## Table 4: Study Site Mining and Environmental Characteristics

<table>
<thead>
<tr>
<th>Study Site</th>
<th>Initial Sapphire Exploitation</th>
<th>Mining Substrate</th>
<th>Local Environment</th>
<th>Environmental or Species Importance</th>
<th>Neighboring Protected Area</th>
</tr>
</thead>
</table>
| Andranodambo                | 1992                          | Hard limestone                                              | **Primary:** dry spiny forest; gallery forests bordering rivers. **Secondary:** anthropogenic savannah and non-native cactus scrub. | • Southern spiny and gallery forests are the most threatened ecosystem in Madagascar.  
  • Mammals: 130 total recorded, M=12, E=2  
  • Birds: M=74, R=23                                                                 | none                                                          |
| Ambondromifehy              | 1996                          | Mixed: hard limestone, natural underground caves, and some rocky soil | **Primary:** dry deciduous forest; xerophytic plants growing over eroded limestone pinnacle formations (*Tsingy*); underground caves and rivers. **Secondary:** anthropogenic savannah and dry forest | • Mammals: 11 lemurs, 14 bats, 4 carnivores; R=8  
  • Birds: 96 total recorded, R=1, E=8  
  • Reptiles and Amphibians: 60 total recorded, R=12  
  • Plants: 330 spp in 77 families; R=10                                                                 | Ankaranar National Park                                      |
| Ilakaka-Sakaraha            | 1998                          | Sandy soil                                                  | **Primary:** tapia woodland; dry deciduous forest. **Secondary:** anthropogenic savannah | • Mammals: 8 lemurs, 2 carnivores; R=1  
  • Birds: at least 85, M=37, R=22, 1 locally endemic to Zombitse-Vohibasia N.P.  
  • Reptiles and Amphibians: 48 total recorded; R=2  
  • Plants: several locally endemic                                                                 | Isalo National Park (to the east) and Zombitse-Vohibasia National Park (to the west) |
| Ifanato                     | 2004                          | Hard limestone                                              | **Primary:** dry spiny forest; gallery forest along the Onilahy river; sacred lakes (*Sept Lacs*). **Secondary:** non-native cactus scrub or forest | • Southern Spiny and Gallery forests are the most threatened ecosystem in Madagascar.  
  • Mammals: 26 total recorded; M=21, E=4  
  • Birds: 79 total recorded; M=33, E=2  
  • Reptiles: 55 total recorded; M=50, E=4  
  • Amphibians: 6 total recorded; M=5  
  • Plants: 142 total recorded; M=16 genera                                             | Sept Lacs GELOSE (Community-Managed Forest)                   |

M = number of species endemic to Madagascar found in the study site region  
R = number of species endemic to the region of the study site  
E = number of species classified as endangered or threatened found in the study site region