

# UC Berkeley

## McCown Archaeobotany Laboratory Reports

### Title

Identifying Prehispanic Wood from Archaeological Contexts in Andean Argentina

### Permalink

<https://escholarship.org/uc/item/1jm769gd>

### Journal

UC Berkeley McCown Archaeobotany Laboratory Reports, 30B

### Author

Heyne, Catherine

### Publication Date

1992

### Copyright Information

This work is made available under the terms of a Creative Commons Attribution-NonCommercial License, available at <https://creativecommons.org/licenses/by-nc/4.0/>

(Valdéz and El Potrero de Payogasta, respectively), contexts within a single site, contents of samples from contexts both similar and opposite--samples from inside vs. those from outside the same structure, as well as areas of special activity or use, such as hearth, ash pit, or a ceramic vessel contexts.

All in all, a wide variety of charred wood materials was encountered at both sites of Valdéz and El Potrero de Payogasta. A total of 54 wood types were identified as being present in both site contents--17 of these 54 charred types were found at both sites. Individually, 47 charred wood types were present at El Potrero and 24 at Valdéz. A surprising find was that very few modern wood species were seen in the archaeological samples. Molle (Type AM; *Eschinus* sp.), a species thought to have been highly regarded by the Inka as well as widely used and seen along the rivers, was rarely discovered: it was found in only 5 samples. On the other hand, jarilla (Type AS) was commonly found in the provenience samples at both sites and still abounds in the northern Calchaquí Valley area today. Cardón cactus (Type A; *Trichocereus* sp.), another species that still abounds in the region surrounding El Potrero, was also frequently found in this site's samples, but not once was a cactus type encountered in a Valdéz provenience sample. Most probably this pattern of presence in both archaeological and modern collections shows that much of today's vegetation species covering and surrounding the archaeological sites were also present during the time when the Inka had control in the valley. The absence of archaeological woody material in the modern examples could mean several things: 1) the vegetation of the Calchaquí Valley has changed over the span of 500 years since the Inka empire, 2) materials that were present in either the archaeological samples or modern environment were not collected for the study, and/or 3) not all archaeological material was equally well preserved, thus, unknown woody types from the archaeological record were neither preserved nor identified. These problems could be avoided if historical research were conducted in order to document observed plant life during the first years that the Spanish were in the territory, a concentrated study were completed to confirm that contemporary species are part of the modern plant collection, and the researcher kept in mind that disparities in wood preservation may be found in all contexts. Burning conditions (wood type, age of wood, temperature of charring source, and use of wood and ashes) both during and after charring, environmental conditions (soil type, mineral content, erosion, and weather), and chosen sampling method are just a few factors affecting the survival of a charred wood fragments in the ground.

There were several wood types commonly found together within a single provenience sample. Namely, there were two main type associations: 1) type AA, type AO (monocot), and cactus (Type A) and 2) type AA an jarilla (Type AS). A reason why types AA, AO, and A (cactus) are regularly seen in conjunction with one another may relate to preservation conditions. Specifically, the cactus (Type A) and the monocot species (Type AO) are both delicate materials insofar that both disintegrate rapidly when exposed to a live flame. Thus, if these two types are exposed to the same conditions under which one delicate type to survives, the other type would likely to endure as well. Conditions of preservation may have also influenced the presence of types AA and AS (jarilla) in the samples, but I believe that these two types were commonly encountered in the samples because they were a typical woody vegetation in the Calchaquí Valley during the Inka rule.

There is only a single area in which almost identical types of wood were used in more than one context--

the larger, circular structure between the elite habitations and central *ushnu* plaza at El Potrero (42=14-1; Figures 4 and 5). To date, the sequence of events within this structure is not fully understood; it is not known whether the large ceramic vessel and the hearth feature situated almost directly above it are associated with a single event. If these two contexts are not related, it may be possible to suggest that location does indeed play an important role in the distribution of wood throughout a site.

After reviewing many well preserved charred fragments associated with Inka/elite contexts at El Potrero, I was surprised to see such large quantities of woody materials used for fuel. In a number of cases, more than 12 l of charred material were collected from a single provenience. These high concentrations of well preserved material does not seem to suggest careful regulation of fuel or wood in terms of how much was used at a single time or at least it suggests that the upper-class citizens had easy access to important resources. Although, the unearthing of substantial wood and ash concentrations could be due to the repeated use of a dumping site, the charred material was often still found in its original context of burning in a good state of preservation. Hearth materials were, in general, not in a worse state of preservation than any other context. The relatively undamaged charred fragments usually suggests lower burning temperatures, little available oxygen during burning, or a shorter period of time exposed to a live flame. In sum, elite structures and accompanying contexts were associated with large quantities of charred materials that were fairly well preserved. In all of the examples examined, a very wide variety of materials were found to have been used. This observation probably relates to the supply of local materials: there were many species of shrubby plants and no one dominated the immediate area. Thus, the myriad suitable woody resources from the surrounding environment were greatly relied upon for the population's basic needs.

From all that has been seen, neither the location of a structure within the site nor its basic form played a role in respect to what types of wood were used. However, one conclusion was reached regarding construction supplies. After the review of several occupation levels (i.e. roof fall/upper layers of occupation zone vs. occupation zone), it was possible to predict that cactus (Type A) was an important roofing material for the inhabitants of El Potrero. Cactus was basically found inside structures, and in one instance, a high concentration of cactus was discovered in what was a context of roof fall. Today, cactus is still a preferred building material since it endures many years. Most cactus is seen in the form of roof or door paneling and frames. No cactus was encountered in any of the archaeological samples taken from Valdéz. This absence of cactus wood is evidence strongly supporting that today's environment is similar to what the inhabitants of Valdéz were accustomed: presently no large cactus grow at the site of Valdéz. The absence of cactus also sustains the idea that the people were generally constrained to the materials readily available to them in their surrounding environment.

It seems that both the inhabitants of the Inka installation at El Potrero and those people indigenous to the valley used a great variety of wood species on a daily basis. due to the fact that only wood fragments of small diameters (< 4 cm) were identified, probably most of the wood came from the branches of small shrubs and undergrowth. If any larger branches were exploited they were absent from any samples of either site. Probably, most types of vegetation utilized by the Inka and Diaguita are still being used in a similar matter in

the same regions today.

Appendix A: Modern Wood Collection

**1990-9: "brea"**

Very hard wood to cut when dry  
Yellow-green colored wood  
Mature wood has smaller thorns; younger twigs have thorns about 2x longer  
5 Pieces sampled: 3 - 0.75 in. diameter pieces and 2 - 0.33 in. diameter pieces  
**Charring time:** 1 hr. 45 min.

**1990-15:**

Twigs and wood chips  
Wood easy to cut  
6 pieces sampled: 3 - 0.5 in. diameter twigs and 3 - wood chips (from large, mature tree=  
minimum 2 ft diam)  
**Charring time:** twigs- 35 min.  
wood chips- 1) 55 min. 2) 3 hrs. 5 min. 3) 7 hrs. 10 min.

**1990-5:**

Woody plant  
Smaller branches  
4 pieces: 4 - 0.66 in. diameter  
**Charring time:** 30 min.

**1990-56:**

Very small diameter pieces  
Bright yellow-green wood color  
3 pieces sampled: 0.25 in. diameter  
**Charring time:** 35 min.

**1990-36:**

Brown-red colored bark  
Wood fairly easy to cut  
4 pieces sampled: 2 - .66 in. diameter and 2 - 0.5 in. diameter  
**Charring time:** 1 hr.

**1990-24:**

Hollow cane with outer sheath  
Easy to cut  
5 pieces sampled: 3 - 0.66 in. diameter and 2 - 0.33 in. diameter  
**Charring time:** 1 hr.

**1990-35:**

Wood difficult to cut  
6 pieces sampled: 2 - 0.33 in. diameter, 3 - 0.25 in. diameter, and 1 piece of bark  
**Charring time:** 2 hrs. 15 min.

**1990-17:**

Very tough wood to cut

5 pieces sampled: 3 - 1 in. diameter and 2 - 0.25 in. diameter,

**Charring time:** 1 - 0.25 in. piece- 55 min.

4 - pieces- 2 hrs.

**1990-40:** "cactus"

Wood very easy to cut: "soft"

6 pieces sampled: 3 - with smaller openings and 3 - with larger openings

**Charring time:** 3 - pieces- 1 hr. 30 min.

3 - pieces- 2 hrs.

Comments: Cactus wood burst into flames as aluminum foil was opened; flame put out with water

**1990-20:** *Chenopodium* sp.

Stalk-like: grass/weed

4 pieces sampled: 1 - 0.33 in. diameter and 1 - 0.25 in. diameter

**Charring time:** 40 min.

**1990-6:**

Branches and root samples

5 pieces sampled: 3 - 0.66 in. diameter, 3 - 0.33 in. diameter, and 1 piece of root - 1.0 in. diameter

**Charring time:** 3 - pieces- 1 hr. 5 min.

3 - pieces- 1 hr. 40 min.

Comments: Root began to glow as aluminum foil was opened; put ember out with water

**1990-18:**

Stalky weed type

Very easy to cut

4 pieces sampled: 4 - 0.33 in. diameter

**Charring time:** 30 min.

Comments: One piece was disintegrated

**1990-11:**

A yellow-green growth (fungus/moss) on branches

Soft pithy center

5 pieces sampled: 5 - 0.33 in. diameter

**Charring time:** 30 min.

**1990-14:** "sauce"

Very easy to cut

5 pieces sampled: 3 - 0.66 in. diameter and 2 - 0.5 in. diameter

**Charring time:** 35 min.

Comments: 1990-82 also was designated as "sauce"

**1990-8:**

Possibly woody stem  
Snapped easily in half  
Small stickers/thorns  
5 pieces sampled: 3 - 0.66 in. diameter and 2 - 0.33 in. diameter  
**Charring time:** 3 pieces- 35 min.  
1 piece- 55 min.  
1 piece- 1 hr. 55 min.

**1990-83:** "cactus roots"

4 pieces sampled: 2 - 2.25 in. diameter and 2 - 0.75 in. diameter  
**Charring time:** 3 pieces- 45 min.  
1 piece- 1 hr. 10 min.  
Comments: The root was moldy before it was dried out for charring  
One root piece burst into flames as the aluminum foil was opened; flame put  
out with water

**1990-47:** "molle"

Weather beaten and gnarled bark  
5 pieces sampled: 3 - 0.75 in. diameter and 2 - 0.33 in. diameter  
**Charring time:** 1 piece- 30 min.  
3 pieces- 1 hr. 50 min.  
1 piece- 1 hr. 30 min.  
Comments: 1990-72 also thought to be "molle"

**1990-72:** "molle"

5 pieces sampled: ranged from 1.25 in. to 0.75 in. in diameter  
**Charring time:** 3 pieces- 30 min.  
4 pieces- 1 hr. 35 min.  
1 piece- 3 hrs.  
Comments: 1990-47 also was designated as "molle"

**1990-60:** "molle"

woody stemmed plant: "shrubby"  
5 pieces sampled: 4 - 0.66 in. diameter and 1 - 0.33 in. diameter  
**Charring time:** 1 piece- 25 min.  
2 pieces- 1 hr. 5 min.  
2 pieces- 1 hr. 30 min.

**1990-82:**

Old dead-wood  
Easy to cut  
5 pieces sampled: 3 - 1.25 in. diameter and 2 - 0.75 in. diameter  
**Charring time:** 3 pieces- 50 min.  
2 pieces- 1 hr. 45 min.

**1990-74:**

Stalky plant stem  
Very easy to cut

5 pieces sampled: 3 - 0.75 in. diameter and 2 - 0.5 in. diameter

**Charring time:** 4 pieces- 35 min.  
1 piece- 1 hr. 5 min.

**1990-71:**

Very gnarled branches

Wood is hard as rock

4 pieces sampled: 2 - 0.75 in. diameter and 2 - 0.33 in. diameter

**Charring time:** 2 pieces- 50 min.  
1 piece- 1 hr. 10 min.  
1 piece- 2 hrs. 25 min.

**1990-78:**

Hard wood

Long-thorned branches

4 pieces sampled: 1 - 0.4 in. diameter, 2 - 0.25 in. diameter, and 2 - 0.15 in. diameter

**Charring time:** 1 piece- 35 min.  
2 pieces- 1 hr. 15 min.  
1 piece- 3 hrs. 20 min.

**1990-68:**

Woody stalk

Grayish to brown "bark"

Branch breaks easily apart into long strips

5 pieces sampled: 2 - 0.5 in. diameter and 3 - 0.4 in. diameter

**Charring time:** 4 pieces- 1 hr.  
1 piece- 1 hr. 35 min.

**1990-77:**

Easily broken twigs

4 pieces sampled: 4 - 0.4 in. diameter

**Charring time:** 2 pieces- 40 min.  
1 piece- 1 hr. 10 min.  
1 piece- 1 hr. 30 min.

**1990-75:**

4 pieces sampled: 3 - 0.5 in. diameter and 1 - 0.33 in. diameter

**Charring time:** 3 pieces- 40 min.  
1 piece- 1 hr.

Comments: Piece was very moldy and soft before charring

**1990-13: "maize"**

Monocot

3 pieces sampled

**Charring time:** 3 pieces- 2 hrs.

**1990-32: "jarilla"**



**Charring time:** 1 piece- 1 hr. 30 min.  
2 pieces- 2 hrs. 40 min.

## Appendix B.prov densities

## Appendix B: Wood Densities

## SCREEN SAMPLES:

## SCREEN

| Proveniences: |                | Density (pcs/l) | CC  |
|---------------|----------------|-----------------|-----|
| P17           | 42=5-20-2-4-3  | 339.13          | 250 |
| P6            | 42=15-90-1-4-3 | 180.00          | 410 |
| P9            | 42=14-1-2-6-2  | 174.00          | 498 |
| P8            | 42=21-51-1-3-2 | 21.20           | 420 |
| P4            | 42=4-20-8-8-1  | 17.39           | 390 |
| P13           | 42=7-50-1-4-1  | 6.72            | 211 |
| V1            | 12=3-41-1-9-9  | 3.88            | 390 |
| V3            | 12=1-50-3-5-1  | 3.60            | 390 |
| V2            | 12=4-40-3-3-2  | 2.90            | 330 |
| P18           | 42=7-50-1-5-4  | 2.57            | 419 |
| P1            | 42=7-20-6-2-1  | 1.28            | 330 |
| P27           | 42=4-20-1-8-1  | 1.18            | 300 |
| P5            | 42=40-1-2-4-2  | 1.16            | 420 |
| P26           | 42=14-1-2-4-1  | 1.00            | 311 |
| P14           | 42=16-50-1-4-2 | 1.00            | 310 |
| P21           | 42=17-20-5-3-1 | 1.00            | 330 |
| P12           | 42=21-50-2-2-1 | 0.90            | 390 |
| P2            | 42=7-20-6-3-1  | 0.76            | 301 |
| P16           | 42=5-20-2-4-1  | 0.36            | 311 |
| P3            | 42=16-1-3-3-1  | 0.33            | 310 |
| P25           | 42=15-90-1-4-1 | 0.31            | 312 |
| P11           | 42=21-20-1-3-1 | 0.08            | 390 |

| CC = Cultural Context |  |
|-----------------------|--|
| 211                   | medium density midden                              |
| 250                   | high density midden                                |
| 300                   | surface not clearly compact                        |
| 301                   | surface/floor inside structure                     |
| 310                   | occupation zone                                    |
| 311                   | occupation zone; soil laid down inside during use  |
| 312                   | occupation zone; soil laid down outside during use |
| 313                   | dense occupation zone                              |
| 330                   | roof fall onto floor/floor contact                 |
| 342                   | floor  |
| 343                   | compact surface outside structure                  |
| 390                   | possible occupation zone                           |
| 410                   | pit filled with ash                                |
| 419                   | pit filled with charred material                   |
| 420                   | hearth   |
| 498                   | fill fom inside ceramic vessel                     |
| 595                   | burial in ceramic vessel                           |
| 620                   | cultural fill                                      |

## FLOT SAMPLES:

## SCATTER

| Proveniences: |                | Density (pcs/l) | CC  |
|---------------|----------------|-----------------|-----|
| P5            | 42=40-1-2-4-2  | 571.43          | 420 |
| P14           | 42=16-50-1-4-2 | 141.62          | 310 |
| V2            | 12=4-40-3-3-2  | 79.17           | 330 |
| P21           | 42=17-20-5-3-1 | 40.32           | 330 |
| P15           | 42=16-50-4-3-3 | 22.57           | 343 |
| P2            | 42=7-20-6-3-1  | 16.17           | 301 |

## BULK

| Proveniences: |                   | Density (pcs/l) | CC  |
|---------------|-------------------|-----------------|-----|
| P6            | 42=15-90-1-4-3/1  | 3132.40         | 410 |
| P13           | 42=7-50-1-4-1/4   | 1234.17         | 211 |
| P27           | 42=4-20-1-8-1/4   | 650.33          | 300 |
| P4            | 42=4-20-8-8-1/3   | 309.40          | 390 |
| P23           | 42=40-1-2-4-1/11  | 245.45          | 342 |
| P17           | 42=5-20-2-4-3/11  | 156.25          | 250 |
| V1            | 12=3-41-1-9-9/1   | 72.61           | 390 |
| P12           | 42=21-50-2-2-1/3  | 53.92           | 390 |
| P7            | 42=21-51-1-3-1/1  | 49.33           | 310 |
| P26           | 42=14-1-2-4-1/1   | 44.48           | 311 |
| P15           | 42=16-50-4-3-3/3  | 40.00           | 343 |
| P9            | 42=14-1-2-6-2/1   | 38.50           | 498 |
| P16           | 42=5-20-2-4-1/21  | 33.68           | 311 |
| P19           | 42=41-50-1-2-1/1  | 31.22           | 595 |
| P1            | 42=7-20-6-2-1/1   | 28.00           | 330 |
| P20+          | 42=9-50-3-3-1/3   | 20.29           | 620 |
| P10           | 42=14-1-2-6-3/1   | 19.50           | 420 |
| P11           | 42=21-20-1-3-1/1  | 14.00           | 390 |
| P20           | 42=9-50-1-3-1/1   | 11.14           | 620 |
| P25           | 42=15-90-1-4-1/1  | 10.67           | 312 |
| P28           | 42=4-20-5-3-2/2   | 9.20            | 313 |
| V3            | 12=1-50-3-5-1/1   | 8.78            | 390 |
| P22           | 42=4-50-1-4-1/1   | 6.80            | 390 |
| P22+          | 42=4-50-1-7-1/1   | 6.71            | 390 |
| P24           | 42=15-90-13-6-1/1 | 5.67            | 390 |
| P3            | 42=16-1-3-3-1/1   | 0.24            | 310 |

## Bibliography

- Acreche, Noemi, Marta de Viana y Carlos Palaci  
1989 *Los cardones: Distribución, abundancia y crecimiento*. Salta, Argentina: Museo de Ciencias Naturales, Universidad Nacional de Salta.
- Ansión, Juan  
1986 *El árbol y el bosque en la sociedad andina*. Lima, Perú: Proyecto FAO Holanda/INFOR.
- Aparicio, Francisco de y Horacio A. Difrieri  
1958-1963 *La Argentina, una de geographía*. Tomo III. Buenos Aires: Ediciones Peuser.
- Arnott, Sigrid and Catherine Heyne  
1990 Flot procedure: Proyecto Arqueológico Calchaquí. Laboratory procedure notes.
- Bennett, Wendell C. and Junius B. Bird  
1960 *Andean Culture History*, pp. 158-182. Garden City, New York: The Natural History Press.
- Bouchard, Jean-François  
1983 *Contribution a l'etude de l'architecture inca*. Paris: Maison des sciences de l'homme.
- Cabrera, Angel L.  
1976 *Regiones fitogeográficas argentinas. Enciclopedia argentina de agricultura y jardinería*, 2. Buenos Aires: Editorial ACME S.A.C.I..
- Cobo, Father Bernabé  
1979 [1653] *History of the Inca empire*. Roland Hamilton, trans. and ed.. Austin, TX: University of Texas Press.
- Core, H. A., W. A. Côté, and A. C. Day  
1979 *Wood structure and identification*. Syracuse Wood Science Series, 6. Syracuse, NY: Syracuse University Press.
- Hastorf, Christine A. and Sissel Johannessen  
1991 Understanding changing people/plant relationships in the prehispanic Andes. *Processual and postprocessual archaeologies: Multiple ways of knowing the past*. Robert W. Preucel, ed.. Carbondale, IL: Southern Illinois University.
- Hoadley, R. Bruce  
1990 *Identifying Wood*. New Town, Connecticut: Taunton Press.
- Hyslop, John  
1984 *The Inka road system*. New York: Academic Press.  
1990 *Inka Settlement Planning*. Austin, TX: University of Texas Press.
- Johannessen, Sissel  
1990 personal communication.

- Johannessen, Sissel and Christine A. Hastorf  
1990 A history of fuel management (A.D. 500 to the present) in the Mantaro Valley, Peru. *Journal of Ethnobiology*, 10(1):61-90.
- Kendall, Ann  
1985 *Aspects of Inca architecture: Description, function and chronology*, Part i & ii. International Series 242. Oxford, England: British Archaeological Reports.
- Lennstrom, Heidi A.  
Botanical remains from the Calchaquí Archaeological Project 1990. Lab report.
- Lennstrom, Heidi A. and Christine A. Hastorf  
1992 Homes and Stores: A botanical comparison of Inka storehouses and contemporary ethnic houses. *Storage in the Inka empire*. Terri LeVine, ed.. University of Oklahoma Press.
- Mosely, Michael  
1992 *The Incas and their ancestors*. London: Thames & Hudson, Ltd..
- Newsom, Lee A.  
Plants and people: Cultural, biological, and ecological responses to wood exploitation.
- Poma de Ayala, Felipe Huaman  
1978 [1567-1615] *A letter to a king*. Christopher Dilke, ed.. New York: E. P. Dutton.
- Rowe, John Howland  
1946 Inca culture at the time of the Spanish conquest. *Handbook of South American Indians*, Vol. 2. Julian H. Steward, ed.. Washington D.C.: US Governmental Printing Office.
- Tarragó, Myriam Noemí  
1977 La localidad arqueológica de Las Pailas, Provincia de Salta, Argentina. *Actas del VII Congreso de Arqueología de Chile*, 2.  
1978 Paleoecology of the Calchaquí Valley, Salta Province, Argentina. *Advances in Andean Archaeology*. David Browman, ed.. Paris: Mouton Publishers.
- Tarragó, Myriam Noemí y Pío Pablo Díaz  
1972 Sitios arqueológicos del valle Calchaquí. *Estudios de arqueología*, 1:49-61. Salta, Argentina: La imprenta de la provincia - Salta.
- Watson, Patty Jo  
1976 In pursuit of prehistoric subsistence; A comparative account of some contemporary flotation techniques. *Midcontinental Journal of Archaeology*, 1:77-100.

*Wood to flot boxes:*

Wood IDs.raw data

*make sure tag is with wood specimen before returning to flot box.*

| √ | Prov   | Vial    | Pc   | Vial Type | Flot | Quant | Cats | ID   | Divisic | Cond | CC     |
|---|--------|---------|------|-----------|------|-------|------|------|---------|------|--------|
|   | modern | 1990-05 |      | box       |      | 0     |      | R    | 2       | no   | modern |
| x | modern | 1990-06 |      | box       |      | 0     |      | AS   |         | no   |        |
|   | modern | 1990-06 | root | box       |      | 0     |      |      |         | no   |        |
| x | modern | 1990-08 |      | box       |      | 0     | ZY   | BF   |         | no   | modern |
| x | modern | 1990-15 |      | box       |      | 0     |      | ED   |         | no   |        |
|   | modern | 1990-15 | twig | box       |      | 0     |      |      |         | no   |        |
|   | modern | 1990-17 |      | box       |      | 0     | N    |      |         | no   |        |
| x | modern | 1990-32 |      | box       |      | 0     | ZV   | AS   |         | no   |        |
| y | modern | 1990-36 |      | box       |      | 0     |      |      |         | no   |        |
| x | modern | 1990-40 |      | box       |      | 0     |      | A    |         | no   |        |
| x | modern | 1990-47 |      | box       |      | 0     |      | AM   |         | no   | modern |
| x | modern | 1990-60 |      | box       |      | 0     |      | R    | 2       | no   | modern |
|   | modern | 1990-68 |      | box       |      | 0     |      |      |         | no   | modern |
| x | modern | 1990-71 |      | box       |      | 0     |      | AN   |         | no   | modern |
| x | modern | 1990-72 |      | box       |      | 0     |      | AM   |         | no   | modern |
|   | modern | 1990-74 |      | box       |      | 0     |      |      |         | no   |        |
|   | modern | 1990-75 |      | box       |      | 0     |      |      |         | no   |        |
|   | modern | 1990-78 |      | box       |      | 0     |      | 'C'  |         | no   |        |
|   | modern | 1990-83 |      | box       |      | 0     | A    | 'A'  |         | no   |        |
| x | P.1    | 1       |      | flot      | b    | 1     |      | noID |         | D    | 330    |
| x | P.1    | 1       | A    | screen    |      | 1     | A    | A    |         | no   | 330    |
| x | P.1    | 1       | B    | screen    |      | 1     | A    | A    |         | no   | 330    |
| x | P.1    | 1       | C    | screen    |      | 1     | A    | A    |         | no   | 330    |
| x | P.1    | 1       | D    | screen    |      | 1     | A    | A    |         | no   | 330    |
| x | P.1    | 2       | A    | flot      | b    | 1     | ZT   | C    |         | no   | 330    |
| x | P.1    | 2       | B    | flot      | b    | 1     | ZT   | C    |         | no   | 330    |
| x | P.1    | 2       | A    | screen    |      | 1     | M    | Pk   | 3       | no   | 330    |
| x | P.1    | 2       | B    | screen    |      | 1     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 2       | C    | screen    |      | 1     | M    | Pk   | 3       | no   | 330    |
| x | P.1    | 2       | D    | screen    |      | 1     | M    | Pk   | 2       | no   | 330    |
| x | P.1    | 3       |      | flot      | b    | 1     |      | noID |         | C    | 330    |
| x | P.1    | 3       | A    | screen    |      | 1     | ZX   | V    |         | no   | 330    |
| x | P.1    | 3       | B    | screen    |      | 1     | N    | K    |         | no   | 330    |
| x | P.1    | 4       |      | flot      | b    | 1     | ZV   | AS   |         | no   | 330    |
| x | P.1    | 4       |      | screen    |      | 2     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 5       |      | flot      | b    | 1     | M    | Pk   | 2       | T,no | 330    |
| x | P.1    | 5       | A    | screen    |      | 1     | M    | BL   | 1       | no   | 330    |
| x | P.1    | 5       | B    | screen    |      | 1     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 6       |      | flot      | b    | 1     | M    | Pk   | 2       | no   | 330    |
| x | P.1    | 6       |      | screen    |      | 1     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 7       |      | flot      | b    | 1     | M    | noID |         | T    | 330    |
| x | P.1    | 7       |      | screen    |      | 1     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 8       |      | flot      | b    | 1     | M    | BL   |         | no   | 330    |
| x | P.1    | 8       |      | screen    |      | 1     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 9       |      | flot      | b    | 1     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 9       |      | screen    |      | 1     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 9       |      | screen    |      | 1     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 10      |      | flot      | b    | 1     |      | AO   |         | no   | 330    |
| x | P.1    | 11      |      | flot      | b    | 1     |      | AA   | 3       | no   | 330    |
| x | P.1    | 153     | A    | screen    |      | 1     | M    | Pk   | 1       | C    | 330    |
| x | P.1    | 153     | B    | screen    |      | 1     | M    | Pk   | 1       | no   | 330    |
| x | P.1    | 205     | A    | flot      | b    | 1     | A    | A    |         | no   | 330    |
| x | P.1    | 205     | B    | flot      | b    | 1     | A    | A    |         | no   | 330    |
| x | P.1    | 205     | C    | flot      | b    | 1     | A    | A    |         | no   | 330    |
| x | P.1    | 205     | D    | flot      | b    | 2     | A    | A    |         | no   | 330    |
| x | P.1    | 205     | E    | flot      | b    | 2     | A    | A    |         | no   | 330    |
| x | P.1    | 205     | F    | flot      | b    | 1     | A    | A    |         | no   | 330    |
| x | P.2    | 10      | A    | screen    |      | 1     | A    | A    |         | T,no | 301    |
| x | P.2    | 10      | B    | screen    |      | 1     | A    | A    |         | T,no | 301    |
| x | P.2    | 10      | C    | screen    |      | 1     | A    | A    |         | no   | 301    |
| x | P.2    | 11      |      | screen    |      | 1     |      | AA   | 1       | T    | 301    |
| x | P.2    | 12      |      | flot      | s    | 1     | ZX   | V    |         | no   | 301    |
| x | P.2    | 12      | A    | screen    |      | 1     | ZX   | V    |         | no   | 301    |
| x | P.2    | 12      | B    | screen    |      | 1     | ZX   | V    |         | no   | 301    |
| x | P.2    | 13      |      | flot      | s    | 1     | ZX   | R    | 2       | no   | 301    |
| x | P.2    | 13      |      | screen    |      | 1     | ZT   | C    |         | no   | 301    |
| x | P.2    | 14      |      | flot      | s    | 1     |      | noID |         | C    | 301    |
| x | P.2    | 14      | A    | screen    |      | 1     | M    | Pk   | 1       | no   | 301    |

## Wood IDs.raw data

| <u>√</u> | <u>Prov</u> | <u>Vial</u> | <u>Pc</u> | <u>Vial_Type</u> | <u>Flot</u> | <u>Quanti</u> | <u>Catr</u> | <u>ID</u> | <u>Divisic</u> | <u>Cond</u> | <u>CC</u> |
|----------|-------------|-------------|-----------|------------------|-------------|---------------|-------------|-----------|----------------|-------------|-----------|
| x        | P.2         | 14          | B         | screen           |             | 1             | M           | Pk        | 1              | no          | 301       |
| x        | P.2         | 15          | A         | flot             | s           | 1             | JJ          | noID      | AI             | D           | 301       |
| x        | P.2         | 15          | B         | flot             | s           | 1             | JJ          | AI        | AL             | no          | 301       |
| x        | P.2         | 15          | C         | flot             | s           | 1             | JJ          | AI        |                | SD,D        | 301       |
| x        | P.2         | 15          | A         | screen           |             | 1             |             | AA        | 3              | no          | 301       |
| x        | P.2         | 15          | B         | screen           |             | 1             |             | AA        | 1              | no          | 301       |
| x        | P.2         | 15          | C         | screen           |             | 1             |             | AA        | 1              | no          | 301       |
| x        | P.2         | 15          | D         | screen           |             | 1             |             | AA        | 1              | no          | 301       |
| x        | P.2         | 16          | A         | flot             | s           | 1             | ZX          | R         | 1              | SD,T        | 301       |
| x        | P.2         | 16          | B         | flot             | s           | 1             | ZX          | V         | 2              | T           | 301       |
| x        | P.2         | 16          | A         | screen           |             | 1             | PP          | F         | 1              | no          | 301       |
| x        | P.2         | 16          | B         | screen           |             | 1             | PP          | F         | 1              | no          | 301       |
| x        | P.2         | 17          |           | flot             | s           | 1             |             | L         |                | T           | 301       |
| x        | P.2         | 17          | A         | screen           |             | 2             | M           | Pk        | 1              | no          | 301       |
| x        | P.2         | 17          | B         | screen           |             | 1             |             | noID      | AW             | D/SD        | 301       |
| x        | P.2         | 18          |           | flot             | s           | 2             |             | AA        | 3              | no          | 301       |
| x        | P.2         | 18          |           | screen           |             | 1             |             | J         |                | SD          | 301       |
| x        | P.2         | 19          |           | flot             | s           | 1             | ZZ          | EE        |                | no          | 301       |
| x        | P.2         | 19          |           | screen           |             | 1             | ZX          | R         | 2              | no          | 301       |
| x        | P.2         | 20          | A         | flot             | s           | 1             |             | noID      |                | D/SD        | 301       |
| x        | P.2         | 20          | B         | flot             | s           | 1             |             | AG        |                | no          | 301       |
| x        | P.2         | 21          |           | flot             | s           | 2             |             | noID      |                | T           | 301       |
| x        | P.2         | 22          | A         | flot             | s           | 1             |             | noID      |                | D           | 301       |
| x        | P.2         | 22          | B         | flot             | s           | 1             | N           | noID      |                | D           | 301       |
| x        | P.2         | 206         | A         | flot             | s           | 1             | MN          | C         | Pk             | no          | 301       |
| x        | P.2         | 206         | B         | flot             | s           | 1             |             | BN        |                | T,SD        | 301       |
| x        | P.3         | 29          |           | screen           |             | 1             | ZX          | R         | 2              | no          | 310       |
| x        | P.3         | 30          |           | screen           |             | 1             | JJ          | AJ        |                | no          | 310       |
| x        | P.3         | 31          |           | screen           |             | 1             |             | AM        |                | no          | 310       |
| x        | P.3         | 32          |           | flot             | b           | 1             |             | AH        |                | no          | 310       |
| x        | P.3         | 32          |           | screen           |             | 1             | MN          | noID      | C/G            | T           | 310       |
| x        | P.3         | 33          |           | flot             | b           | 1             |             | AN        |                | D           | 310       |
| x        | P.3         | 33          |           | screen           |             | 2             |             | AA        | 1/3            | SD          | 310       |
| x        | P.3         | 34          | A         | flot             | b           | 1             | ZT          | C         |                | T           | 310       |
| x        | P.3         | 34          | B         | flot             | b           | 1             | M           | noID      | B              | T           | 310       |
| x        | P.3         | 34          |           | screen           |             | 1             |             | AK        | BD             | no          | 310       |
| x        | P.3         | 35          |           | flot             | b           | 1             | A           | AB        |                | no          | 310       |
| x        | P.3         | 35          |           | screen           |             | 1             |             | G         |                | SD,D        | 310       |
| x        | P.3         | 36          |           | flot             | b           | 1             |             | AM        |                | no          | 310       |
| x        | P.3         | 36          |           | screen           |             | 1             | M           | Pk        |                | no          | 310       |
| x        | P.3         | 37          | A         | flot             | b           | 1             |             | noID      |                | D           | 310       |
| x        | P.3         | 37          | B         | flot             | b           | 1             |             | noID      |                | D,T         | 310       |
| x        | P.3         | 37          | C         | flot             | b           | 1             |             | noID      |                | D           | 310       |
| x        | P.3         | 37          | D         | flot             | b           | 1             |             | noID      |                | D           | 310       |
| x        | P.3         | 37          |           | screen           |             | 1             |             | noID      |                | D           | 310       |
| x        | P.4         | 51          | A         | screen           |             | 1             | ZX          | S         |                | no          | 390       |
| x        | P.4         | 51          | B         | screen           |             | 1             | ZX          | S         |                | no          | 390       |
| x        | P.4         | 52          | A         | screen           |             | 1             | ZX          | R         | 1              | no          | 390       |
| x        | P.4         | 52          | B         | screen           |             | 1             | ZX          | R         | 2              | no          | 390       |
| x        | P.4         | 53          | A         | screen           |             | 1             |             | noID      |                | D           | 390       |
| x        | P.4         | 53          | B         | screen           |             | 1             | JJ          | AI        | AJ             | no          | 390       |
| x        | P.4         | 53          | C         | screen           |             | 1             | JJ          | AJ        |                | no          | 390       |
| x        | P.4         | 54          |           | flot             | b           | 1             | ZX          | S         |                | no          | 390       |
| x        | P.4         | 54          |           | screen           |             | 1             | JJ          | AI        |                | no          | 390       |
| x        | P.4         | 55          |           | flot             | b           | 1             |             | U         |                | Y           | 390       |
| x        | P.4         | 56          | A         | flot             | b           | 1             | JJ          | AD        | AI             | no          | 390       |
| x        | P.4         | 56          | B         | flot             | b           | 1             |             | AA        | 4              | no          | 390       |
| x        | P.4         | 56          | C         | flot             | b           | 1             |             | AA        | 4              | no          | 390       |
| x        | P.4         | 57          |           | flot             | b           | 1             |             | noID      |                | T,SD        | 390       |
| x        | P.4         | 58          | A         | flot             | b           | 1             | JJ          | AI        |                | no          | 390       |
| x        | P.4         | 58          | B         | flot             | b           | 1             | JJ          | AI        |                | D           | 390       |
| x        | P.4         | 59          |           | flot             | b           | 1             | M           | Pk        | 1              | no          | 390       |
| x        | P.4         | 60          |           | flot             | b           | 1             | ZX          | R         | 2              | no          | 390       |
| x        | P.4         | 152         | A         | screen           |             | 1             | ZX          | R         |                | D           | 390       |
| x        | P.4         | 152         | B         | screen           |             | 1             | ZY          | W         |                | no          | 390       |
| x        | P.5         | 55          | A         | screen           |             | 1             |             | noID      |                | C,T         | 420       |
| x        | P.5         | 55          | B         | screen           |             | 1             | ZT          | C         |                | no          | 420       |
| x        | P.5         | 55          | C         | screen           |             | 1             | ZT          | C         |                | SD          | 420       |
| x        | P.5         | 55          | D         | screen           |             | 1             | ZT          | C         |                | C           | 420       |

## Wood IDs.raw data

| ✓ | Prov | Vial | Pc | Vial_Type | Flot | Quan | Cats | ID   | Divisic | Cond | CC  |
|---|------|------|----|-----------|------|------|------|------|---------|------|-----|
| x | P.5  | 55   | E  | screen    |      | 1    |      | noID |         | C    | 420 |
| x | P.5  | 56   |    | screen    |      | 1    |      | AA   | 3       | SD/D | 420 |
| x | P.5  | 57   | A  | screen    |      | 1    | ZT   | C    |         | no   | 420 |
| x | P.5  | 57   | B  | screen    |      | 1    | ZT   | C    |         | no   | 420 |
| x | P.5  | 57   | C  | screen    |      | 1    | ZT   | C    |         | no   | 420 |
| x | P.5  | 58   |    | screen    |      | 1    | A    | A    |         | no   | 420 |
| x | P.5  | 61   | A  | flot      | s    | 1    | M    | Pk   | 1       | no   | 420 |
| x | P.5  | 61   | B  | flot      | s    | 1    | ZT   | C    |         | no   | 420 |
| x | P.5  | 62   | A  | flot      | s    | 1    |      | AR   |         | no   | 420 |
| x | P.5  | 62   | B  | flot      | s    | 1    |      | AR   |         | no   | 420 |
| x | P.5  | 63   |    | flot      | s    | 1    |      | AO   |         | no   | 420 |
| x | P.5  | 64   |    | flot      | s    | 1    | ZV   | AS   |         | no   | 420 |
| x | P.5  | 65   |    | flot      | s    | 1    | ZY   | W    |         | no   | 420 |
| x | P.5  | 66   |    | flot      | s    | 1    |      | AQ   |         | no   | 420 |
| x | P.5  | 67   |    | flot      | s    | 1    | ZX   | V    |         | no   | 420 |
| x | P.5  | 68   |    | flot      | s    | 1    |      | noID | G       | T,SD | 420 |
| x | P.6  | 59   | A  | screen    |      | 1    | JJ   | AI   |         | D,SD | 410 |
| x | P.6  | 59   | B  | screen    |      | 1    | JJ   | AI   |         | SD   | 410 |
| x | P.6  | 59   | C  | screen    |      | 1    | JJ   | AI   |         | no   | 410 |
| x | P.6  | 59   | D  | screen    |      | 1    | JJ   | AJ   |         | no   | 410 |
| x | P.6  | 59   | E  | screen    |      | 1    | JJ   | AI   |         | no   | 410 |
| x | P.6  | 59   | F  | screen    |      | 1    | JJ   | AI   |         | SD   | 410 |
| x | P.6  | 60   |    | screen    |      | 1    | ZX   | AX   |         | no   | 410 |
| x | P.6  | 61   | A  | screen    |      | 1    | ZX   | V    | 2       | no   | 410 |
| x | P.6  | 61   | B  | screen    |      | 1    | ZX   | V    | 2       | D    | 410 |
| x | P.6  | 69   | A  | flot      | b    | 1    | ZX   | V    | 1       | no   | 410 |
| x | P.6  | 69   | B  | flot      | b    | 1    | ZX   | V    | 1       | no   | 410 |
| x | P.6  | 69   | C  | flot      | b    | 1    | ZX   | V    | 1       | no   | 410 |
| x | P.6  | 70   | A  | flot      | b    | 1    | JJ   | noID |         | D    | 410 |
| x | P.6  | 70   | B  | flot      | b    | 1    | JJ   | AI   |         | no   | 410 |
| x | P.6  | 70   | C  | flot      | b    | 1    | JJ   | noID |         | D    | 410 |
| x | P.6  | 70   | D  | flot      | b    | 1    | JJ   | AI   | AD      | no   | 410 |
| x | P.6  | 71   |    | flot      | b    | 1    | ZX   | R    | 1       | SD   | 410 |
| x | P.6  | 72   |    | flot      | b    | 1    | JJ   | AJ   |         | SD   | 410 |
| x | P.6  | 73   |    | flot      | b    | 1    | JJ   | AJ   |         | no   | 410 |
| x | P.6  | 151  |    | screen    |      | 1    | ZX   | V    | 2       | no   | 410 |
| x | P.7  | 74   |    | flot      | b    | 1    | M    | Pk   | 1       | C    | 310 |
| x | P.7  | 75   | A  | flot      | b    | 1    | JJ   | BA   |         | no   | 310 |
| x | P.7  | 75   | B  | flot      | b    | 1    | JJ   | AJ   |         | SD   | 310 |
| x | P.7  | 76   |    | flot      | b    | 1    | M    | AZ   |         | no,T | 310 |
| x | P.7  | 77   |    | flot      | b    | 1    |      | L    |         | no,T | 310 |
| x | P.7  | 78   |    | flot      | b    | 1    | ZX   | Q    |         | C,SD | 310 |
| x | P.7  | 79   |    | flot      | b    | 1    | N    | noID |         | T    | 310 |
| x | P.7  | 80   | A  | flot      | b    | 1    |      | noID |         | D    | 310 |
| x | P.7  | 80   | B  | flot      | b    | 1    |      | GR   |         | no   | 310 |
| x | P.7  | 80   | C  | flot      | b    | 1    |      | L    |         | SD   | 420 |
| x | P.8  | 62   |    | screen    |      | 1    | ZX   | V    | 1       | no   | 420 |
| x | P.8  | 63   | A  | screen    |      | 1    | JJ   | noID |         | SD/D | 420 |
| x | P.8  | 63   | B  | screen    |      | 1    | JJ   | AI   |         | SD   | 420 |
| x | P.8  | 63   | C  | screen    |      | 1    | JJ   | noID |         | D/SD | 420 |
| x | P.8  | 64   |    | screen    |      | 1    | ZZ   | X    | 1       | no   | 420 |
| x | P.8  | 65   |    | screen    |      | 1    | ZX   | R    |         | T,SD | 420 |
| x | P.8  | 66   | A  | screen    |      | 1    | ZX   | R    | 2       | no   | 420 |
| x | P.8  | 66   | B  | screen    |      | 1    | ZX   | R    | 1       | SD   | 420 |
| x | P.8  | 67   |    | screen    |      | 1    | N    | T    | noID    | T,SD | 420 |
| x | P.8  | 68   |    | screen    |      | 1    | JJ   | noID | AI      | T,SD | 420 |
| x | P.9  | 69   |    | screen    |      | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 70   | A  | screen    |      | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 70   | B  | screen    |      | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 71   | A  | screen    |      | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 71   | B  | screen    |      | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 71   | C  | screen    |      | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 71   | D  | screen    |      | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 71   | E  | screen    |      | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 72   |    | screen    |      | 1    |      | AO   |         | no   | 498 |
| x | P.9  | 73   |    | screen    |      | 1    |      | AO   |         | no   | 498 |
| x | P.9  | 81   | A  | flot      | b    | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 81   | B  | flot      | b    | 1    | A    | A    |         | no   | 498 |
| x | P.9  | 81   | C  | flot      | b    | 1    | A    | A    |         | no   | 498 |

## Wood IDs.raw data

| √ | Prov | Vial | Pc | Vial Type | Flot | Quant | Cate | ID   | Divisic | Cond | CC      |
|---|------|------|----|-----------|------|-------|------|------|---------|------|---------|
| x | P.9  | 81   | D  | flot      | b    | 1     | A    | A    |         | no   | 498     |
| x | P.9  | 81   | E  | flot      | b    | 1     | A    | A    |         | SD   | 498     |
| x | P.9  | 82   |    | flot      | b    | 1     |      | AO   |         | no   | 498     |
| x | P.9  | 83   | A  | flot      | b    | 1     |      | AA   | 3       | T    | 498     |
| x | P.9  | 83   | B  | flot      | b    | 1     |      | AA   | 3       | no   | 498     |
| x | P.9  | 83   | C  | flot      | b    | 1     |      | AA   | 3       | no   | 498     |
| x | P.9  | 84   |    | flot      | b    | 1     |      | 'AO' |         | T    | 498     |
| x | P10  | 85   | A  | flot      | b    | 1     | A    | A    |         | T,no | 390     |
| x | P10  | 85   | B  | flot      | b    | 1     | A    | A    |         | T,SD | 390     |
| x | P10  | 86   | A  | flot      | b    | 1     |      | noID |         | C,T  | 390     |
| x | P10  | 86   | B  | flot      | b    | 1     |      | AA   |         | C    | 390     |
| x | P10  | 87   |    | flot      | b    | 1     | ZZ   | X    | noID    | D    | 390     |
| x | P10  | 88   |    | flot      | b    | 1     |      | noID | AA-5    | T    | 390     |
| x | P10  | 89   | A  | flot      | b    | 1     |      | AA   | 2       | SD   | 390     |
| x | P10  | 89   | B  | flot      | b    | 1     |      | AA   | 2       | SD   | 390     |
| x | P10  | 89   | C  | flot      | b    | 1     |      | AA   | 2       | SD   | 390     |
| x | P10  | 90   | A  | flot      | b    | 1     |      | AO   |         | no   | 390     |
| x | P11  | 74   | A  | screen    |      | 1     | FP   | E    | 1       | no   | 390/670 |
| x | P11  | 74   | B  | screen    |      | 1     | FP   | E    | 1       | no   | 390/670 |
| x | P11  | 75   |    | screen    |      | 1     | ZV   | AS   |         | C    | 390/670 |
| x | P11  | 76   |    | screen    |      | 1     | A    | A    |         | no   | 390/670 |
| x | P11  | 77   | A  | screen    |      | 1     | MN   | C    |         | no   | 390/670 |
| x | P11  | 77   | B  | screen    |      | 1     | MN   | C    |         | no   | 390/670 |
| x | P11  | 77   | C  | screen    |      | 1     | MN   | C    |         | no   | 390/670 |
| x | P11  | 77   | D  | screen    |      | 1     | MN   | C    |         | no   | 390/670 |
| x | P11  | 77   | E  | screen    |      | 1     | MN   | C    |         | no   | 390/670 |
| x | P11  | 78   |    | screen    |      | 1     |      | L    |         | SD   | 390/670 |
| x | P11  | 91   | A  | flot      | b    | 1     |      | noID |         | D    | 390/670 |
| x | P11  | 91   | B  | flot      | b    | 1     |      | noID |         | T    | 390/670 |
| x | P11  | 92   |    | flot      | b    | 1     | ZY   | BF   |         | no   | 390/670 |
| x | P11  | 93   | A  | flot      | b    | 1     | ZV   | AS   |         | no   | 390/670 |
| x | P11  | 93   | B  | flot      | b    | 1     | ZV   | AS   |         | no   | 390/670 |
| x | P11  | 93   | C  | flot      | b    | 1     | ZV   | AS   |         | no   | 390/670 |
| x | P11  | 94   |    | flot      | b    | 1     | N    | T    | C       | T    | 390/670 |
| x | P11  | 95   |    | flot      | b    | 1     | ZX   | noID | R       | T    | 390/670 |
| x | P11  | 96   |    | flot      | b    | 1     | ZY   | W    |         | SD   | 390/670 |
| x | P11  | 97   |    | flot      | b    | 1     | ZX   | V    | 1       | T,no | 390/670 |
| x | P12  | 79   |    | screen    |      | 1     | JJ   | Al   |         | SD   | 390/670 |
| x | P12  | 80   |    | screen    |      | 1     | ZX   | V    | 1       | no   | 390/670 |
| x | P12  | 81   |    | screen    |      | 1     | JJ   | Al   |         | SD,D | 390/670 |
| x | P12  | 82   | A  | screen    |      | 1     | N    | C    |         | no   | 390/670 |
| x | P12  | 82   | B  | screen    |      | 1     | M    | Pk   | 1       | T    | 390/670 |
| x | P12  | 82   | C  | screen    |      | 1     | M    | Pk   | 1       | T    | 390/670 |
| x | P12  | 82   | D  | screen    |      | 1     | M    | noID |         | T    | 390/670 |
| x | P12  | 83   |    | screen    |      | 1     |      | noID |         | D    | 390/670 |
| x | P12  | 84   |    | screen    |      | 1     | ZV   | AS   |         | no   | 390/670 |
| x | P12  | 85   |    | screen    |      | 1     | M    | Pk   | 1       | no   | 390/670 |
| x | P12  | 98   | A  | flot      | b    | 1     | ZV   | AS   |         | no   | 390/670 |
| x | P12  | 98   | B  | flot      | b    | 1     | ZV   | AS   |         | no   | 390/670 |
| x | P12  | 99   |    | flot      | b    | 1     | ZX   | R    | 3       | no   | 390/670 |
| x | P12  | 100  |    | flot      | b    | 1     |      | AA   | 3       | no   | 390/670 |
| x | P12  | 101  |    | flot      | b    | 1     |      | noID |         | D    | 390/670 |
| x | P12  | 102  |    | flot      | b    | 1     | M    | Pk   | 3       | T,no | 390/670 |
| x | P12  | 103  |    | flot      | b    | 1     |      | AA   | 3       | no   | 390/670 |
| x | P12  | 104  |    | flot      | b    | 1     | JJ   | noID |         | T    | 390/670 |
| x | P12  | 105  |    | flot      | b    | 1     | ZX   | R    | 2       | no   | 390/670 |
| x | P12  | 106  |    | flot      | b    | 1     | ZX   | V    | 1       | no   | 390/670 |
| x | P13  | 86   | A  | screen    |      | 1     | JJ   | Al   | AL      | SD   | 211     |
| x | P13  | 86   | B  | screen    |      | 1     | JJ   | Al   | AL      | no   | 211     |
| x | P13  | 87   |    | screen    |      | 1     | ZZ   | X    | noID    | D    | 211     |
| x | P13  | 88   |    | screen    |      | 1     | ZV   | AS   |         | no   | 211     |
| x | P13  | 89   |    | screen    |      | 1     |      | AA   | 3       | D    | 211     |
| x | P13  | 90   |    | screen    |      | 1     | ZX   | R    | 1       | no   | 211     |
| x | P13  | 91   | A  | screen    |      | 1     |      | AT   |         | SD   | 211     |
| x | P13  | 91   | B  | screen    |      | 1     |      | AT   |         | no   | 211     |
| x | P13  | 92   |    | screen    |      | 1     | ZX   | V    | 1       | no   | 211     |
| x | P13  | 93   |    | screen    |      | 1     | ZT   | C    |         | SD   | 211     |
| x | P13  | 107  | A  | flot      | b    | 1     | ZX   | R    | 3       | no   | 211     |
| x | P13  | 107  | B  | flot      | b    | 1     | ZX   | R    | 2       | no   | 211     |



## Wood IDs.raw data

| <u>√</u> | <u>Prov</u> | <u>Vial</u> | <u>Pc</u> | <u>Vial_Type</u> | <u>Flot</u> | <u>Quanti</u> | <u>Cats</u> | <u>ID</u> | <u>Divisic</u> | <u>Cond</u> | <u>CC</u> |
|----------|-------------|-------------|-----------|------------------|-------------|---------------|-------------|-----------|----------------|-------------|-----------|
| x        | P13         | 108         |           | flot             | b           | 1             | JJ          | BA        |                | no          | 211       |
| x        | P13         | 109         | A         | flot             | b           | 1             |             | AU        |                | no          | 211       |
| x        | P13         | 109         | B         | flot             | b           | 1             |             | AU        |                | T,B         | 211       |
| x        | P13         | 110         | A         | flot             | b           | 1             | ZX          | R         | 1              | SD          | 211       |
| x        | P13         | 110         | B         | flot             | b           | 1             |             | noID      |                | D           | 211       |
| x        | P13         | 111         |           | flot             | b           | 1             | ZV          | AS        |                | no          | 211       |
| x        | P13         | 112         |           | flot             | b           | 1             |             | noID      |                | D           | 211       |
| x        | P13         | 113         |           | flot             | b           | 1             | PP          | E         | 1              | no          | 211       |
| x        | P14         | 94          | A         | screen           |             | 1             | A           | A         |                | no          | 310       |
| x        | P14         | 94          | B         | screen           |             | 1             | A           | A         |                | no          | 310       |
| x        | P14         | 95          | A         | screen           |             | 1             | M           | BL        | 1              | no          | 310       |
| x        | P14         | 95          | B         | screen           |             | 1             | M           | BL        | 1              | no          | 310       |
| x        | P14         | 95          | C         | screen           |             | 1             | M           | BL        | 3              | no          | 310       |
| x        | P14         | 95          | D         | screen           |             | 1             | ZT          | C         |                | no          | 310       |
| x        | P14         | 96          |           | screen           |             | 1             |             | AM        |                | no          | 310       |
| x        | P14         | 97          | A         | screen           |             | 1             | ZJ          | O         |                | no          | 310       |
| x        | P14         | 97          | B         | screen           |             | 1             | ZJ          | O         |                | no          | 310       |
| x        | P14         | 98          |           | screen           |             | 1             |             | AA        | 3              | C           | 310       |
| x        | P14         | 114         | A         | flot             | s           | 1             | M           | BL        | 1              | no          | 310       |
| x        | P14         | 114         | B         | flot             | s           | 1             |             | BN        |                | SD          | 310       |
| x        | P14         | 114         | C         | flot             | s           | 1             | M           | Pk        |                | no          | 310       |
| x        | P14         | 114         | D         | flot             | s           | 1             | M           | BL        | 2              | no          | 310       |
| x        | P14         | 114         | E         | flot             | s           | 1             | M           | BL        | 1              | T           | 310       |
| x        | P14         | 115         | A         | flot             | s           | 1             | ZV          | AS        |                | no          | 310       |
| x        | P14         | 115         | B         | flot             | s           | 1             | ZV          | AS        |                | no          | 310       |
| x        | P14         | 116         |           | flot             | s           | 1             |             | AO        |                | no          | 310       |
| x        | P14         | 117         |           | flot             | s           | 1             |             | AF        |                | no          | 310       |
| x        | P14         | 118         |           | flot             | s           | 1             | ZX          | R         | 1              | no          | 310       |
| x        | P15         | 119         | A         | flot             | b           | 1             | JJ          | AJ        |                | SD,D        | 343       |
| x        | P15         | 119         | B         | flot             | b           | 1             | JJ          | AI        |                | SD,T        | 343       |
| x        | P15         | 120         | A         | flot             | b           | 1             | ZZ          | BE        |                | no          | 343       |
| x        | P15         | 120         | B         | flot             | b           | 1             | ZZ          | BE        |                | T           | 343       |
| x        | P15         | 121         | A         | flot             | b           | 1             |             | noID      |                | D           | 343       |
| x        | P15         | 121         | B         | flot             | b           | 1             |             | noID      |                | D           | 343       |
| x        | P15         | 121         | C         | flot             | b           | 1             |             | noID      |                | D           | 343       |
| x        | P15         | 121         | D         | flot             | b           | 1             |             | noID      |                | D           | 343       |
| x        | P15         | 121         | E         | flot             | b           | 1             |             | noID      |                | D           | 343       |
| x        | P15         | 121         | F         | flot             | b           | 1             |             | noID      | Pk-3           | T,SD        | 343       |
| x        | P15         | 122         | A         | flot             | s           | 1             | JJ          | AI        |                | no,SD       | 343       |
| x        | P15         | 122         | B         | flot             | s           | 1             | JJ          | AI        |                | no,SD       | 343       |
| x        | P15         | 123         | A         | flot             | s           | 1             | ZX          | R         | 2              | no          | 343       |
| x        | P15         | 123         | B         | flot             | s           | 1             | ZX          | R         | 2              | no,T        | 343       |
| x        | P15         | 123         | C         | flot             | s           | 1             |             | noID      |                | no          | 343       |
| x        | P15         | 123         | D         | flot             | s           | 1             |             | noID      |                | T           | 343       |
| x        | P15         | 124         |           | flot             | s           | 1             | ZX          | V         | 1              | T           | 343       |
| x        | P15         | 125         | A         | flot             | s           | 1             |             | AA        | 6              | T           | 343       |
| x        | P15         | 125         | B         | flot             | s           | 1             |             | AA        | 6              | no          | 343       |
| x        | P15         | 126         |           | flot             | s           | 1             | A           | AV        |                | no,T        | 343       |
| x        | P16         | 99          | A         | screen           |             | 1             |             | noID      |                | D           | 311       |
| x        | P16         | 99          | B         | screen           |             | 1             |             | noID      |                | D           | 311       |
| x        | P16         | 100         |           | screen           |             | 1             | JJ          | AI        |                | no          | 311       |
| x        | P16         | 101         |           | screen           |             | 1             | M           | F         | 2              | no          | 311       |
| x        | P16         | 102         |           | screen           |             | 1             | PP          | E         | 1              | no,T        | 311       |
| x        | P16         | 103         | A         | screen           |             | 1             | ZX          | V         | 2              | no          | 311       |
| x        | P16         | 103         | B         | screen           |             | 1             | ZX          | V         | 2              | C,D         | 311       |
| x        | P16         | 104         |           | screen           |             | 1             | M           | noID      |                | D           | 311       |
| x        | P16         | 105         |           | screen           |             | 1             | ZV          | AS        |                | no          | 311       |
| x        | P16         | 106         |           | screen           |             | 1             |             | noID      |                | C           | 311       |
| x        | P16         | 127         | A         | flot             | b           | 1             | JJ          | AI        |                | no          | 311       |
| x        | P16         | 127         | B         | flot             | b           | 1             | JJ          | AI        | AD             | no          | 311       |
| x        | P16         | 127         | C         | flot             | b           | 1             | JJ          | AD        | AL             | no          | 311       |
| x        | P16         | 128         | A         | flot             | b           | 1             |             | noID      |                | D           | 311       |
| x        | P16         | 128         | B         | flot             | b           | 1             | JJ          | noID      | AD             | T           | 311       |
| x        | P16         | 128         | C         | flot             | b           | 1             |             | noID      |                | T,SD        | 311       |
| x        | P16         | 129         | A         | flot             | b           | 1             |             | noID      |                | T,D         | 311       |
| x        | P16         | 129         | B         | flot             | b           | 1             |             | noID      |                | T,D         | 311       |
| x        | P16         | 129         | C         | flot             | b           | 1             |             | noID      |                | T,D         | 311       |
| x        | P16         | 130         |           | flot             | b           | 1             |             | noID      |                | R           | 311       |
| x        | P17         | 107         | A         | screen           |             | 1             | ZX          | R         | 1              | no          | 250       |

## Wood IDs.raw data

| $\sqrt{}$ | Prov | Vial | Pc | Vial_Type | Flot | Quant | Cats | ID   | Divisic | Cond | CC  |
|-----------|------|------|----|-----------|------|-------|------|------|---------|------|-----|
| x         | P17  | 107  | B  | screen    |      | 1     | ZX   | V    | 1       | no   | 250 |
| x         | P17  | 107  | C  | screen    |      | 1     | ZX   | R    | 1       | no   | 250 |
| x         | P17  | 108  | A  | screen    |      | 1     | JJ   | AJ   |         | D,SD | 250 |
| x         | P17  | 108  | B  | screen    |      | 1     | JJ   | AJ   |         | SD,D | 250 |
| x         | P17  | 108  | C  | screen    |      | 1     | JJ   | AI   | AL      | SD   | 250 |
| x         | P17  | 109  |    | screen    |      | 1     | JJ   | AI   | AJ      | SD   | 250 |
| x         | P17  | 110  |    | screen    |      | 1     | ZZ   | X    |         | C    | 250 |
| x         | P17  | 111  |    | screen    |      | 1     | JJ   | AJ   | AI      | SD,D | 250 |
| x         | P17  | 112  |    | screen    |      | 1     |      | ED   |         | no   | 250 |
| x         | P17  | 131  |    | flot      | b    | 1     |      | AA   | 3       | C    | 250 |
| x         | P17  | 132  | A  | flot      | b    | 1     | ZX   | R    | 1       | T,D  | 250 |
| x         | P17  | 132  | B  | flot      | b    | 1     |      | noID |         | D,Y  | 250 |
| x         | P17  | 132  | C  | flot      | b    | 1     | ZX   | R    | 1       | no   | 250 |
| x         | P17  | 133  | A  | flot      | b    | 1     | JJ   | noID |         | SD,D | 250 |
| x         | P17  | 133  | B  | flot      | b    | 1     | JJ   | noID | AL/AD   | SD   | 250 |
| x         | P17  | 133  | C  | flot      | b    | 1     | JJ   | noID | AL/AD   | D,SD | 250 |
| x         | P17  | 134  |    | flot      | b    | 1     |      | noID |         | T    | 250 |
| x         | P17  | 135  |    | flot      | b    | 1     |      | L    |         | no   | 250 |
| x         | P17  | 136  |    | flot      | b    | 1     |      | AN   |         | SD   | 250 |
| x         | P18  | 1    | A  | dryscr    |      | 1     | ZV   | AS   |         | no   | 419 |
| x         | P18  | 1    | B  | dryscr    |      | 1     | ZV   | AS   |         | no   | 419 |
| x         | P18  | 2    |    | dryscr    |      | 1     | ZX   | R    | 1       | no   | 419 |
| x         | P18  | 3    |    | dryscr    |      | 1     |      | AA   | 3       | SD   | 419 |
| x         | P18  | 4    |    | dryscr    |      | 1     | JJ   | AJ   | AI      | no   | 419 |
| x         | P18  | 5    |    | dryscr    |      | 1     |      | GR   |         | no   | 419 |
| x         | P18  | 6    |    | dryscr    |      | 1     | ZY   | W    |         | no   | 419 |
| x         | P18  | 7    |    | dryscr    |      | 1     | ZX   | R    | 2       | no   | 419 |
| x         | P18  | 8    |    | dryscr    |      | 1     |      | AU   |         | no   | 419 |
| x         | P18  | 9    |    | dryscr    |      | 1     | N    | noID |         | T    | 419 |
| x         | P18  | 113  |    | screen    |      | 1     | ZX   | R    | 1       | no   | 419 |
| x         | P18  | 114  |    | screen    |      | 1     |      | AU   |         | T    | 419 |
| x         | P18  | 115  |    | screen    |      | 1     |      | noID |         | SD/D | 419 |
| x         | P18  | 116  |    | screen    |      | 1     | ZZ   | BE   |         | no   | 419 |
| x         | P18  | 117  | A  | screen    |      | 1     | JJ   | AD   | AI      | C    | 419 |
| x         | P18  | 117  | B  | screen    |      | 1     |      | noID |         | C    | 419 |
| x         | P18  | 118  |    | screen    |      | 1     | ZX   | R    | 2       | no   | 419 |
| x         | P18  | 119  | A  | screen    |      | 1     | N    | E    | 1       | no   | 419 |
| x         | P18  | 119  | B  | screen    |      | 1     | N    | E    | 1       | no   | 419 |
| x         | P18  | 120  |    | screen    |      | 1     | JJ   | AI   | AD      | no   | 419 |
| x         | P19  | 137  | A  | flot      | b    | 1     | ZY   | W    |         | no   | 595 |
| x         | P19  | 137  | B  | flot      | b    | 1     | ZY   | W    |         | C    | 595 |
| x         | P19  | 137  | C  | flot      | b    | 1     | ZY   | W    |         | no   | 595 |
| x         | P19  | 138  |    | flot      | b    | 1     | ZX   | V    | 2       | no   | 595 |
| x         | P19  | 139  |    | flot      | b    | 1     |      | noID |         | T,SD | 595 |
| x         | P19  | 140  | A  | flot      | b    | 1     |      | noID |         | D    | 595 |
| x         | P19  | 140  | B  | flot      | b    | 1     |      | noID |         | D    | 595 |
| x         | P19  | 140  | C  | flot      | b    | 1     |      | noID |         | D,T  | 595 |
| x         | P19  | 141  |    | flot      | b    | 1     | M    | F    | 2       | no   | 595 |
| x         | P19  | 142  |    | flot      | b    | 1     |      | noID |         | T    | 595 |
| x         | P20  | 143  |    | flot      | b    | 1     |      | AA   | 3       | no   | 620 |
| x         | P20  | 144  | A  | flot      | b    | 1     | M    | noID | Pk      | T    | 620 |
| x         | P20  | 144  | B  | flot      | b    | 1     | N    | noID |         | no   | 620 |
| x         | P20  | 144  | C  | flot      | b    | 1     |      | noID |         | D    | 620 |
| x         | P20  | 144  | D  | flot      | b    | 1     | N    | noID |         | no,T | 620 |
| x         | P20  | 144  | E  | flot      | b    | 1     | M    | noID |         | T    | 620 |
| x         | P20  | 144  | F  | flot      | b    | 1     | N    | noID |         | no,T | 620 |
| x         | P20  | 145  |    | flot      | b    | 1     | N    | E    | 1       | T    | 620 |
| x         | P20  | 146  |    | flot      | b    | 1     | ZV   | AS   |         | SD   | 620 |
| x         | P20  | 147  |    | flot      | b    | 1     |      | G    |         | no,T | 620 |
| x         | P20+ | 148  |    | flot      | b    | 1     |      | noID |         | SD   | 620 |
| x         | P20+ | 149  |    | flot      | b    | 1     | JJ   | AI   | AL      | SD   | 620 |
| x         | P20+ | 150  | A  | flot      | b    | 1     | ZZ   | noID |         | T    | 620 |
| x         | P20+ | 150  | B  | flot      | b    | 1     | N    | noID |         | T,D  | 620 |
| x         | P20+ | 151  |    | flot      | b    | 1     | ZV   | AS   |         | no   | 620 |
| x         | P20+ | 152  | A  | flot      | b    | 1     |      | AM   |         | no,T | 620 |
| x         | P20+ | 152  | B  | flot      | b    | 1     |      | noID |         | no,T | 620 |
| x         | P20+ | 153  | A  | flot      | b    | 1     | M    | BL   | 1       | T    | 620 |
| x         | P20+ | 153  | B  | flot      | b    | 1     | N    | noID | H       | T    | 620 |
| x         | P20+ | 154  |    | flot      | b    | 1     | N    | noID |         | T    | 620 |

## Wood IDs.raw data

| <u>V</u> | <u>Prov</u> | <u>Vial</u> | <u>Pc</u> | <u>Vial Type</u> | <u>Flot</u> | <u>Quant</u> | <u>Cats</u> | <u>ID</u> | <u>Divisic</u> | <u>Cond</u> | <u>CC</u> |
|----------|-------------|-------------|-----------|------------------|-------------|--------------|-------------|-----------|----------------|-------------|-----------|
| x        | P21         | 121         | A         | screen           |             | 1            | ZX          | R         | 2              | no          | 330/390   |
| x        | P21         | 121         | B         | screen           |             | 1            | ZX          | R         | 2              | no          | 330/390   |
| x        | P21         | 122         | A         | screen           |             | 1            | JJ          | AJ        | AI             | no          | 330/390   |
| x        | P21         | 122         | B         | screen           |             | 1            | JJ          | AJ        | AI             | SD,D        | 330/390   |
| x        | P21         | 123         |           | screen           |             | 1            |             | 'AS'      |                | SD          | 330/390   |
| x        | P21         | 124         | A         | screen           |             | 1            | ZV          | AS        | 2              | SD/D,T      | 330/390   |
| x        | P21         | 124         | B         | screen           |             | 1            | ZV          | AS        | 2              | SD/no       | 330/390   |
| x        | P21         | 125         |           | screen           |             | 1            |             | AA        | 3              | no          | 330/390   |
| x        | P21         | 126         |           | screen           |             | 1            | N           | noID      | C              | T           | 330/390   |
| x        | P21         | 127         |           | screen           |             | 1            |             | noID      | C              |             | 330/390   |
| x        | P21         | 155         |           | flot             | s           | 1            |             | AS        |                | no          | 330/390   |
| x        | P21         | 156         |           | flot             | s           | 1            |             | noID      |                | D           | 330/390   |
| x        | P21         | 157         |           | flot             | s           | 1            |             | L         |                | no          | 330/390   |
| x        | P21         | 158         | A         | flot             | s           | 1            |             | G         |                | T           | 330/390   |
| x        | P21         | 158         | B         | flot             | s           | 1            |             | G         |                | SD,T        | 330/390   |
| x        | P21         | 159         |           | flot             | s           | 1            | JJ          | AI        |                | D           | 330/390   |
| x        | P21         | 160         |           | flot             | s           | 1            | ZV          | AS        |                | T,no        | 330/390   |
| x        | P21         | 161         |           | flot             | s           | 1            |             | AA        | 3              | T,SD        | 330/390   |
| x        | P21         | 162         | A         | flot             | s           | 1            | ZX          | R         | 1              | no          | 330/390   |
| x        | P21         | 162         | B         | flot             | s           | 1            | ZX          | R         | 1              | no          | 330/390   |
| x        | P22         | 163         | A         | flot             | b           | 1            |             | noID      | T              | SD/D        | 390       |
| x        | P22         | 163         | B         | flot             | b           | 1            |             | noID      | T              | T           | 390       |
| x        | P22         | 164         | A         | flot             | b           | 1            | M           | Pk        | 3              | no          | 390       |
| x        | P22         | 164         | B         | flot             | b           | 1            | M           | Pk        | 3              | T           | 390       |
| x        | P22         | 165         |           | flot             | b           | 1            | A           | A         |                | SD          | 390       |
| x        | P22         | 166         |           | flot             | b           | 1            |             | AO        |                | no          | 390       |
| x        | P22         | 167         | A         | flot             | b           | 1            | noID        | AA        | 1              | SD,D        | 390       |
| x        | P22         | 167         | B         | flot             | b           | 1            | noID        | AA        | 1              | T,C         | 390       |
| x        | P22         | 167         | C         | flot             | b           | 1            | noID        | AA        | 1              | T,SD        | 390       |
| x        | P22         | 167         | D         | flot             | b           | 1            | noID        | AA        | 1              | T,SD        | 390       |
| x        | P22+        | 168         | A         | flot             | b           | 1            |             | AA        |                | no          | 390       |
| x        | P22+        | 168         | B         | flot             | b           | 1            |             | AA        |                | no          | 390       |
| x        | P22+        | 168         | C         | flot             | b           | 1            |             | AA        |                | no          | 390       |
| y        | P22+        | 169         |           | flot             | b           | 1            | M           | BL        | 2              | no          | 390       |
| x        | P22+        | 170         | A         | flot             | b           | 1            | M           | Pk        | 1              | no          | 390       |
| x        | P22+        | 170         | B         | flot             | b           | 1            | M           | Pk        | 1              | no          | 390       |
| x        | P22+        | 170         | C         | flot             | b           | 1            | M           | Pk        | 1              | T           | 390       |
| x        | P22+        | 170         | D         | flot             | b           | 1            | M           | Pk        | 1              | T           | 390       |
| x        | P22+        | 171         |           | flot             | b           | 1            |             | noID      | AA-3           | C,T         | 390       |
| x        | P22+        | 172         |           | flot             | b           | 1            |             | noID      |                | T           | 390       |
| x        | P23         | 173         |           | flot             | b           | 1            |             | AO        |                | no          | 342       |
| x        | P23         | 174         |           | flot             | b           | 1            | A           | A         |                | no          | 342       |
| x        | P23         | 175         |           | flot             | b           | 1            |             | AM        |                | SD/D        | 342       |
| x        | P23         | 176         |           | flot             | b           | 1            | ZV          | AS        |                | no          | 342       |
| x        | P23         | 177         | A         | flot             | b           | 1            | M           | AZ        |                | no          | 342       |
| y        | P23         | 177         | B         | flot             | b           | 1            | M           | Pk        | 2              | no          | 342       |
| y        | P23         | 177         | C         | flot             | b           | 1            | M           | Pk        | 2              | no          | 342       |
| x        | P23         | 178         | A         | flot             | b           | 1            | N           | K         |                | no          | 342       |
| x        | P23         | 178         | B         | flot             | b           | 1            | M           | Pk        | 1              | SD          | 342       |
| x        | P23         | 179         |           | flot             | b           | 1            |             | noID      |                | D,T         | 342       |
| x        | P24         | 180         |           | flot             | b           | 1            | JJ          | noID      | AI             | D,SD        | 390       |
| x        | P24         | 181         | A         | flot             | b           | 1            | ZY          | W         |                | T           | 390       |
| x        | P24         | 181         | B         | flot             | b           | 1            |             | noID      |                | T,SD        | 390       |
| x        | P24         | 181         | C         | flot             | b           | 1            | ZZ          | BE        |                | no          | 390       |
| x        | P24         | 182         | A         | flot             | b           | 1            | M           | B         |                | no          | 390       |
| x        | P24         | 182         | B         | flot             | b           | 1            | M           | noID      |                | D           | 390       |
| x        | P24         | 182         | C         | flot             | b           | 1            | ZV          | AG        |                | no          | 390       |
| x        | P24         | 182         | D         | flot             | b           | 1            | N           | noID      |                | D,T         | 390       |
| x        | P24         | 183         |           | flot             | b           | 1            |             | noID      |                | Y,SD        | 390       |
| x        | P24         | 184         |           | flot             | b           | 1            |             | noID      |                | T,no        | 390       |
|          | P25         | 10          | A         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |
|          | P25         | 10          | B         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |
|          | P25         | 10          | C         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |
|          | P25         | 10          | D         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |
|          | P25         | 10          | E         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |
|          | P25         | 11          | A         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |
|          | P25         | 11          | B         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |
|          | P25         | 11          | C         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |
|          | P25         | 11          | D         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |

## Wood IDs.raw data

| <u>√</u> | <u>Prev</u> | <u>Vial</u> | <u>Pc</u> | <u>Vial_Type</u> | <u>Flot</u> | <u>Quant</u> | <u>Cats</u> | <u>ID</u> | <u>Divisic</u> | <u>Cond</u> | <u>CC</u> |
|----------|-------------|-------------|-----------|------------------|-------------|--------------|-------------|-----------|----------------|-------------|-----------|
|          | P25         | 11          | E         | uncharred        |             | 1            |             | AL/N      |                | no          | 312       |
| x        | P25         | 128         | A         | screen           |             | 1            | JJ          | AI        |                | SD          | 312       |
| x        | P25         | 128         | B         | screen           |             | 1            |             | noID      |                | R           | 312       |
| x        | P25         | 128         | C         | screen           |             | 1            | JJ          | noID      |                | D           | 312       |
| x        | P25         | 128         | D         | screen           |             | 1            |             | noID      |                | D           | 312       |
| x        | P25         | 129         | A         | screen           |             | 1            | ZX          | R         | 2              | no          | 312       |
| x        | P25         | 129         | B         | screen           |             | 1            | ZX          | R         | 2              | no          | 312       |
| x        | P25         | 130         | A         | screen           |             | 1            | ZV          | AS        |                | no          | 312       |
| x        | P25         | 130         | B         | screen           |             | 1            | ZV          | AS        |                | no          | 312       |
| x        | P25         | 131         |           | screen           |             | 1            | ZX          | V         | 1              | no          | 312       |
| x        | P25         | 132         |           | screen           |             | 1            |             | noID      |                | D           | 312       |
| x        | P25         | 185         | A         | flot             | b           | 1            | ZX          | R         | 2              | no          | 312       |
| x        | P25         | 185         | B         | flot             | b           | 1            | ZX          | R         | 2              | no          | 312       |
| x        | P25         | 185         | C         | flot             | b           | 1            | ZX          | R         | 2              | SD          | 312       |
| x        | P25         | 185         | D         | flot             | b           | 1            | ZX          | R         | 2              | T           | 312       |
| x        | P25         | 185         | E         | flot             | b           | 1            | ZX          | R         | 2              | no          | 312       |
| x        | P25         | 185         | F         | flot             | b           | 1            | ZX          | R         | 1              | no          | 312       |
| x        | P25         | 185         | G         | flot             | b           | 1            |             | AA        | 6              | SD          | 312       |
| x        | P25         | 185         | H         | flot             | b           | 1            |             | noID      |                | C           | 312       |
| x        | P25         | 186         |           | flot             | b           | 1            |             | noID      | Z              | Y           | 312       |
| x        | P25         | 187         |           | flot             | b           | 1            |             | noID      |                | T/SD        | 312       |
| x        | P26         | 133         |           | screen           |             | 1            |             | AA        | 3              | SD          | 311       |
| x        | P26         | 134         |           | screen           |             | 1            | FP          | E         | 1              | no          | 311       |
| x        | P26         | 135         |           | screen           |             | 1            |             | noID      |                | D           | 311       |
| x        | P26         | 136         |           | screen           |             | 1            |             | W         |                | SD          | 311       |
| x        | P26         | 137         |           | screen           |             | 1            |             | AA        | 3              | D,C         | 311       |
| x        | P26         | 138         | A         | screen           |             | 1            |             | AA        | 3              | D           | 311       |
| x        | P26         | 138         | B         | screen           |             | 1            |             | AA        | 3              | SD          | 311       |
| x        | P26         | 139         |           | screen           |             | 1            | A           | A         |                | no          | 311       |
| x        | P26         | 140         |           | screen           |             | 1            |             | C         |                | no          | 311       |
| x        | P26         | 141         |           | screen           |             | 1            |             | AA        | 3              | no/SD       | 311       |
| x        | P26         | 188         | A         | flot             | b           | 1            | A           | A         |                | no          | 311       |
| x        | P26         | 188         | B         | flot             | b           | 1            | A           | A         |                | no          | 311       |
| x        | P26         | 188         | C         | flot             | b           | 1            | A           | A         |                | no          | 311       |
| x        | P26         | 189         | A         | flot             | b           | 1            |             | noID      |                | D           | 311       |
| x        | P26         | 189         | B         | flot             | b           | 1            | noID        | AA        | 3              | C,SD        | 311       |
| x        | P26         | 189         | C         | flot             | b           | 1            | noID        | AA        | 3              | no          | 311       |
| x        | P26         | 190         |           | flot             | b           | 1            |             | AA        | 5              | no          | 311       |
| x        | P26         | 191         |           | flot             | b           | 1            |             | AA        | 3              | C,D         | 311       |
| x        | P26         | 192         |           | flot             | b           | 1            | JJ          | AJ        | AI             | no          | 311       |
| x        | P26         | 193         |           | flot             | b           | 1            | N           | noID      |                | T,no        | 311       |
| x        | P27         | 142         |           | screen           |             | 1            |             | G         | 2              | no          | 300       |
| x        | P27         | 143         |           | screen           |             | 1            |             | noID      | L?             | D           | 300       |
| x        | P27         | 144         | A         | screen           |             | 1            | ZZ          | X         | 2              | SD          | 300       |
| x        | P27         | 144         | B         | screen           |             | 1            |             | noID      |                | D           | 300       |
| x        | P27         | 145         |           | screen           |             | 1            | ZY          | W         |                | no          | 300       |
| x        | P27         | 146         |           | screen           |             | 1            |             | C         |                | R           | 300       |
| x        | P27         | 147         |           | screen           |             | 1            | ZX          | R         | 1              | no          | 300       |
| x        | P27         | 148         |           | screen           |             | 1            |             | C         |                | R           | 300       |
| x        | P27         | 149         |           | screen           |             | 1            |             | noID      | AH             | SD/R        | 300       |
| x        | P27         | 150         |           | screen           |             | 1            |             | C         |                | no          | 300       |
| x        | P27         | 194         | A         | flot             | b           | 1            |             | L         |                | SD,no       | 300       |
| x        | P27         | 194         | B         | flot             | b           | 1            |             | L         |                | SD,no       | 300       |
| x        | P27         | 195         | A         | flot             | b           | 1            | JJ          | AI        |                | SD          | 300       |
| x        | P27         | 195         | B         | flot             | b           | 1            | JJ          | AI        | AL             | no          | 300       |
| x        | P27         | 196         | A         | flot             | b           | 1            | ZY          | W         |                | no          | 300       |
| x        | P27         | 196         | B         | flot             | b           | 1            |             | V         | 2              | no          | 300       |
| x        | P27         | 196         | C         | flot             | b           | 1            |             | V         |                | SD,R        | 300       |
| x        | P27         | 197         |           | flot             | b           | 1            | ZZ          | X         |                | no          | 300       |
| x        | P27         | 198         |           | flot             | b           | 1            |             | noID      |                | D           | 300       |
| x        | P27         | 199         |           | flot             | b           | 1            | ZX          | R         | 2              | no          | 300       |
| x        | P28         | 200         | A         | flot             | b           | 1            |             | noID      |                | D           | 313       |
| x        | P28         | 200         | B         | flot             | b           | 1            |             | noID      |                | D           | 313       |
| x        | P28         | 200         | C         | flot             | b           | 1            |             | noID      |                | D           | 313       |
| x        | P28         | 200         | D         | flot             | b           | 1            |             | noID      |                | D,T         | 313       |
| x        | P28         | 201         | A         | flot             | b           | 1            | JUN         | H         |                | no          | 313       |
| x        | P28         | 201         | B         | flot             | b           | 1            | JUN         | H         |                | no          | 313       |
| x        | P28         | 202         |           | flot             | b           | 1            |             | AO        |                | no          | 313       |
| x        | P28         | 203         |           | flot             | b           | 1            |             | L         |                | SD,D        | 313       |

## Wood IDs.raw data

| <u>√</u> | <u>Prov</u> | <u>Vial</u> | <u>Pc</u> | <u>Vial_Type</u> | <u>Flot</u> | <u>Quant</u> | <u>Cats</u> | <u>ID</u> | <u>Divisic</u> | <u>Cond</u> | <u>CC</u> |
|----------|-------------|-------------|-----------|------------------|-------------|--------------|-------------|-----------|----------------|-------------|-----------|
| x        | P28         | 204         | A         | flot             | b           | 1            |             | noID      |                | D,T         | 313       |
| x        | P28         | 204         | B         | flot             | b           | 1            |             | noID      |                | T,SD        | 313       |
| x        | V.1         | 20          |           | screen           |             | 1            |             | AE        |                | no          | 390       |
| x        | V.1         | 21          |           | screen           |             | 1            |             | F         |                | SD          | 390       |
| x        | V.1         | 22          | A         | screen           |             | 1            |             | J         |                | no          | 390       |
| x        | V.1         | 22          | B         | screen           |             | 1            |             | AA        | 2              | no          | 390       |
| x        | V.1         | 23          |           | flot             | b           | 1            |             | AN        |                | no          | 390       |
| x        | V.1         | 23          |           | screen           |             | 1            |             | G         |                | no          | 390       |
| x        | V.1         | 24          |           | flot             | b           | 1            | ZJ          | I         |                | SD/D        | 390       |
| x        | V.1         | 24          |           | screen           |             | 1            |             | noID      |                | D/SD        | 390       |
| x        | V.1         | 25          |           | flot             | b           | 1            |             | C         |                | no          | 390       |
| x        | V.1         | 25          |           | screen           |             | 1            | JJ          | D         |                | no          | 390       |
| x        | V.1         | 26          |           | flot             | b           | 1            | FP          | noID      | E              | T           | 390       |
| x        | V.1         | 26          |           | screen           |             | 1            |             | noID      | AZ             | SD,D        | 390       |
| x        | V.1         | 27          |           | flot             | b           | 1            |             | AN        |                | SD          | 390       |
| x        | V.1         | 27          |           | screen           |             | 1            | FP          | EG        |                | no          | 390       |
| x        | V.1         | 28          |           | flot             | b           | 1            |             | AH        |                | no          | 390       |
| x        | V.1         | 28          |           | screen           |             | 1            |             | noID      |                | C           | 390       |
| x        | V.1         | 29          | A         | flot             | b           | 1            | ZZ          | EE        |                | SD          | 390       |
| x        | V.1         | 29          | B         | flot             | b           | 1            | ZZ          | EE        |                | SD,D        | 390       |
| x        | V.1         | 30          |           | flot             | b           | 1            | ZZ          | EE        |                | no          | 390       |
| x        | V.1         | 31          |           | flot             | b           | 1            | ZW          | Y         |                | SD          | 390       |
| x        | V.2         | 38          |           | flot             | s           | 1            | M           | G         |                | no          | 330       |
| x        | V.2         | 38          | A         | screen           |             | 1            |             | noID      |                | D           | 330       |
| x        | V.2         | 38          | B         | screen           |             | 1            |             | noID      |                | D,C         | 330       |
| x        | V.2         | 39          |           | flot             | s           | 1            | ZV          | AC        |                | SD          | 330       |
| x        | V.2         | 39          |           | screen           |             | 1            |             | noID      |                | D           | 330       |
| x        | V.2         | 40          |           | flot             | s           | 1            |             | AP        |                | SDT         | 330       |
| x        | V.2         | 40          | A         | screen           |             | 1            | ZJ          | O         |                | D           | 330       |
| x        | V.2         | 40          | B         | screen           |             | 1            | ZJ          | O         |                | D,T         | 330       |
| x        | V.2         | 41          |           | flot             | s           | 1            |             | noID      |                | SD/D        | 330       |
| x        | V.2         | 41          | A         | screen           |             | 1            |             | M         | noID           | D/SD        | 330       |
| x        | V.2         | 41          | B         | screen           |             | 1            |             | noID      |                | D           | 330       |
| x        | V.2         | 42          |           | flot             | s           | 1            |             | AG        |                | no          | 330       |
| x        | V.2         | 42          |           | screen           |             | 1            | ZV          | AS        |                | no          | 330       |
| x        | V.2         | 43          |           | flot             | s           | 1            |             | noID      |                | D           | 330       |
| x        | V.2         | 43          | A         | screen           |             | 1            |             | noID      |                | B,D         | 330       |
| x        | V.2         | 43          | B         | screen           |             | 1            |             | noID      |                | D           | 330       |
| x        | V.2         | 44          |           | flot             | s           | 1            |             | noID      |                | T,SD        | 330       |
| x        | V.2         | 45          |           | flot             | s           | 1            |             | noID      |                | D           | 330       |
| x        | V.2         | 46          | A         | flot             | s           | 1            |             | noID      |                | D           | 330       |
| x        | V.2         | 46          | B         | flot             | s           | 1            |             | noID      |                | C           | 330       |
| x        | V.3         | 44          |           | screen           |             | 1            |             | AA        | 1              | SD/D        | 390       |
| x        | V.3         | 45          |           | screen           |             | 1            | ZV          | AS        |                | no          | 390       |
| x        | V.3         | 46          |           | screen           |             | 1            | FP          | E         | 1              | no,T        | 390       |
| x        | V.3         | 47          | A         | flot             | b           | 1            | FP          | E         | 2              | SD          | 390       |
| x        | V.3         | 47          | B         | flot             | b           | 1            | FP          | E         | 2              | T           | 390       |
| x        | V.3         | 47          | C         | flot             | b           | 1            | FP          | E         | 2              | T           | 390       |
| x        | V.3         | 47          | A         | screen           |             | 1            |             | G         |                | SD          | 390       |
| x        | V.3         | 47          | B         | screen           |             | 1            |             | G         | Pk             | SD          | 390       |
| x        | V.3         | 48          |           | flot             | b           | 1            |             | noID      | J              | D/SD        | 390       |
| x        | V.3         | 48          | A         | screen           |             | 1            |             | J         |                | no          | 390       |
| x        | V.3         | 48          | B         | screen           |             | 1            | M           | Pk        | 3              | no          | 390       |
| x        | V.3         | 49          |           | flot             | b           | 1            | ZV          | AS        |                | D           | 390       |
| x        | V.3         | 49          |           | screen           |             | 1            | M           | B         |                | T           | 390       |
| x        | V.3         | 50          |           | flot             | b           | 1            |             | AM        |                | T,no        | 390       |
| x        | V.3         | 50          | A         | screen           |             | 1            |             | noID      |                | D           | 390       |
| x        | V.3         | 50          | B         | screen           |             | 1            |             | noID      |                | D,C         | 390       |
| x        | V.3         | 51          | A         | flot             | b           | 1            | ZZ          | X         |                | SD          | 390       |
| x        | V.3         | 51          | B         | flot             | b           | 1            | ZZ          | EE        |                | no          | 390       |
| x        | V.3         | 52          |           | flot             | b           | 1            |             | AT        |                | no          | 390       |
| x        | V.3         | 53          |           | flot             | b           | 1            |             | noID      |                | C           | 390       |

Total: 601

## Wood IDs.raw data

| Vial    | Pc   | Comments  |
|---------|------|---|
| 1990-05 |      | interesting parenc/pore combo;brushy/scrub bush;put here but haven't seen                   |
| 1990-06 |      | "jarilla"   |
| 1990-06 | root | sim to 'AT' & 'AU'  |
| 1990-08 |      |   |
| 1990-15 |      | willow,etc type; V112scr  |
| 1990-15 | twig | looks A LOT diff from 1990-15;closer to some 'AS's  |
| 1990-17 |      | LG pores for size of pc (1.7cm diam)  |
| 1990-32 |      | "jarilla"; both root and branch part  |
| 1990-36 |      | very sim to AS but very sol round pores & diffuse p.  |
| 1990-40 |      | cactus; pores,rays,etc differ greatly from ray width to arrangemt in sing.pc                |
| 1990-47 |      | "molle"; ring porous  |
| 1990-60 |      | brushy/scrub bush; have seen!!  |
| 1990-68 |      | very variable= ZZ or ZX categ;twiggy/scruby type  |
| 1990-71 |      | jume  |
| 1990-72 |      | prob= 1990-47: "molle"  |
| 1990-74 |      | looks like 'A'/cact but pores sol&usually only lg pcs usable,ie.annual sim                  |
| 1990-75 |      | willow,etc Type   |
| 1990-78 |      | VERY HARD to break;breaks at joints;would put with 'C'                                      |
| 1990-83 |      | 'A'-root;growth rings: semi-ring p.   |
| 1       |      | tang banded parenc; sol & dispersed pres; rad splits; crunchy                               |
| 1       | A    | cactus;wide ray;sol.pores-few nested  |
| 1       | B    | cact;smllr sol. pores;wide rays   |
| 1       | C    | cact;nested-bunched pores;wide rays   |
| 1       | D    | cact;smllr pores;wide rays  |
| 2       | A    | med lg round pores s.times nested 2/1; tyloses; med wide 1/3 pore size [not= V57A-Cscr]     |
| 2       | B    | = V2Afl; parenc? not sure whether WH but very sim   |
| 2       | A    | diam  |
| 2       | B    | diam; black; = V2Cscr   |
| 2       | C    | diam; softer wood;see card(pink)  |
| 2       | D    | diam; cross btw 'Pk's   |
| 3       |      |   |
| 3       | A    | single pore rows;pores sim to ray width;not much parenc;NICE PC                             |
| 3       | B    | = V178Afl   |
| 4       |      | shiny; smooth   |
| 4       |      | approx 1.2cm diam; = V2Cscr   |
| 5       |      | sm pc   |
| 5       | A    | tyloses common; crunchy-mushy; shiny; lg fibers; tang.banded parenc.around med.lg->sm pores |
| 5       | B    | sparkles from tyloses; poss= BL, V5Ascr   |
| 6       |      | lg, sol.pores, spread out;[sim to V5fl]   |
| 6       |      | = V2Bscr  |
| 7       |      | parenc around lgr sol&nest pores in circles; sim to V4scr except parenc; poss='T'           |
| 7       |      | =V4scr  |
| 8       |      | semi-ring porous; = V5Ascr  |
| 8       |      | = V4scr; = V7scr; breaksinto squarish pcs   |
| 9       |      | = V4scr; from lgr pc  |
| 9       |      | = V4scr   |
| 9       |      | = V4scr   |
| 10      |      | monocot   |
| 11      |      |   |
| 153     | A    | = V2Cscr; branch characteristics;diam; bumpy surf;tyloses                                   |
| 153     | B    | = V2Cscr; smooth surf break; tyloses;diam   |
| 205     | A    | cact;sol.pores;wide rays  |
| 205     | B    | cact;smllr,sol.few,nested pores;soft;narrow rays  |
| 205     | C    | cact;sqaushed/compressed pc;nested,bunched pores  |
| 205     | D    | cact;nested,lg pores;narrow rays;= V205Bfl  |
| 205     | E    | cact;prob= V205Dfl  |
| 205     | F    | cact;soft;smllr sol.pores;narrow rays   |
| 10      | A    | cact;bunched,nested w/sol. pores;narrow rays  |
| 10      | B    | cact;sol.(?) w/few nested pores   |
| 10      | C    | cact; = V10Ascr   |
| 11      |      | few pores;fine rays;no parenc but like 'AA-2'   |
| 12      |      | sm pores & smllr than rays;soft   |
| 12      | A    | partially uncharred   |
| 12      | B    |   |
| 13      |      |   |
| 13      |      | lgr pores; from a lgr pc  |
| 14      |      | =? AA; lgr backgr cells; crunchy  |
| 14      | A    | round twig; 0.6cm diam; = V4scr   |

| Vial | Pc | Comments   |
|------|----|--|
| 14   | B  | round twig; 0.7cm diam; = V4scr  |
| 15   | A  | breaks off in chunks; features not clear; tyloses                              |
| 15   | B  | sim to V15Afl  |
| 15   | C  | sim to V53Cscr   |
| 15   | A  | like 'AA-2' but no parenc; = V11fl   |
| 15   | B  | tiny pores   |
| 15   | C  | tiny pores; pores in rays; = V15Bscr   |
| 15   | D  | pores in rays; = V15Bscr   |
| 16   | A  | wide rays;eroded; pores=ray width  |
| 16   | B  | =138fl;rays close&pract invis;parenc btw rows->wide spcd;pores wdr than rays   |
| 16   | A  | circular parenc; 1-celled ray  |
| 16   | B  | = V16scr   |
| 17   |    |  |
| 17   | A  | occas.tyloses; evenly dispersed, med-lg pores; parenc                          |
| 17   | B  | tiny pores surrounded by parenc; rays close together&straight                  |
| 18   |    | tiny pores   |
| 18   |    |  |
| 19   |    |  |
| 19   |    |  |
| 20   | A  | poss 'AK','AS';poss=155fl; crisp break; flat surf; shiny                       |
| 20   | B  |  |
| 21   |    | lgr fibers; tyloses; parenc around pores; poss pcs in vial not=                |
| 22   | A  | sim to V1fl; lg pith center; almost everyth= rad splits;tiny to sm pores       |
| 22   | B  | tang banded parenc; very lg pores  |
| 206  | A  | poss= V4scr;also sim to 77scr  |
| 206  | B  | smooth; radial splits; sol&chain(up to 3); straight rays;shiny                 |
| 29   |    |  |
| 30   |    | GOOD PC; soft/ crunchy; shiny surface  |
| 31   |    | soft;black;semi-shiny surface  |
| 32   |    | = V28fl  |
| 32   |    | from very lg pc! clear tyloses;prob= V13scr('C')                               |
| 33   |    | very melted  |
| 33   |    | not best pcs   |
| 34   | A  | not sure of type   |
| 34   | B  | lg pores;shiny silver;thin rays  |
| 34   |    | a lot of tiny sol pores=ray width; no parenc;remind me slightly of maple       |
| 35   |    | poss cact;pores in bunched clusters;rad.organiz;med wide rays                  |
| 35   |    | shiny crumbly; not well preserved but features there;parenc                    |
| 36   |    |  |
| 36   |    | from lg pc; prob= V4scr  |
| 37   | A  |  |
| 37   | B  | lgr backgr cells   |
| 37   | C  | pith   |
| 37   | D  | poss banded parenc   |
| 37   |    | banded parenc; bks tangentially  |
| 51   | A  | black;can see rays w/ eye;no parenc;ring porous;1/2twig pc                     |
| 51   | B  | black;can see rays w/ eye;no parenc;ring porous;1/2twig pc                     |
| 52   | A  | w/eye can see rings & rays; black;lg pc; no parenc                             |
| 52   | B  | parenc;smooth;shiny surf;slightly wider rays                                   |
| 53   | A  | very flaky-crunchy; chained split rays; poss "JJ" categ; prob= V53Cscr         |
| 53   | B  | 1 cm diam  |
| 53   | C  | 1 cm diam; in some ways sim to "D"   |
| 54   |    | = V51scr; many sim to AM but not!  |
| 54   |    | 1cm diam; = V58Afl   |
| 55   |    | very young & tiny; sev rings of ring porous; ca. 1.5 mm diam                   |
| 56   | A  | 'L' Type;AL...Group  |
| 56   | B  | = V56Cfl; (?= V55Cfl)  |
| 56   | C  | = V56Bfl; many lg.sol.pores;few rad.chains                                     |
| 57   |    | silvery  |
| 58   | A  | 1.5 cm diam; softer; rounded when eroded; chunkier breaks                      |
| 58   | B  | bks radially; lg splits; prob= V58Afl  |
| 59   |    | = V4scr  |
| 60   |    |  |
| 152  | A  | lg crunchy;rad breaks; poss R-2  |
| 152  | B  | very soft & mushy dark black; rows not always single; [= V16Ascr]              |
| 55   | A  | ?= V55Bscr; = V55Cscr  |
| 55   | B  | NICE PIECE! = V95Dscr; crispy; breaks at rounded non-angles                    |
| 55   | C  | banded parenc; very sim to WH; see 'C'Type card[brks hard;sim V57scr, crunchy] |
| 55   | D  | = V55Bscr; crunchy   |

## Wood IDs.raw data

| Vial | Pc | Comments  |
|------|----|---|
| 55   | E  | prob= V55Bscr;parenc?   |
| 56   |    |   |
| 57   | A  | crunchy, rough  |
| 57   | B  | prob= 55Bscr  |
| 57   | C  | prob= 57Bscr  |
| 58   |    | cact; tang.nested bunched pores;lg fibers,no parenc   |
| 61   | A  | eroded ends;soft,rich black;many tyloses;bumpy looking but smooth surface;parenc around pores         |
| 61   | B  | rays; porb N size; wider rad row of parenc.   |
| 62   | A  | Salix? very light,soft; multiple chains; sparkly; occas tyloses                                       |
| 62   | B  | Salix? = V62Afl; NICE PIECE   |
| 63   |    | monocot   |
| 64   |    |   |
| 65   |    | soft;sing.tang.pore rows;lg fibers;no parenc  |
| 66   |    | NICE PC;very lg pc->lg,round pores oft.nested 2-3;semi-ring p.; rays detour pores; aspen,birch,willow |
| 67   |    | = V3scr & V80scr  |
| 68   |    | tiny pores; from lgr pc;approx 1cm diam;fine rays(1-2cells);very lg pith;marg&banded parenc           |
| 59   | A  | = V59Dscr   |
| 59   | B  | = V59Dscr   |
| 59   | C  | = V59Dscr   |
| 59   | D  | 1.2 cm diam; = 57Ascr   |
| 59   | E  | = V59Dscr; close together growth rings; rad splits; brittle   |
| 59   | F  | = V59Dscr   |
| 60   |    | soft;blk;ringporous;vry lg backgr cells compared to pores;rays&pore width sim                         |
| 61   | A  | = V61Bscr; lg pc; about 2 cm diam   |
| 61   | B  | = V151scr; lgr pc; about 1 cm diam; very dark when charred  |
| 69   | A  | has parenc.   |
| 69   | B  | has parenc.   |
| 69   | C  | = V96Afl  |
| 70   | A  | poss AL-sim   |
| 70   | B  |   |
| 70   | C  | crunchy; couple of tyloses; porb Al-sim   |
| 70   | D  | = V70Cfl  |
| 71   |    | no parenc;tension/irreg;few/any?pores btw rings;ring porous;poss term.parenc                          |
| 72   |    | very much like V30scr   |
| 73   |    | crunchy-soft  |
| 151  |    | bks along ring; delicately crunchy; ring porous; ca. 2 cm diam  |
| 74   |    | = V4scr; [= V59fl, V5fl]  |
| 75   | A  | diagonal arranged pores w/surrounding parenc  |
| 75   | B  | twisted growth; crunch; chaining rays   |
| 76   |    | from med-lgr tree in area   |
| 77   |    | = V17fl   |
| 78   |    | parenc around ring porous (1-4 pores thick) pores; thicker rays, 1/2 pores                            |
| 79   |    | clear tyloses;simto 'H','C','&'T';too sm; parenc  |
| 80   | A  | ring porous; rad splits (sim to V110Afl)  |
| 80   | B  | =V5dryscr; 1 pore space btw rays; med, sol & 2/1 nested pores; parenc around pores                    |
| 80   | C  |   |
| 62   |    | looks like annual texture; sev. grouped pore rows;no parenc?  |
| 63   | A  | ?= "D" or Al  |
| 63   | B  |   |
| 63   | C  | ?="D" or Al/AJ  |
| 64   |    |   |
| 65   |    | prob= AS  |
| 66   | A  |   |
| 66   | B  |   |
| 67   |    | too sm;poss 'C','G';sing row,med,pores along ring;parenc around ring                                  |
| 68   |    | parenc around ring pores  |
| 69   |    | cact;wide rays;nested-bunched pores   |
| 70   | A  | cact; = V205Cfl; narrow rays  |
| 70   | B  | cact;bunched&sol.pores;med rays   |
| 71   | A  | cact;prob= V70Bscr  |
| 71   | B  | cact;nested pores;soft  |
| 71   | C  | cactus;sm pores;med.rays;tang.chains,sol.&nested pores  |
| 71   | D  | cact;soft;prob= V71Cscr   |
| 71   | E  | cact;med.rays;radial,nested w/few sol.pores   |
| 72   |    | monocot; twig;= V10fl; photos-#10&11:F-stop6,5; 11/20/91  |
| 73   |    | monocot; very diagnost. twig;= V63fl; photos-#12-14:F-stop8,15,8; 11/20/91                            |
| 81   | A  | cact;sol.w/nested pore bunches  |
| 81   | B  | cact;nested pore bunches;med rays   |
| 81   | C  | cact;nested pore bunches;wide rays;= V1Cscr   |



| Vial | Pc | Comments  |
|------|----|---|
| 81   | D  | cact;sm,sol. pores;wide rays;= V1Bscr   |
| 81   | E  | cact;prob= V81Cscr  |
| 82   |    | monocot; twig; = V72scr; photos-#8,9:F-stop4; 11/20/91                                  |
| 83   | A  | more obvious rays;rad.chains of tiny pores/lgr cells?                                   |
| 83   | B  | = V83Afl; more obvious rays;rad.chains of pores   |
| 83   | C  | = V83Afl; more obvious rays;rad.chains of tiny pores/lgr cells?                         |
| 84   |    | think bark/outside of 'AO' Type but poss not  |
| 85   | A  | cact;almost no pores=rad.nested pairs&sol   |
| 85   | B  | cact;very narrow rays?-slightly compressed  |
| 86   | A  | soft; brown-black; sm to tiny pores   |
| 86   | B  | has parenc?   |
| 87   |    | poss= V136scr; lgr trans pores  |
| 88   |    | = V190fl;med-sm,nested pairs & few sol.pores;parenc                                     |
| 89   | A  | fine rays   |
| 89   | B  | GOOD COMPARISON!has parenc;fine rays;= V89Afl   |
| 89   | C  | has parenc;fine rays;= V89Afl;ring porous   |
| 90   | A  | monocot   |
| 74   | A  |   |
| 74   | B  |   |
| 75   |    |   |
| 76   |    | cact;tang,nested pores&sol.pores;med rays   |
| 77   | A  | = 57Ascr  |
| 77   | B  | = 77Ascr  |
| 77   | C  | = 77Ascr  |
| 77   | D  | = 77Ascr  |
| 77   | E  | = 77Ascr  |
| 78   |    | poss thorned  |
| 91   | A  | rad splits; parenc around smllr sol & nested pores; crunchy-crumbly                     |
| 91   | B  | banded parenc; fine(1 celled) & close together rays; sm pores                           |
| 92   |    | GOOD EX.; = 1990-8;shiny;single pore row along ring;lg fibers;nested pore groups        |
| 93   | A  |   |
| 93   | B  |   |
| 93   | C  |   |
| 94   |    | [= V77scr]  |
| 95   |    | too sm; ring porous-2 growth rings;pores in bunches as radiates out;wider rays          |
| 96   |    | = V61Bscr   |
| 97   |    | rings very close together; [= V67fl]  |
| 79   |    | ca. 1.5 cm diam; [= V70Bfl]   |
| 80   |    | no parenc; [= V151scr]  |
| 81   |    | softer; =? V58Afl   |
| 82   | A  | from lgr pc   |
| 82   | B  | very sm, but from lgr pc; clear tyloses   |
| 82   | C  | = V82Bscr   |
| 82   | D  | colored tyloses; sim to 'T' & 'Pk-1'  |
| 83   |    | smllr pores; rad splits; sim to V22Afl  |
| 84   |    |   |
| 85   |    | [= V102fl, V74fl]   |
| 98   | A  | = V115Bfl   |
| 98   | B  | very "light" wood:sim to monocot  |
| 99   |    | wide rays;clustered pores; parenc around pores along ring=ring porous; [= V16Afl]       |
| 100  |    | = V103fl, V11fl; sim BF?  |
| 101  |    |   |
| 102  |    | lg band of term.parenc--doesn't look nat!; [= V74fl] = V85scr                           |
| 103  |    | = V100fl  |
| 104  |    |   |
| 105  |    |   |
| 106  |    | black   |
| 86   | A  | slightly melted; 1.5 cm diam  |
| 86   | B  | very lg pc: 4cm long X 1.5 cm diam; = V86Ascr   |
| 87   |    | split along rays; ca. 1 cm diam   |
| 88   |    | = V64fl   |
| 89   |    | = V133scr; sim to V3dryscr  |
| 90   |    | = V105fl  |
| 91   | A  | = V91Bscr;lots of pores;very fine rays;med fibers                                       |
| 91   | B  | = V91Ascr;crunchy   |
| 92   |    | very sim to V62scr; parenc? [= V67fl & V97fl]   |
| 93   |    | very lg pc; various # of characteristics; crunchy, rad splits; smllr branch; [= V32scr] |
| 107  | A  | combo of R-1&-2 ray charact& parenc;pith with inverse U shapes, forms star              |
| 107  | B  | [= V29scr]  |

## Wood IDs.raw data

| Via | Pc | Comments   |
|-----|----|--|
| 108 |    | round; 0.6cm diam [= V134fl]   |
| 109 | A  | = V109Bfl  |
| 109 | B  | = V109Afl; poss= 'AT'  |
| 110 | A  | chained rays   |
| 110 | B  | crumbly; rad split;ring porous;sm,sol pores;wider rays; prob= V110Afl  |
| 111 |    | "= V88scr&V1dryscr   |
| 112 |    | rad splits; nested-clumy pores?  |
| 113 |    | 7+cm diam;NICE PC;parenc round pores encircled& tang bands;sol&chained->4pores=>2/1 & = to rays; hvier wood;occas tylos. |
| 94  | A  | cact; narrow rays; 4sol&rad chain pores  |
| 94  | B  | cact;wider rays;nested,bunched&solitary  |
| 95  | A  | grouped & sol.pores; many tyloses  |
| 95  | B  | med.pores; tyloses; semi-ring porous; 1 cell width ray   |
| 95  | C  | diffuse porous;chained lg pores; parenc around pores--tree   |
| 95  | D  | rays both M&N;marginal parenc;diam-almost no pith;crumbles;many med-sm pores;diffuse porous                              |
| 96  |    | crunchier; = 1990-47   |
| 97  | A  | =? V40scr; sim to V24fl  |
| 97  | B  | =? V40scr; sim to V24fl  |
| 98  |    |  |
| 114 | A  | vry crumbly; mushy black; parenc?; ring porous; [= V95scr; not= V114Bfl]   |
| 114 | B  | shiny, smooth breaks; radial splits; sol.& sol-nested, round,med-sized pores; not= V114Afl                               |
| 114 | C  | soft black; med->lgr pores; semi-ring->ring porous   |
| 114 | D  | obvious parenc; sm pores; poss= V5dryscr   |
| 114 | E  | lg fibers; smooth; radial mult pores   |
| 115 | A  | = V4fl; shinyish; (=? V93fl)   |
| 115 | B  | ring porousness more like 'AS-1'but shiny = V4fl;(=? V115Afl)  |
| 116 |    | monocot;(= V62fl recheck)  |
| 117 |    | med rays; med-sm pores in chains and round groups;rays1/2 pore size;no parenc  |
| 118 |    | cross btw V136scr & "BE" & "U"; = V132Cfl  |
| 119 | A  |  |
| 119 | B  | = V30scr   |
| 120 | A  |  |
| 120 | B  | poss= V120Afl  |
| 121 | A  | melted; rad splits   |
| 121 | B  | melted & rad split to death  |
| 121 | C  | melted & rad split to death  |
| 121 | D  | 3 lg cell wide rays; parenc? AL-Type   |
| 121 | E  | sim= V121B&Cfl   |
| 121 | F  | sm,nested bunched pores; parenc arounddpores; breaks into chunks   |
| 122 | A  | ca. 1.5 cm diam; = V119Bfl   |
| 122 | B  | = V122Afl  |
| 123 | A  |  |
| 123 | B  | sm pc; = V123Afl   |
| 123 | C  | poss= V123Afl; crumbly; bks at ring  |
| 123 | D  | prob=123Cfl; crumbly: poss "R-2"?  |
| 124 |    | soft;rings very close together   |
| 125 | A  | 1-2 sol r nested pores togeth; parenc around pores; = V125Bfl  |
| 125 | B  | = V125Afl; parenc  |
| 126 |    | prob cact;huge all-nested pores;2-3cell ray;very delicate--crumbles when touch   |
| 99  | A  | sol,round pores;parenc; 1 celled rays btw wider ones; rad spl & melted; crumbles when broken                             |
| 99  | B  | melted rad splits; =? V99Ascr  |
| 100 |    | 1+ cm diam; softer   |
| 101 |    |  |
| 102 |    | = V113fl; from lg pc;thus, pc is "tiny" in comparison  |
| 103 | A  | poss= V138fl   |
| 103 | B  | believe= V103Ascr  |
| 104 |    | 1 cell/fine rays; many pores sm to med lg  |
| 105 |    |  |
| 106 |    | twisted branching; at growth division  |
| 127 | A  |  |
| 127 | B  | ca. 0.8 cm diam; = V127Afl   |
| 127 | C  | very narrow, mult tangential rows of parenc btw rings  |
| 128 | A  | [= V99scr; rad splits]   |
| 128 | B  |  |
| 128 | C  | =? V99Ascr   |
| 129 | A  | Tyloses; soft,brownish wood; rad splits as "bubbles"; many pores;[prob= V127Cfl]   |
| 129 | B  | tiny, melted; [prob= V128fl; crumbly]  |
| 129 | C  | melted; crunchy; rad splits  |
| 130 |    | sim to 'C','G';tang.parenc;lgr pores;lg fibers   |
| 107 | A  |  |

## Wood IDs.raw data

| Vial | Pc | Comments   |
|------|----|--|
| 107  | B  | no parenc; soft; dk  |
| 107  | C  | soft;narrow growth rings   |
| 108  | A  | 1.5 cm diam; placed in "AJ" due to sm rays and sing. pores -not parenc   |
| 108  | B  | placed in "AJ" due to sm rays and sing. pores -not parenc  |
| 108  | C  | bks off in squarish chunks; round; 0.6cm diam  |
| 109  |    | round; 0.75 cm diam  |
| 110  |    | from lgr pc; ca. 2 cm diam; cross of BE& V-2; lg fibers; ring-p.; sm pores                                       |
| 111  |    | tyloses?; crunchy/brittle; rad splits  |
| 112  |    | dk black;soft;sol,2/1,&3/1 nesyed pores 2x wider than rays;=Salix?Populus?                                       |
| 131  |    | (?= V115scr?); = V100fl, V103fl  |
| 132  | A  | = V132Cfl  |
| 132  | B  | melted;narrow rays; tang splits;frequent&med-sm pores  |
| 132  | C  | soft;black;ring porous;1-3 rows at ring; silver rays; = V118fl; ca. 1 cm diam                                    |
| 133  | A  | = V133Cfl; pore size differs sm to lg  |
| 133  | B  | crunchy;rad splits   |
| 133  | C  | wider rays= pore width; 1->2 btw rays  |
| 134  |    | poss JJ/AJ???.too sm of pc   |
| 135  |    | med sol&most bubble nested pores;often tang &rad chains; thin parenc around pores;from lgr pc[= V80Cfl]          |
| 136  |    | breaks transversally;poss sim to 'AN'  |
| 1    | A  | twig; = V111fl;  |
| 1    | B  | (=? V93Ascr & V1Adryscr)   |
| 2    |    | parenc;lgr pc;ring porous; = V52Ascr   |
| 3    |    |  |
| 4    |    | VERY NICE; round pc;1 cm diam; crunchy; smooth transv. break;  |
| 5    |    | few,med.pores btw ring porous,lg ones-approx 6x lgr than rays;banded parenc; [poss= V114Dfl] NICE                |
| 6    |    | = V65fl  |
| 7    |    | poss= V66A&Bscr  |
| 8    |    | lg pc;sq.breaks;rad spl;lg sol&nested 2/1 pores;sim 'AQ'   |
| 9    |    | 'T','H', or 'C';too tiny;clear tyloses;parenc [= V77scr; poss= V79fl]  |
| 113  |    |  |
| 114  |    | round; 0.6cm diam  |
| 115  |    | not well preserved   |
| 116  |    |  |
| 117  | A  | sim to 56Afl; from very lg pc  |
| 117  | B  | =? V117Ascr  |
| 118  |    | poss Type U  |
| 119  | A  | = V113fl; sim to'H'but smllr pores, blacker & parenc btw pore rows   |
| 119  | B  | = V119Ascr   |
| 120  |    | chunky-squarish bks;sing.row ring-p.;pores= ray width; 1 pore btw rays;parenc not vis but prob pres; prob AL-sim |
| 137  | A  | slight diff texture:not as 'soft'as other 'W's   |
| 137  | B  |  |
| 137  | C  |  |
| 138  |    | rays very close together; parenc; [= V121Ascr]   |
| 139  |    | friable; tang parenc, sm & lg pores/sol&nested; rays approx sm pores   |
| 140  | A  | breaks hard then crumbles; melted  |
| 140  | B  | hard as rock; melted; =? V140Afl   |
| 140  | C  | prob= V140Afl  |
| 141  |    | poss= V139fl;very sim to V16scr  |
| 142  |    | sim'AK','AS';tiny most often sol.pores;can barely see rays;very 'soft'   |
| 143  |    |  |
| 144  | A  | med pores;wiggly rays-sing cell;clear tyloses;black  |
| 144  | B  | obv.banded parenc around pores;wider rays;med pores;ring/semi-ring porous;crumbly;[= V119Ascr]                   |
| 144  | C  | lgr backgr cells; BL-like; many med sized pores  |
| 144  | D  | lg fibers; obvious parenc around btw more spread out, lgr pores; chains 3+; [prob= V145fl]                       |
| 144  | E  | too sm of a pc; lg fibers; med-lg pores; not V144A-Dfl; [no parenc]  |
| 144  | F  | too sm of a pc; lots of tyloses; = V144Efl; wider rays   |
| 145  |    | = V113fl, V119Bscr   |
| 146  |    |  |
| 147  |    | tiny pc; looks sim to'G' card  |
| 148  |    | poss 'C' or V145fl('E'); breaks hard->crumbles   |
| 149  |    | softer   |
| 150  | A  | approx 1.5mm diam; lg fibers; no pores visible;very soft   |
| 150  | B  | tyloses; med->lg, close together pores   |
| 151  |    |  |
| 152  | A  | dk clr, smooth; breaks rad&tang;poss not 'AM' due to size  |
| 152  | B  | very tiny; poss M-Type   |
| 153  | A  | parenc only narrowly around pores; shiny;some clear tyloses  |
| 153  | B  | too sm;round sol.med->sm pores;lgr fibers;tang pore rows;poss parenc   |
| 154  |    | poss 'H','K','C','T';too sm; huge pores; smllr rays;obvious parenc around pores                                  |

## Wood IDs.raw data

| Vial | Pc | Comments   |
|------|----|--|
| 121  | A  | soft, dk black, diam; = V121Bscr   |
| 121  | B  | = V121Ascr   |
| 122  | A  | diam ca. 1 cm; round   |
| 122  | B  | crunchy; rad splits; = V122Ascr  |
| 123  |    | crunchy;ring porous;sm to tiny pores;fibers tang arranged in rows;bks sim to chert;dense;fwr pores than 'AS' |
| 124  | A  | brks rad&tang; friable   |
| 124  | B  | = V124Ascr; crumbly; prob not= 'AS-1'-lg/many pores, M502breaks in chunks; [poss=V8dryscr]                   |
| 125  |    | GOOD COMPARISON!!  |
| 126  |    | too sm,from lgr pc;breaks hard; rad splits;lg pores;poss 'C'or other'N'-type                                 |
| 127  |    | dk black,smudgy-soft;tang parenc;'C','G'   |
| 155  |    | crisp break; NICE PC; sol pores; flat surf; shiny  |
| 156  |    | looks as tho ring porous w/parenc around clustered/nested sm pores btw rings[sim V122Bscr?, gritty]          |
| 157  |    | ring porous; sim to V203fl, V135fl   |
| 158  | A  | lgr fibers;banded parenc;irreg pores   |
| 158  | B  | prob= V158Afl  |
| 159  |    | lgr pores  |
| 160  |    |  |
| 161  |    |  |
| 162  | A  |  |
| 162  | B  | = V162Afl  |
| 163  | A  | 'T','G'; tang parenc; 2/1&3/1 pores  |
| 163  | B  | too sm; V163Afl  |
| 164  | A  | =V48Bscr   |
| 164  | B  | prob V164Afl   |
| 165  |    | cact;nested bunched pores  |
| 166  |    | monocot  |
| 167  | A  | too erode; med.fibers; couldn't make out any pores; =? V15Bscr   |
| 167  | B  | believe = V167Afl;very fine rays -barely visible; = V15Bscr  |
| 167  | C  | believe = V167Afl & V15Bscr  |
| 167  | D  | tiny, hard to distinguish pores; rays visible?; = V167Afl & V15Bscr  |
| 168  | A  | soft;narrow-med rays;sol&chained pores;silvery reflects;silver rays;no parenc                                |
| 168  | B  | = V168Afl; breaks hard   |
| 168  | C  | = V168A&Bfl  |
| 169  |    |  |
| 170  | A  | prob= V4scr, but from lgr pc that 4scr   |
| 170  | B  | = 170Afl   |
| 170  | C  | = 170Afl   |
| 170  | D  | very tiny; looks= to 170Afl  |
| 171  |    |  |
| 172  |    | too small  |
| 173  |    | (photo?); twig part  |
| 174  |    | lg cact pc; narrow rays;sol.pores  |
| 175  |    | crunchier/crumbles&breaks in long narrow pcs--rad&tang   |
| 176  |    |  |
| 177  | A  |  |
| 177  | B  | poss= V177Afl  |
| 177  | C  | prob= V177Afl  |
| 178  | A  | = V3Bscr;black;smooth;parenc;from lg pc  |
| 178  | B  | prob= V4scr; from lgr pc   |
| 179  |    | crunchy-shiny  |
| 180  |    | crunchy-crumbly  |
| 181  | A  | poss= V31fl and/or V17scr  |
| 181  | B  | poss=AW;fiber&pores differ slight from 'W';parenc; =?181Afl  |
| 181  | C  | really 'W'?  |
| 182  | A  | lg fibers; round sol & s.times nested, med-sm pores; ring porous   |
| 182  | B  | tyloses;smllr pores; diffuse porous; melted; crunchy   |
| 182  | C  | sol,round pores-rays width; rays approx 1 pore apart;softer than V155fl;mushy                                |
| 182  | D  | very lg pores; lots of tyloses   |
| 183  |    | too young; diam approx. 2mm; ring porous; pores approx same width as rays                                    |
| 184  |    | category 'M'or'N';too sm;from lgr pc/tree;brittle;rad&tang breaks  |
| 10   | A  | AL/N-Type;photo  |
| 10   | B  | AL/N-Type  |
| 10   | C  | AL/N-Type  |
| 10   | D  | AL/N-Type  |
| 10   | E  | AL/N-Type  |
| 11   | A  | AL/N-Type  |
| 11   | B  | AL/N-Type  |
| 11   | C  | AL/N-Type  |
| 11   | D  | AL/N-Type  |

| Vial | Pc | Comments  |
|------|----|---|
| 11   | E  | AL/N-Type   |
| 128  | A  | crunchy; lots of ray splits   |
| 128  | B  | very hard;poss JJ/AD  |
| 128  | C  | shiny melted; prob "AI"-Type; crunchy-crumbly   |
| 128  | D  | rad brks; very few pores; prob "JJ" category  |
| 129  | A  | = V107Ascr; soft dk black   |
| 129  | B  | = V129Ascr; [= V115Afl]   |
| 130  | A  |   |
| 130  | B  | both 'AS-1' & 'AS-2' characteristics; = V115Bfl   |
| 131  |    | soft,sgle pore row; no parenc?  |
| 132  |    | many med to sm pores; breaks in chunks as well as radially [sim AI?]                                |
| 185  | A  | semi-crunchy;rad split  |
| 185  | B  | = V185Afl   |
| 185  | C  | = V185Afl; flat,tiny pores;wider rays;almost no parenc  |
| 185  | D  | = V185Afl; very light & soft feeling  |
| 185  | E  | = V185Afl; has wider rays   |
| 185  | F  | = V185Afl; prob BE/X  |
| 185  | G  | = V125fl; parenc in tang blobs;rings wide apart;  |
| 185  | H  |   |
| 186  |    | round twiglet;0.15cm diam;too young;ring-p.;photo   |
| 187  |    | not JJ gr more sim to BA-Type; crispy and crisp bks   |
| 133  |    | rock hard; = V89scr, V137scr; GOOD COMPARISON   |
| 134  |    | hard;distinct parenc  |
| 135  |    | rock hard; melted-shiny;looks as if sev. multiple chains, sol.& med.sm pores [prob=138scr]          |
| 136  |    | 'W'-type w/lgr pores;twig; GREAT PC!! 0.7 cm diam   |
| 137  |    | lg pores; = V191fl; very charred  |
| 138  | A  | = V137Ascr,V191fl   |
| 138  | B  | = V137Ascr,V191fl   |
| 139  |    | cact; sol.med.sm pores evenly distributed; med->wide rays   |
| 140  |    | ring-p.1-3 rows;parenc around med pores&encircles smllr pores btw rings;med pc; bks trans           |
| 141  |    | fairly good pres.--why chose 'AA-3' for other P26   |
| 188  | A  | cact; prob= V139scr   |
| 188  | B  | cact; prob=138Cscr  |
| 188  | C  | cact;tiny,sol.pores;narrow rays,even fibers   |
| 189  | A  | many lgr pores; few tyloses? crisp planar breaks  |
| 189  | B  | pores slightly lgr than other AA-3s; crunchy; irreg & chunky breaks; [sim to V138scr,V140scr]       |
| 189  | C  | = V189Bfl   |
| 190  |    | = V57fl   |
| 191  |    | = V137scr,V138scr   |
| 192  |    | parenc around many pores; crumbly   |
| 193  |    | too sm;interesting pc;poss='H','C';from lgr pc;huge pores about= ray width; parenc                  |
| 142  |    | round twig;NICE PC;diam approx 0.5cm;crisp,smooth twig;tang bks;photo                               |
| 143  |    | hard but bks easily tang;nested,sm pores  |
| 144  | A  | ligt wt;sim to 'V'&'W'  |
| 144  | B  | melted; intersting pc; sim to "R-2"?; "annual";spongy soft  |
| 145  |    | very sm pores;scattered lgr&arched rows btw rays  |
| 146  |    | = V148scr;obvious parenc;soft;bks in chunks;semi-ring p;sm,round pores;rays wdr than pores          |
| 147  |    | poss= V144scr   |
| 148  |    | = V146scr;obvious parenc  |
| 149  |    | lg pc;2cm diam;bks off in sq chunks;very sm pith;banded parenc?;tyloses;sol pores= or lgr than rays |
| 150  |    | = V146scr   |
| 194  | A  | round twig  |
| 194  | B  | = V194Afl   |
| 195  | A  | ca. 2 cm diam; chained->evn spced,widr ray; tang pores; little/no parenc; crunchy; poss= V200Afl    |
| 195  | B  | 2+ cm diam; single row of pores   |
| 196  | A  | great EXAMPLE; = V145scr  |
| 196  | B  | round twig; 0.4cm diam  |
| 196  | C  | prob=196Bfl;lg pores  |
| 197  |    | sim to V144Ascr   |
| 198  |    | lg pithy center;very obvious tang rows of parenc-marginal parenc?; woody stem; melted               |
| 199  |    | text sim to annual  |
| 200  | A  | parenc around smllr clustered pores;when rad split->chains; diam; AL-type                           |
| 200  | B  | almost ring porous; diam about 1cm; rad spl; prob= V200Afl  |
| 200  | C  | = V200Afl; rays about 2 cells wide, <1/3 width of pores   |
| 200  | D  | prob= V200Afl   |
| 201  | A  | from lgr pc;see'H'card; =V201Bfl;lg fibers;sol&nest pores;poss parenc;wider rays                    |
| 201  | B  | = V201Afl; sim to 'C'   |
| 202  |    | monocot   |
| 203  |    | poss= V135fl  |

## Wood IDs.raw data

| Vial | Pc | Comments  |
|------|----|---|
| 204  | A  |   |
| 204  | B  | single line of pores along ring porous; sol., round pores; pores about= ray width               |
| 20   |    | dk black;soft looking but crunchy;marginal parenc;sm to med pores                               |
| 21   |    | prob not= V16scr  |
| 22   | A  | crunchy; prob not= V18scr   |
| 22   | B  | THE COMPARISON!!!   |
| 23   |    |   |
| 23   |    | seems "smllr tree/lgr bush" type  |
| 24   |    |   |
| 24   |    | breaks in chunks ...& NOT tangentially; sim to 'AF' only lgr pores                              |
| 25   |    | NICE PC   |
| 25   |    |   |
| 26   |    | from lgr tree; HUGE pores; parenc thinly around sol&nested pores that are 4/1 rays              |
| 26   |    | tang elongated/flattened,lgr pores;parenc around pores;silver/sparkly                           |
| 27   |    | seem to be from pc much lgr in diam than 2cm;4+times more                                       |
| 27   |    | semi-ring porous;crunchy;mostly nested 2/1 pores; thin parenc around pores                      |
| 28   |    | ray width=lgr round pores-sol,chains,&grouped;no parenc;lgr fibers                              |
| 28   |    | lgr pc but at growth division; crunch-crumbly   |
| 29   | A  |   |
| 29   | B  |   |
| 30   |    | = V51fl   |
| 31   |    | strange pc; lg fibers; no rays; twisted arrangmt; no pores?; strange cut splits => part of pc?  |
| 38   |    |   |
| 38   | A  | had nested & sol.pores; melted-crunchy-shiny  |
| 38   | B  | shiny-crunchy-melted-rad. split; totally unidentifiable   |
| 39   |    | lots of pores in rings; lgr fibers  |
| 39   |    | many,many pores-lgr to tiny;can't see rays;in some ways sim to AG                               |
| 40   |    | very lg & close together pores;can't see rays; related to Salix? [=Sissels#283?rubus robustus]  |
| 40   | A  | silver; very, very hard; tyloses; pores in chains and some sol.                                 |
| 40   | B  | silver; very, very hard; tyloses; pores in chains and some sol.; very sm                        |
| 41   |    | lgr backgr cells; med-sm pores; parenc  |
| 41   | A  | silver;tyloses;sol&nested pores;fine rays;parenc around pores;very difficult to break           |
| 41   | B  | bumpy-crumbly-crunchy; melted; tyloses  |
| 42   |    | diffuse porous;round,med pores;med wide short looking rays;no parenc                            |
| 42   |    |   |
| 43   |    | shiny; melted; sim to M, F-Types  |
| 43   | A  | total mush and dust   |
| 43   | B  | shiny-crunchy-melted; totally unidentifiable  |
| 44   |    | too tiny; from lgr tree   |
| 45   |    | shiny-crunchy-melted; totally unidentifiable  |
| 46   | A  | totally melted but lg pores visible (M/N-Type)  |
| 46   | B  | sol. pores; med lg fibers; soft   |
| 44   |    |   |
| 45   |    | spread out pores; (= ? V115Bfl)   |
| 46   |    | sim to V113fl;from lg pc; thus, pc is "tiny" in comparison                                      |
| 47   | A  | sparkly; from very lg pc, i.e. tree   |
| 47   | B  | = V47Afl; parenc in bands   |
| 47   | C  | = V47Afl; parenc in bands   |
| 47   | A  | parenc in bands; poss 'C'   |
| 47   | B  | smooth,silver-gray surface;parenc in thin bands   |
| 48   |    | rays close together-1 pore width apart;sol&nested (3-5),med pores;semi-ring pores               |
| 48   | A  |   |
| 48   | B  |   |
| 49   |    | ID from pore organization, breakage, & rays; melted   |
| 49   |    | sm pores; fine fibers; from lgr tree  |
| 50   |    | sm eroded pc  |
| 50   | A  | crunchy,shiny, melted; lgr pores than others that are 'destroyed'; also soft-crunchy            |
| 50   | B  | crunchy, shiny, melted; part of growth division   |
| 51   | A  | poss= "BE"? more like ZX, too!  |
| 51   | B  | NICE PC! silver; many very close together growth rings; ring porous; sm pores btw rings;= V30fl |
| 52   |    | poss= 'AS-2'  |
| 53   |    | soft; reminds me of AA-Type fibers->lgr; noID because part of growth tissue                     |