -8.10 | -12.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1491.5 | 642.19 | -8.20 | -12.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1491.1 | 642.20 | -8.20 | -12.60 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1484.4 | 642.40 | -8.60 | -12.40 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1482.0 | 642.47 | -8.60 | -12.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1474.1 | 642.71 | -8.60 | -12.90 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1473.2 | 642.74 | -8.40 | -12.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1472.5 | 642.76 | -8.50 | -12.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1471.9 | 642.77 | -8.60 | -12.30 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1471.9 | 642.77 | -8.50 | -12.80 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1470.9 | 642.80 | -8.70 | -11.70 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1469.3 | 642.85 | -8.80 | -12.50 | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona Formation | 1457.5 | 643.20 | -8.60 | -12.60 | Swanson-Hysell et al. 2010 |
| Location            | Formation | Pedotype | R# rock | Level (m) | Ma     | δ¹³C_carb ‰ | δ¹⁸O_carb ‰ | author        |
|---------------------|-----------|----------|---------|-----------|--------|------------|------------|---------------|
| Ten Mile Creek      | Pantapinna | Warru    | R3347   | 8062.2    | 503    | -3.88      | -6.45      | Retallack 2008 |
| Ten Mile Creek      | Pantapinna | Warru    | R3347   | 8062.2    | 503    | -2.88      | -5.51      | Retallack 2008 |
| Ten Mile Creek      | Balcoracana | Warru    | R3341   | 7673.0    | 508    | -5.05      | -5.40      | Retallack 2008 |
| Ten Mile Creek      | Balcoracana | Warru    | R3341   | 7673.0    | 508    | -4.95      | -5.29      | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Natala   | R3555   | 7662.8    | 508    | -10.15     | -6.42      | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Natala   | R3555   | 7662.8    | 508    | -10.00     | -6.47      | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Viparri  | R3556   | 7662.2    | 508    | -7.21      | -6.71      | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Viparri  | R3556   | 7662.2    | 508    | -7.11      | -6.64      | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Warru    | R3571   | 7590.8    | 509    | -9.14      | -5.76      | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Warru    | R3571   | 7590.8    | 509    | -9.13      | -5.71      | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Warru    | R3381   | 7585.8    | 509    | -8.70      | -5.30      | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Warru    | R3381   | 7585.8    | 509    | -8.77      | -5.35      | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Natala   | R3569   | 7322.1    | 512    | -0.64      | -15.84     | Retallack 2008 |
| Ten Mile Creek      | Moodlatana | Natala   | R3569   | 7322.1    | 512    | -0.59      | -15.85     | Retallack 2008 |
| Ten Mile Creek      | Billy Creek | Warru    | R3567   | 7245.2    | 513    | -2.82      | -16.55     | Retallack 2008 |
| Ten Mile Creek      | Billy Creek | Warru    | R3567   | 7245.2    | 513    | -2.90      | -16.39     | Retallack 2008 |
| Ten Mile Creek      | Billy Creek | Irkii    | R3568   | 7228.0    | 513    | -2.56      | -17.11     | Retallack 2008 |
| Ten Mile Creek      | Billy Creek | Warru    | R3563   | 6935.3    | 517    | -7.63      | -5.69      | Retallack 2008 |
| Ten Mile Creek      | Billy Creek | Warru    | R3563   | 6935.3    | 517    | -7.68      | -5.74      | Retallack 2008 |
| Ten Mile Creek      | Billy Creek | Warru    | R3561   | 6464.6    | 523    | -4.28      | -5.35      | Retallack 2008 |
| Ten Mile Creek      | Billy Creek | Warru    | R3561   | 6464.6    | 523    | -4.22      | -5.35      | Retallack 2008 |
| Ten Mile Creek      | Billy Creek | Warru    | R3376   | 6464.6    | 523    | -1.72      | -6.16      | Retallack 2008 |
| Ten Mile Creek      | Billy Creek | Warru    | R3376   | 6464.6    | 523    | -1.26      | -5.99      | Retallack 2008 |
| Parachilna Gorge    | Parachilina | Mata     | R3288   | 5176.7    | 537    | -7.15      | -7.11      | Retallack 2008 |
| Parachilna Gorge    | Parachilina | Watuna   | R3301   | 5169.8    | 537    | -2.82      | -2.82      | Retallack 2008 |
| Parachilna Gorge    | Parachilina | Watuna   | R3301   | 5169.8    | 537    | -2.60      | -2.26      | Retallack 2008 |
| Parachilna Gorge    | Parachilina | Mata     | R3277   | 5160.2    | 538    | -6.33      | -4.72      | Retallack 2008 |
| Parachilna Gorge    | Parachilina | Mata     | R3277   | 5160.2    | 538    | -6.54      | -4.85      | Retallack 2008 |
| Hookapunna Well     | Uratanna   | Valkarra  | R3529   | 4975.0    | 543    | -5.80      | -6.13      | herein       |
| Hookapunna Well     | Uratanna   | Valkarra  | R3529   | 4975.0    | 543    | -5.76      | -5.93      | herein       |
| Brachina Gorge      | Rawsley    | Yaldati   | R3274   | 4916.1    | 545    | -8.66      | -4.80      | herein       |
| Brachina Gorge      | Rawsley    | Yaldati   | R3274   | 4916.1    | 545    | -8.84      | -4.79      | herein       |
| Ediacara #3 bore    | Ediacara   | Yaldati   | #1553475 | 4760.9    | 550    | -5.75      | -6.20      | Retallack 2012, 2013 |
| Ediacara #3 bore    | Ediacara   | Yaldati   | #1553475 | 4760.9    | 550    | -5.89      | -6.18      | Retallack 2012, 2013 |
| Hookapunna Well     | Ediacara   | Yaldati   | R3526   | 4757.4    | 550    | -2.74      | -5.58      | Retallack 2012, 2013 |
| Hookapunna Well     | Ediacara   | Yaldati   | R3526   | 4757.4    | 550    | -1.62      | -6.14      | Retallack 2012, 2013 |
| Ediacara Hills      | Ediacara   | Yaldati   | R3522   | 4735.7    | 550    | -4.12      | -4.44      | Retallack 2012, 2013 |
| Ediacara Hills      | Ediacara   | Yaldati   | R3522   | 4735.7    | 550    | -3.86      | -4.14      | Retallack 2012, 2013 |
| Brachina Gorge      | Bonney     | Yaldati   | R3269   | 4564.9    | 555    | -5.00      | -1.66      | herein       |
| Brachina Gorge      | Bonney     | Yaldati   | R3269   | 4564.9    | 555    | -5.17      | -1.84      | herein       |
| Brachina Gorge      | Bonney     | Yaldati   | R3267   | 4530.1    | 556    | -9.89      | -6.27      | herein       |
| Brachina Gorge      | Bonney     | Yaldati   | R3267   | 4530.1    | 556    | -8.82      | -6.30      | herein       |
| Brachina Gorge      | Bonney     | Yaldati   | R3471   | 4471.8    | 558    | -3.97      | -14.5      | herein       |
| Brachina Gorge      | Bonney     | Yaldati   | R3471   | 4471.8    | 558    | -4.01      | -13.92     | herein       |
Table S7. Stable isotopic analyses (‰) of organic carbon, Flinders Ranges

| Locality         | Formation | Pedotype | Sample | Level (m) | Ma | δ¹³C ave | δ¹³C stdev | %C ave | Reference          |
|------------------|-----------|----------|--------|-----------|----|----------|------------|--------|--------------------|
| Ten Mile Creek   | Moodlatana| Natala   | R3555  | 7662.8    | 463.63 | -23.10  | 0.09       | 0.060  | herein             |
| Ten Mile Creek   | Moodlatana| Viparri  | R3556  | 7662.2    | 463.65 | -23.10  | 0.09       | 0.060  | herein             |
| Ten Mile Creek   | Moodlatana| Viparri  | R3556  | 7662.2    | 463.65 | -23.10  | 0.09       | 0.060  | herein             |
| Ten Mile Creek   | Moodlatana| Warru    | R3571  | 7590.8    | 465.76 | -26.36  | 0.05       | 0.070  | herein             |
| Ten Mile Creek   | Moodlatana| Warru    | R3571  | 7590.8    | 465.76 | -26.36  | 0.05       | 0.070  | herein             |
| Ten Mile Creek | Billy Creek | Warra | R3563 | 6935.3 | 485.17 | -24.77 | 0.21 | 0.030 | herein |
| Ten Mile Creek | Billy Creek | Warra | R3563 | 6935.3 | 485.17 | -24.77 | 0.21 | 0.030 | herein |
| Ten Mile Creek | Billy Creek | Warra | R3561 | 6464.6 | 499.10 | -23.71 | 0.12 | 0.050 | herein |
| Hookapunna Well | Uratanna | Valbarra | R3529 | 5103.0 | 539.40 | -28.50 | 0.19 | 0.070 | herein |
| Hookapunna Well | Uratanna | Valbarra | R3529 | 5103.0 | 539.40 | -28.50 | 0.19 | 0.070 | herein |
| Hookapunna Well | Uratanna | Valbarra | R3529 | 4975.0 | 538.79 | -28.50 | n/a | 0.070 | herein |
| Hookapunna Well | Uratanna | Valbarra | R3529 | 4975.0 | 538.79 | -28.50 | n/a | 0.070 | herein |
| Ediacara bore E3 | Ediacara | Yaldati | #1553475 | 4760.9 | 549.53 | -26.49 | 0.36 | 0.010 | herein |
| Ediacara bore E3 | Ediacara | Yaldati | #1553475 | 4760.9 | 549.53 | -26.49 | 0.36 | 0.010 | herein |
| Hookapunna Well | Ediacara | Yaldati | R3526 | 4757.4 | 549.63 | -26.49 | 0.36 | 0.010 | herein |
| Hookapunna Well | Ediacara | Yaldati | R3526 | 4757.4 | 549.63 | -26.49 | 0.36 | 0.010 | herein |
| Brachina Gorge | Bonney | Yaldati | R3472 | 4471.8 | 558.08 | -26.49 | 0.36 | 0.010 | herein |
| Brachina Gorge | Bonney | Yaldati | R3472 | 4471.8 | 558.08 | -26.49 | 0.36 | 0.010 | herein |
| Brachina Gorge | Bonney | Yaldati | R3472 | 4471.8 | 558.08 | -26.49 | 0.36 | 0.010 | herein |
| Brachina Gorge | Bonney | Yaldati | R3472 | 4471.8 | 558.08 | -26.49 | 0.36 | 0.010 | herein |

- Bunyeroo Gorge
- Wonoka (marine) micrite: 4111.7, 555.28, -29.55, n/a, 0.500 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) oolitic: 4107.6, 555.35, -30.22, n/a, 0.200 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) limestone: 4106.8, 555.37, -28.52, n/a, 0.220 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4104.3, 555.42, -23.00, n/a, 0.100 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4098.9, 555.52, -26.05, n/a, 0.070 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) limestone: 4098.1, 555.54, -25.80, n/a, 0.270 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) limestone: 4096.4, 555.57, -24.77, n/a, 0.420 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4093.0, 555.63, -25.89, n/a, 0.140 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) mudstone: 4091.2, 555.67, -23.08, n/a, 0.540 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4089.0, 555.71, -25.63, n/a, 0.120 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) mudstone: 4087.5, 555.74, -22.56, n/a, 0.490 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4080.0, 555.88, -25.98, n/a, 0.280 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) limestone: 4078.0, 555.92, -22.20, n/a, 0.260 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4073.3, 556.01, -26.96, n/a, 0.280 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) limestone: 4073.0, 556.07, -23.48, n/a, 0.140 Calver 2000
- First Hill
- Wonoka (marine) limestone: 4063.6, 556.20, -25.80, n/a, 0.150 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4063.1, 556.20, -25.15, n/a, 0.140 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) micrite: 4059.6, 556.27, -22.85, n/a, 0.090 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) micrite: 4056.7, 556.33, -23.30, n/a, 0.260 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4052.7, 556.40, -25.69, n/a, 0.120 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) micrite: 4048.3, 556.49, -22.20, n/a, 0.210 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4046.9, 556.52, -24.07, n/a, 0.180 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4040.4, 556.64, -22.72, n/a, 0.160 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) micrite: 4032.2, 556.80, -22.86, n/a, 0.270 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) micrite: 4016.1, 557.10, -22.70, n/a, 0.300 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) micrite: 4016.1, 557.10, -22.68, n/a, 0.370 Calver 2000
- First Hill
- Wonoka (marine) micrite: 4004.9, 557.32, -22.20, n/a, 0.120 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) micrite: 3997.9, 557.45, -22.30, n/a, 0.110 Calver 2000
- First Hill
- Wonoka (marine) micrite: 3988.6, 557.63, -22.54, n/a, 0.140 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) gray shale: 3978.6, 557.82, -22.75, n/a, 0.340 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) dolostone: 3958.8, 558.20, -22.72, n/a, 0.390 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) green shale: 3946.1, 558.44, -22.80, n/a, 0.120 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) siltstone: 3918.1, 558.97, -23.47, n/a, 0.630 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) dolostone: 3907.5, 559.18, -23.84, n/a, 0.190 Calver 2000
- Bunyeroo Gorge
- Wonoka (marine) mudstone: 3846.1, 560.35, -23.78, n/a, 0.220 Calver 2000

Calver 2000
| Location       | Deposit          | Formation                  | Depth (m) | Age (Ma) | Water Depth (m) | Bathymetry (m) | Slope (°) | Water Temperature (°C) | Reference |
|----------------|------------------|----------------------------|-----------|----------|----------------|----------------|-----------|------------------------|-----------|
| Bunyeroo Gorge | Bunyeroo (marine) | mudstone                  | 3846.1    | 560.35   | -23.38         | n/a            | 0.220     | Calver 2000            |           |
| Bunyeroo Gorge | Bunyeroo (marine) | mudstone                  | 3718.9    | 562.78   | -23.82         | n/a            | 0.230     | Calver 2000            |           |
| Bunyeroo Gorge | Bunyeroo (marine) | siltstone                 | 3652.6    | 564.05   | -24.05         | n/a            | 0.290     | Calver 2000            |           |
| Bunyeroo Gorge | Bunyeroo (marine) | siltstone                 | 3493.5    | 567.08   | -24.55         | n/a            | 0.340     | Calver 2000            |           |
| Bunyeroo Gorge | Bunyeroo (marine) | mudstone                  | 3326.4    | 570.28   | -25.52         | n/a            | 0.210     | Calver 2000            |           |
| Brachina Gorge | Bunyeroo (marine) | green shale               | 3318.8    | 570.42   | -24.48         | n/a            | 0.730     | Calver 2000            |           |
| Brachina Gorge | Bunyeroo (marine) | mudstone                  | 3295.0    | 570.88   | -27.25         | n/a            | 0.450     | Calver 2000            |           |
| Brachina Gorge | Bunyeroo (marine) | blue shale                | 3270.0    | 571.45   | -29.35         | n/a            | 0.520     | Calver 2000            |           |
| Brachina Gorge | Bunyeroo (marine) | mudstone                  | 3265.1    | 571.72   | -27.23         | n/a            | 0.490     | Calver 2000            |           |
| Brachina Gorge | Bunyeroo (marine) | mudstone                  | 3247.8    | 571.78   | -23.13         | n/a            | 0.630     | Calver 2000            |           |
| Brachina Gorge | Bunyeroo (marine) | mudstone                  | 3236.3    | 570.88   | -27.34         | n/a            | 0.140     | Calver 2000            |           |
| Brachina Gorge | Bunyeroo (marine) | mudstone                  | 3194.0    | 571.73   | -24.55         | n/a            | 0.510     | Calver 2000            |           |
| Brachina Gorge | Bunyeroo (marine) | mudstone                  | 3180.0    | 573.07   | -27.99         | n/a            | 0.430     | Calver 2000            |           |
| Brachina Gorge | Bunyeroo (marine) | mudstone                  | 3144.0    | 573.76   | -33.81         | n/a            | 17.050    | Calver 2000            |           |
| SCYW1a core    | Bunyeroo (marine) | green shale               | 3075.7    | 575.04   | -24.55         | n/a            | 0.260     | Calver 2000            |           |
| SCYW1a core    | Bunyeroo (marine) | mudstone                  | 3061.0    | 575.34   | -22.12         | n/a            | 0.290     | Calver 2000            |           |
| SCYW1a core    | Bunyeroo (marine) | mudstone                  | 3036.1    | 575.82   | -24.10         | n/a            | 0.050     | Calver 2000            |           |
| SCYW1a core    | Bunyeroo (marine) | mudstone                  | 3002.0    | 576.47   | -24.47         | n/a            | 0.130     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| gray shale                | 2975.0    | 576.99   | -28.04         | n/a            | 1.540     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| mudstone                  | 2952.7    | 577.41   | -26.00         | n/a            | 0.630     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| gray shale                | 2932.5    | 577.80   | -28.19         | n/a            | 0.970     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| mudstone                  | 2892.8    | 578.56   | -28.84         | n/a            | 1.690     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| gray shale                | 2852.8    | 579.32   | -26.54         | n/a            | 1.020     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| gray shale                | 2852.8    | 579.32   | -28.24         | n/a            | 1.020     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| mudstone                  | 2840.5    | 579.56   | -28.28         | n/a            | 0.990     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| gray shale                | 2795.9    | 580.41   | -28.90         | n/a            | 1.700     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| mudstone                  | 2752.1    | 581.04   | -26.79         | n/a            | 0.860     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| gray shale                | 2752.1    | 581.24   | -26.79         | n/a            | 0.860     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| mudstone                  | 2752.1    | 581.24   | -26.60         | n/a            | 0.780     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| mudstone                  | 2752.1    | 581.24   | -25.49         | n/a            | 0.500     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| gray shale                | 2752.1    | 581.24   | -26.54         | n/a            | 0.500     | Calver 2000            |           |
| Bunyeroo Gorge | ABC Range (marine)| mudstone                  | 2668.8    | 582.84   | -24.72         | n/a            | 0.520     | Calver 2000            |           |
| Bunyeroo Gorge | ABC Range (marine)| mudstone                  | 2638.3    | 583.42   | -25.87         | n/a            | 0.650     | Calver 2000            |           |
| Bunyeroo Gorge | ABC Range (marine)| mudstone                  | 2585.8    | 584.42   | -24.33         | n/a            | 0.420     | Calver 2000            |           |
| Bunyeroo Gorge | ABC Range (marine)| mudstone                  | 2542.6    | 585.25   | -23.05         | n/a            | 0.410     | Calver 2000            |           |
| SCYW1a core    | ABC Range (marine)| mudstone                  | 2494.7    | 586.16   | -26.19         | n/a            | 0.800     | Calver 2000            |           |
| Bunyeroo Gorge | ABC Range (marine)| mudstone                  | 2432.9    | 587.34   | -23.70         | n/a            | 0.250     | Calver 2000            |           |
| Location                     | Formation                  | Type          | Depth  | Age     | Thickness | Author   | Year     |
|------------------------------|----------------------------|---------------|--------|---------|-----------|----------|----------|
| Bunyeroo Gorge               | ABC Range (marine) mudstone | 2432.9        | 587.34 | -23.57  | n/a       | 0.250    | Calver 2000 |
| Bunyeroo Gorge               | ABC Range (marine) mudstone | 2432.9        | 587.34 | -23.27  | n/a       | 0.190    | Calver 2000 |
| SCYW1a core                  | ABC Range (marine) gray shale | 2413.6        | 587.71 | -26.16  | n/a       | 1.330    | Calver 2000 |
| SCYW1a core                  | Brachina (marine) shale     | 2372.2        | 588.50 | -26.67  | n/a       | 0.820    | Calver 2000 |
| Bunyeroo Gorge               | Brachina (marine) mudstone  | 2345.4        | 589.01 | -23.89  | n/a       | 0.320    | Calver 2000 |
| SCYW1a core                  | Brachina (marine) gray shale | 2310.5        | 589.68 | -26.54  | n/a       | 1.070    | Calver 2000 |
| Bunyeroo Gorge               | Brachina (marine) mudstone  | 2273.8        | 590.38 | -23.00  | n/a       | 0.370    | Calver 2000 |
| SCYW1a                       | Brachina (marine) gray shale | 2263.8        | 590.57 | -26.90  | n/a       | 1.500    | Calver 2000 |
| Bunyeroo Gorge               | Brachina (marine) mudstone  | 2225.5        | 591.30 | -23.17  | n/a       | 0.450    | Calver 2000 |
| SCYW1a                       | Brachina (marine) gray shale | 2189.3        | 591.99 | -27.05  | n/a       | 1.340    | Calver 2000 |
| Bunyeroo Gorge               | Brachina (marine) mudstone  | 2174.3        | 592.28 | -23.22  | n/a       | 0.450    | Calver 2000 |
| SCYW1a                       | Brachina (marine) gray shale | 2133.7        | 593.06 | -29.35  | n/a       | 0.870    | Calver 2000 |
| Bunyeroo Gorge               | Brachina (marine) mudstone  | 2047.6        | 594.70 | -23.65  | n/a       | 0.350    | Calver 2000 |
| SCYW1a                       | Brachina (marine) gray shale | 2041.7        | 594.81 | -29.61  | n/a       | 0.760    | Calver 2000 |
| Bunyeroo Gorge               | Brachina (marine) mudstone  | 2021.0        | 595.21 | -24.93  | n/a       | 0.720    | Calver 2000 |
| SCYW1a                       | Brachina (marine) gray shale | 2021.0        | 595.21 | -23.75  | n/a       | 0.750    | Calver 2000 |
| Bunyeroo Gorge               | Brachina (marine) mudstone  | 2008.3        | 595.76 | -23.27  | n/a       | 0.610    | Calver 2000 |
| BCYM1a                       | Brachina (marine) mudstone  | 1977.1        | 597.36 | -23.35  | n/a       | 0.560    | Calver 2000 |
| SCYW1a                       | Brachina (marine) gray shale | 1908.3        | 597.62 | -23.35  | n/a       | 0.890    | Calver 2000 |
| BCYM1a-1                     | Brachina (marine) mudstone  | 1894.7        | 597.65 | -24.89  | n/a       | 2.500    | Calver 2000 |
| BCYM1a                       | Brachina (marine) gray shale | 1885.3        | 597.80 | -32.19  | n/a       | 2.210    | Calver 2000 |
| BCYM1a-1                     | Brachina (marine) mudstone  | 1883.4        | 597.84 | -32.28  | n/a       | 2.340    | Calver 2000 |
| BCYM1a                       | Brachina (marine) gray shale | 1883.4        | 597.84 | -32.28  | n/a       | 2.340    | Calver 2000 |
| BCYM1a-1                     | Brachina (marine) mudstone  | 1881.3        | 597.88 | -32.72  | n/a       | 2.340    | Calver 2000 |
| BCYM1a                       | Brachina (marine) gray shale | 1881.3        | 597.88 | -26.00  | n/a       | 0.660    | Calver 2000 |
| BCYM1a-1                     | Brachina (marine) mudstone  | 1878.8        | 597.92 | -28.35  | n/a       | 1.380    | Calver 2000 |
| BCYM1a                       | Brachina (marine) gray shale | 1877.5        | 597.95 | -24.55  | n/a       | 0.680    | Calver 2000 |
| BCYM1a-1                     | Brachina (marine) gray shale | 1876.2        | 597.97 | -24.54  | n/a       | 0.600    | Calver 2000 |
| BCYM1a                       | Brachina (marine) gray shale | 1874.0        | 598.02 | -24.56  | n/a       | 0.640    | Calver 2000 |
| BCYM1a-1                     | Nuccaleena (marine) gray shale | 1871.9        | 598.06 | -24.39  | n/a       | 0.420    | Calver 2000 |
| SCYW1a                       | Nuccaleena (marine) gray shale | 1836.4        | 598.73 | -24.53  | n/a       | 0.100    | Calver 2000 |
| Enorama Creek Trezona        | Limestone                  | 1757.0        | 600.25 | -26.60  | n/a       | 0.015    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1727.5        | 600.81 | -24.80  | n/a       | 0.018    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1723.2        | 600.90 | -25.20  | n/a       | 0.013    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1721.4        | 600.93 | -25.70  | n/a       | 0.017    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1716.6        | 601.02 | -23.70  | n/a       | 0.007    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1712.6        | 601.10 | -23.50  | n/a       | 0.008    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1711.0        | 601.13 | -24.10  | n/a       | 0.008    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1705.9        | 601.23 | -24.50  | n/a       | 0.009    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1700.9        | 601.32 | -24.70  | n/a       | 0.011    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1693.5        | 601.46 | -24.90  | n/a       | 0.008    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1688.1        | 601.57 | -25.90  | n/a       | 0.008    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1681.7        | 601.69 | -25.60  | n/a       | 0.005    | Swanson-Hysell et al. 2010 |
| Enorama Creek Trezona        | Limestone                  | 1680.5        | 601.71 | -24.00  | n/a       | 0.006    | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1674.9 | 601.82 | -23.50 | n/a | 0.011 | Swanson-Hysell et al. 2010 |
|--------------|-----------------|-----------|--------|--------|--------|-----|--------|---------------------------|
| Enorama Creek | Trezona (marine) | limestone | 1671.2 | 601.89 | -25.40 | n/a | 0.007 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1664.5 | 602.02 | -25.70 | n/a | 0.009 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1663.7 | 602.03 | -26.20 | n/a | 0.014 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1657.8 | 602.15 | -24.80 | n/a | 0.007 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1653.8 | 602.22 | -25.20 | n/a | 0.004 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1650.3 | 602.29 | -25.20 | n/a | 0.009 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1645.4 | 602.38 | -25.20 | n/a | 0.012 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1641.6 | 602.46 | -23.70 | n/a | 0.013 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1632.4 | 602.63 | -26.10 | n/a | 0.009 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1625.4 | 602.76 | -26.50 | n/a | 0.009 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1622.7 | 602.82 | -26.00 | n/a | 0.011 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1616.9 | 602.93 | -24.80 | n/a | 0.008 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1612.0 | 603.02 | -27.00 | n/a | 0.007 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1605.3 | 603.15 | -30.10 | n/a | 0.014 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1596.6 | 603.31 | -25.00 | n/a | 0.011 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1594.0 | 603.36 | -24.90 | n/a | 0.006 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1584.1 | 603.55 | -27.90 | n/a | 0.009 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1566.0 | 603.90 | -24.30 | n/a | 0.009 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1558.4 | 604.04 | -24.20 | n/a | 0.016 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1539.3 | 604.41 | -27.50 | n/a | 0.012 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1536.5 | 604.46 | -26.20 | n/a | 0.012 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1534.0 | 604.51 | -26.40 | n/a | 0.007 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1528.9 | 604.61 | -23.90 | n/a | 0.013 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1521.9 | 604.74 | -23.20 | n/a | 0.013 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1495.3 | 605.25 | -24.40 | n/a | 0.016 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1482.0 | 605.50 | -26.40 | n/a | 0.005 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Trezona (marine) | limestone | 1457.3 | 605.98 | -23.90 | n/a | 0.011 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 925.3 | 616.14 | -24.00 | n/a | 0.009 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 915.9 | 616.32 | -23.70 | n/a | 0.015 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 904.1 | 616.54 | -25.00 | n/a | 0.008 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 891.0 | 616.79 | -24.60 | n/a | 0.010 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 852.9 | 623.86 | -25.60 | n/a | 0.012 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 517.0 | 623.94 | -22.70 | n/a | 0.013 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 512.0 | 624.03 | -25.60 | n/a | 0.008 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 473.8 | 624.36 | -22.50 | n/a | 0.009 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 465.6 | 624.92 | -23.00 | n/a | 0.014 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 455.6 | 625.11 | -21.30 | n/a | 0.023 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 386.5 | 626.43 | -23.60 | n/a | 0.016 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 367.1 | 626.80 | -22.20 | n/a | 0.012 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 355.8 | 627.01 | -23.50 | n/a | 0.016 | Swanson-Hysell et al. 2010 |
| Enorama Creek | Etina (marine) | limestone | 329.6 | 627.51 | -25.90 | n/a | 0.006 | Swanson-Hysell et al. 2010 |
| Enorama Creek Etina (marine) limestone | Enorama Creek Etina (marine) limestone | Enorama Creek Etina (marine) limestone | Enorama Creek Etina (marine) limestone | Enorama Creek Etina (marine) limestone | Enorama Creek Etina (marine) limestone | Enorama Creek Etina (marine) limestone | Enorama Creek Etina (marine) limestone | Enorama Creek Etina (marine) limestone |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| 321.8                                | 627.66                                | -23.40                               | n/a                                  | 0.011                                | Swanson-Hysell et al. 2010           | 315.7                                | 627.78                                | -23.10                               | n/a                                  | 0.005                                | Swanson-Hysell et al. 2010           | 292.3                                | 628.23                                | -23.20                               | n/a                                  | 0.014                                | Swanson-Hysell et al. 2010           | 276.3                                | 628.53                                | -21.60                               | n/a                                  | 0.023                                | Swanson-Hysell et al. 2010           | 268.5                                | 628.68                                | -24.40                               | n/a                                  | 0.017                                | Swanson-Hysell et al. 2010           | 200.2                                | 629.99                                | -26.00                               | n/a                                  | 0.017                                | Swanson-Hysell et al. 2010           | 189.4                                | 630.19                                | -21.50                               | n/a                                  | 0.038                                | Swanson-Hysell et al. 2010           | 188.4                                | 630.21                                | -21.50                               | n/a                                  | 0.038                                | Swanson-Hysell et al. 2010           | 176.5                                | 630.44                                | -21.20                               | n/a                                  | 0.015                                | Swanson-Hysell et al. 2010           | 146.3                                | 631.02                                | -20.00                               | n/a                                  | 0.018                                | Swanson-Hysell et al. 2010           | 131.2                                | 631.30                                | -24.20                               | n/a                                  | 0.021                                | Swanson-Hysell et al. 2010           | 106.0                                | 631.79                                | -21.60                               | n/a                                  | 0.012                                | Swanson-Hysell et al. 2010           | 90.0                                 | 632.09                                | -23.50                               | n/a                                  | 0.014                                | Swanson-Hysell et al. 2010           | 63.3                                 | 632.60                                | -23.50                               | n/a                                  | 0.010                                | Swanson-Hysell et al. 2010           |

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