

| Piece Number | Scanned Image                                                                     | Orientation                                                                       | Shipboard Studies | Lith. Unit | Structure      | Structural Measurement                        | Glass | Phenocrysts | Constituent Minerals | Grain Size | Alteration |
|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------|------------|----------------|-----------------------------------------------|-------|-------------|----------------------|------------|------------|
| 0            |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 1            |  |  |                   | x          | V <sub>1</sub> | irregular, dark green (0.1mm)                 |       |             |                      |            |            |
|              |                                                                                   |                                                                                   |                   |            | V <sub>2</sub> | planar, diffused, light green(+white) (0.1mm) |       |             |                      |            |            |
|              |                                                                                   |                                                                                   |                   |            | V <sub>3</sub> | V <sub>2</sub> =V <sub>3</sub> (4-6 cm)       |       |             |                      |            |            |
| 2            |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 3            |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 4            |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 5            |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 6            |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 7            |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 8            |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 9            |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 10           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 11           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 12           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 13           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 14           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 15           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 16           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 17           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 18           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 19           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 20           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 21           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 22           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 23           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 24           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 25           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 26           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 27           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 28           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 29           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 30           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 31           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 32           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 33           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 34           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 35           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 36           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 37           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 38           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 39           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 40           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 41           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 42           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 43           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 44           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 45           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 46           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 47           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 48           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 49           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 50           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 51           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 52           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 53           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 54           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 55           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 56           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 57           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 58           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 59           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 60           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 61           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 62           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 63           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 64           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 65           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 66           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 67           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 68           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 69           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 70           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 71           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 72           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 73           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 74           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 75           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 76           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 77           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 78           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 79           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 80           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 81           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 82           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 83           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 84           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 85           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 86           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 87           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 88           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 89           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 90           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 91           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 92           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 93           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 94           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 95           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 96           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 97           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 98           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 99           |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 100          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 101          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 102          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 103          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 104          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 105          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 106          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 107          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 108          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 109          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 110          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 111          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 112          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 113          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 114          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 115          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 116          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 117          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 118          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 119          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 120          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 121          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 122          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 123          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 124          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 125          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 126          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 127          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 128          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 129          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 130          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 131          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 132          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 133          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 134          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 135          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 136          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 137          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 138          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 139          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 140          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 141          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 142          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 143          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 144          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 145          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 146          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 147          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 148          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 149          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |
| 150          |                                                                                   |                                                                                   |                   |            |                |                                               |       |             |                      |            |            |

*irregular, dark green (0.1mm), right green halo (1mm) (3-3cm)*  
*planar, diffused, light green(+white) (0.1mm), light gray halo (3mm) (3-4cm)*  
*V<sub>2</sub>=V<sub>3</sub> (4-6 cm)*