

Petrofacies designations used for the greater Tucson basin through time.

| Map designation ^a | Petrofacies | First Named ^a | First described for macroscopic identification | Last used | Note |
|-------------------------------------|----------------------------------|--------------------------|------------------------------------------------|------------------------|--------------------------------------------------------------------------------------|
| <i>Trunk Stream petrofacies</i> | | | | | |
| 1 | Santa Cruz River | Lombard 1987a | | In current use | None |
| 2 | Brawley Wash | Kamilli 1994 | | In current use | Kamilli defined the Brawley Wash system in 1994, but used the designation "S." |
| 3 | Canada del Oro | Heidke and Wiley 1997a | | In current use | None |
| 4 | Rillito Creek | Heidke and Wiley 1997a | | In current use | None |
| 5 | Pantano Wash | Heidke and Wiley 1997a | | In current use | None |
| 6 | McClellan Wash | Heidke and Wiley 1997a | | In current use | None |
| 7 | West Branch of the Santa Cruz R. | Heidke and Wiley 1997a | | Miksa 2003d | Sampling problems make it impossible to establish this petrofacies. |
| 8 | Tanque Verde Creek | Heidke and Wiley 1997a | | In current use | None |
| 9 | Cienega Creek | This chapter | | In current use | None |
| <i>Tributary Stream Petrofacies</i> | | | | | |
| A | Rincon | Lombard 1987e | | In current use | None |
| B | Catalina | Lombard 1987e | | In current use | None |
| BV | Catalina-Volcanic | Miksa 2005a | | In current use | None |
| C | Samaniego | Lombard 1987e | | In current use | None |
| D | Avra | Lombard 1987e | | In current use | Significantly altered by Kamilli (1994) who divided it into five petrofacies. |
| E | Tortolita | Lombard 1987e | | Miksa 2003d | None |
| E1 | Tortolita 1 | Miksa 2005a | | In current use | None |
| E2 | Tortolita 2 | Miksa 2005a | | In current use | None |
| E3 | Tortolita 3 | Miksa 2005a | | In current use | None |
| — | Durham high | Lombard 1987e | | Heidke and Wiley 1997b | None |
| — | Durham low | Lombard 1987e | | Heidke and Wiley 1997b | None |
| F | Durham | Heidke and Wiley 1997a | | In current use | None |
| G | Santa Rita | Lombard 1987e | | In current use | Originally included areas to the west of the Santa Cruz River. |
| H | Empire lower | Lombard 1987e | | Heidke and Wiley 1997b | None |
| H | University | Heidke and Wiley 1997a | | Miksa 2003d | None |
| H | Jaynes | Miksa 2005a | | In current use | None |
| I | Empire upper | Lombard 1987e | | Heidke and Wiley 1997b | None |
| I | Empire | Heidke and Wiley 1997a | | Miksa 2003d | None |
| I | Airport | Miksa 2005a | | In current use | None |
| J | Cat Mountain | Lombard 1987e | | Heidke 1990 | None |
| J1 | Beehive | Heidke et al 1998b | | In current use | Heidke et al. 1998b is a delayed publication of petrofacies modeling done in 1993-5. |
| J2 | Twin Hills | Heidke et al 1998b | | In current use | Heidke et al. 1998b is a delayed publication of petrofacies modeling done in 1993-5. |

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| J3 | Wasson | Heidke et al 1998b | | In current use | Heidke et al. 1998b is a delayed publication of petrofacies modeling done in 1993-5. |
| K | Black Mountain | Lombard 1987a | | In current use | None |
| L | Golden Gate | Lombard 1987e | | In current use | Kamilli (1994) subdivided this petrofacies. |
| M | Rillito | Lombard 1987e | | In current use | None |
| MW | Rillito West | Heidke et al 1998b | | In current use | Heidke et al. 1998b is a delayed publication of petrofacies modeling done in 1993-5. |
| N | Owl Head | Heidke and Wiley 1997a | | In current use | None |
| O | Sierrita | Lombard 1987e | | In current use | None |
| P | Hughes | Heidke and Wiley 1997a | | Miksa 2003d | None |
| P | Green Valley | Miksa 2005a | | In current use | None |
| Q | Amole | Heidke 1989 | | In current use | Noted as a possible petrofacies on Lombard 1987e |
| R | Batamote | Kamilli 1994 | | In current use | None |
| S | Brawley Wash | Kamilli 1994 | | Heidke and Wiley 1997b | Kamilli (1994) subdivided this petrofacies. |
| S | Sutherland | Heidke and Wiley 1997a | | In current use | None |
| T | Recortado | Kamilli 1994 | | In current use | Kamilli (1994) subdivided this petrofacies. |
| U | Cocoraque | Kamilli 1994 | | In current use | None |
| V | Dos Titos | Kamilli 1994 | | In current use | None |
| W | Waterman | Kamilli 1994 | | In current use | Kamilli (1994) subdivided this petrofacies. |
| Y | Roskruge | Kamilli 1994 | | In current use | None |
| Z | Sahuarita | Heidke and Wiley 1997a | | Miksa 2003d | None |
| Z | Big Wash | This chapter | | In current use | None |
| <i>Other designations used for sand samples</i> | | | | | |
| Designation | Name | | | | Note |
| ? | Unassigned or indeterminate | | | | Used for samples that are in the basin, but outside of a defined petrofacies (I.e., at the edge of the basin) or for samples without full location data |
| ?G | Unassigned or indeterminate, granitic | | | | Used in statistical models, to assign samples (as unweighted unknowns) to the correct family or generic group |
| ?V | Unassigned or indeterminate, volcanic | | | | Used in statistical models, to assign samples (as unweighted unknowns) to the correct family or generic group |
| J? | Indeterminate J | | | | Indeterminate J--used for a small number of samples which are known to have been taken in J but which do not have exact location information |

^aLombard (1986b) is the first petrofacies map, but it uses a set of numbered designations that were subsequently dropped in favor of names. The Lombard (1987a-e) maps are thus cited as the first named. The first use of letters on the petrofacies map is Heidke 1989.