

65. BLUE MUD.—Station 323.

Lat. $35^{\circ} 39' S.$, long. $50^{\circ} 47' W.$, 1900 fathoms (Renard).

- I. 0·8069 grm. of substance dried at $110^{\circ} C.$, fused with the carbonates of soda and potash, gave 0·4804 grm. of silica, 0·1566 grm. of alumina, 0·0576 grm. of peroxide of iron, 0·0135 grm. of lime, 0·0427 grm. of pyrophosphate of magnesia = 0·0155 grm. of magnesia, and 0·0503 grm. of loss on ignition.
II. 1·4212 grms. of substance dried at $110^{\circ} C.$, treated with hydrofluoric and sulphuric acids, gave 0·0995 grm. of the chlorides of soda and potash, 0·1603 grm. of chloroplatinate of potash = 0·0202 grm. of potash and, by difference, 0·0382 grm. of soda.

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| Silica, | . | . | . | . | . | . | . | . | . | . | . | 59·54 |
| Alumina, | . | . | . | . | . | . | . | . | . | . | . | 19·42 |
| Peroxide of iron, | . | . | . | . | . | . | . | . | . | . | . | 7·15 |
| Lime, | . | . | . | . | . | . | . | . | . | . | . | 1·68 |
| Magnesia, | . | . | . | . | . | . | . | . | . | . | . | 1·93 |
| Potash, | . | . | . | . | . | . | . | . | . | . | . | 1·35 |
| Soda, | . | . | . | . | . | . | . | . | . | . | . | 2·48 |
| Water, | . | . | . | . | . | . | . | . | . | . | . | 6·24 |
| Phosphoric and sulphuric acids, | . | . | . | . | . | . | . | . | . | . | . | traces |
| | | | | | | | | | | | | 99·99 |

66. GREEN SAND.—Station 141.

Lat. $34^{\circ} 41' S.$, long. $18^{\circ} 36' E.$, 98 fathoms (Brazier).

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| Portion soluble in Hydrochloric Acid = 67·90 | Loss on ignition after drying at 230° Fahr., | . | 9·10 |
| | Alumina, | . | 2·80 |
| | Ferric oxide, | . | 4·70 |
| | Calcium phosphate, | . | trace |
| | Calcium sulphate, | . | 1·07 |
| | Calcium carbonate, | . | 49·46 |
| | Magnesium carbonate, | . | 2·02 |
| | Silica, | . | 8·35 |
| Portion insoluble in Hydrochloric Acid = 29·00 | Alumina, | . | 0·95 |
| | Ferric oxide, | . | 0·35 |
| | Lime, | . | 0·22 |
| | Magnesia, | . | 0·18 |
| | Silica, | . | 21·35 |
| | | | 100·00 |

67. GREEN MUD.—Station 164B.

Lat. $34^{\circ} 13' S.$, long. $151^{\circ} 38' E.$, 410 fathoms (Brazier).

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| Portion soluble in Hydrochloric Acid = 72·29 | Loss on ignition after drying at 230° Fahr., | . | 3·30 |
| | Alumina, | . | 2·50 |
| | Ferric oxide, | . | 12·30 |
| | Calcium phosphate, | . | 0·70 |
| | Manganese oxide, | . | ... |
| | Calcium sulphate, | . | 0·58 |
| | Calomium carbonate, | . | 46·86 |
| | Magnesium carbonate, | . | 0·57 |
| Portion insoluble in Hydrochloric Acid = 24·41 | Silica, | . | 9·28 |
| | Alumina, | . | 1·58 |
| | Ferric oxide, | . | 0·42 |
| | Lime, | . | 0·30 |
| | Magnesia, | . | 0·12 |
| | Silica, | . | 21·99 |
| | | | 100·00 |