

University of Wisconsin-Madison

| Core                 | Library # | Location            | Core Depth ft | Sample #                 | Lithology            | 87Sr/86Sr | d <sup>13</sup> C (PDB) | d18O SMOW   | % Calcite | Note          |
|----------------------|-----------|---------------------|---------------|--------------------------|----------------------|-----------|-------------------------|-------------|-----------|---------------|
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 342           | WB1-342                  | lam. micrite         |           |                         | 7.16        | 21.50     | 18            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 342           | WB1-342                  | lam. micrite         |           |                         | 8.29        | 22.53     | 18            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 342           | WB1-342 weighted average | lam. micrite         |           |                         | <b>7.88</b> | 22.16     | 18            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 345           | WB1-345                  | lam. micrite         |           |                         | 3.33        | 21.07     | 76            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 348           | WB1-348                  | lam. micrite         |           |                         | 4.24        | 21.78     | 97            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 350           | WB1-350                  | micrite              | 0.71176   |                         | 3.83        | 21.53     | 86            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 351           | WB1-351                  | lam. micrite         |           |                         | 1.82        | 20.82     | 100 smal      |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 351           | WB1-351                  | lam. micrite         |           |                         | 3.28        | 20.96     | 100           |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 351           | WB1-351 weighted average | lam. micrite         |           |                         | <b>2.40</b> | 20.92     | 100           |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 353           | WB1-353                  | micrite              | 0.71170   |                         | 3.28        | 21.62     | 88            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 354           | WB1-354                  | lam. micrite         |           |                         | 2.04        | 20.76     | 100           |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 356           | WB1-356                  | micrite              | 0.71163   |                         | 3.51        | 21.85     | 100           |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 358           | WB1-358                  | lam. micrite         |           |                         | 2.63        | 21.28     | 100           |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 360           | WB1-360                  | black lam. micrite   |           |                         | 2.19        | 23.57     | 66            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 362           | WB1-362                  | micrite              | 0.71134   |                         | 4.75        | 22.69     | 94            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 364           | WB1-364                  | lam. micrite         |           |                         | 2.75        | 23.54     | 34            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 368           | WB1-368                  | micrite              | 0.71182   |                         | 5.79        | 24.52     | 66            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 369           | WB1-369                  | lam. micrite         |           |                         | 5.02        | 22.91     | 73            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 371           | WB1-371                  | micrite              | 0.71158   |                         | 5.19        | 21.81     | 85            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 372           | WB1-372                  | lam. micrite         |           |                         | 3.68        | 21.96     | 95            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 372           | WB1-372                  | lam. micrite         |           |                         | 4.10        | 22.39     | 87            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 372           | WB1-372 weighted average | lam. micrite         |           |                         | <b>3.99</b> | 22.27     | 87            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 374           | WB1-374                  | micrite              | 0.71091   |                         | 5.14        | 22.96     | 87            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 376           | WB1-376                  | lam. micrite         |           |                         | 2.58        | 23.19     | 100           |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 383           | WB1-383                  | micrite              | 0.71192   |                         | 4.41        | 24.58     | 100           |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 389           | WB1-389                  | micrite              |           |                         | 5.03        | 27.71     | 0             |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 390           | WB1-390                  | micrite              |           |                         | 5.90        | 27.66     | 0             |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 391           | WB1-391                  | micrite              |           |                         | 4.99        | 27.83     | 0             |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 392           | WB1-392                  | micrite              |           |                         | 4.57        | 26.66     | 0             |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 393           | WB1-393                  | micrite              |           |                         | 2.29        | 26.25     | 0 smal        |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 396           | WB1-396                  | micrite              |           |                         | 4.42        | 26.55     | 5             |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 398           | WB1-398                  | micrite              |           |                         | 6.56        | 26.26     | 57            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 398           | WB1-398                  | micrite              | 0.71221   |                         | 6.35        | 26.35     | 46            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 398           | WB1-398 weighted average | micrite              |           |                         | <b>6.44</b> | 26.32     | 57            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 399           | WB1-399                  | dk. micrite          |           |                         | 6.00        | 25.31     | 34            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 400           | WB1-400                  | dk. lam. micrite     |           |                         | 5.14        | 25.49     | 100           |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 401           | WB1-401                  | micrite              | 0.71204   |                         | 6.26        | 25.95     | 87            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 405           | WB1-405                  | dk. lam. micrite     |           |                         | 11.38       | 26.27     | 0             |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 407           | WB1-407                  | micrite              | 0.71216   |                         | 6.10        | 26.50     | 12            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 410           | WB1-410                  | micrite              | 0.71182   |                         | 7.47        | 27.00     | 69            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 410           | WB1-410                  | micrite              |           |                         | 7.13        | 27.30     | 69            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 410           | WB1-410 weighted average | micrite              |           |                         | <b>7.35</b> | 27.10     | 69            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 416           | WB1-416                  | micrite              | 0.71238   |                         | 7.86        | 26.74     | 75            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 419           | WB1-419                  | micrite              | 0.71178   |                         | 6.13        | 27.04     | 72            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 422           | WB1-422                  | micrite              | 0.71154   |                         | 7.20        | 27.07     | 83            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 499           | WB1-499                  | micrite              | 0.71269   |                         | 7.05        | 27.00     | 42            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 518           | WB1-518                  | micrite              | 0.71175   |                         | 6.22        | 27.39     | 46            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 527           | WB1-527                  | micrite              | 0.71238   |                         | 5.46        | 27.66     | 35            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 527           | WB1-527                  | micrite              |           |                         | 7.24        | 27.01     | 35            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 527           | WB1-527 weighted average | micrite              |           |                         | <b>6.64</b> | 27.21     | 35            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 556           | WB1-556                  | micrite              | 0.71263   |                         | 5.24        | 26.99     | 81            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 562           | WB1-562                  | tuff                 | 0.71215   |                         | 3.84        | 25.57     | 0 tuff n comq |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 562           | WB1-562                  | tuff                 |           |                         | -0.86       | 23.99     | 0 tuff n comq |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 563           | WB1-563                  | dolomitic intraclast | 0.71239   |                         | 6.07        | 27.42     | 39            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 564           | WB1-564                  | dolomitic            | 0.71278   |                         | 4.71        | 26.46     | 84            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 566           | WB1-566                  | micrite              | 0.71199   |                         | 4.38        | 26.73     | 66            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 567           | WB1-567                  | micrite              | 0.71221   |                         | 4.80        | 26.96     | 80            |
| Arco Oil & Gas WB #1 | U895      | T14N, R99W, Sec. 17 | 568           | WB1-568                  | micrite              | 0.71269   |                         | 6.31        | 28.80     | 9             |

|                      |      |                     |       |           |                      |         |      |       |    |
|----------------------|------|---------------------|-------|-----------|----------------------|---------|------|-------|----|
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 569   | WB1-569   | dolomitic intraclast | 0.71331 | 6.51 | 29.50 | 0  |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 570   | WB1-570   | dolomitic intraclast | 0.71297 | 5.64 | 29.32 | 0  |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 571   | WB1-571   | micrite              | 0.71251 | 3.47 | 26.94 | 76 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 572   | WB1-572   | micrite              | 0.71242 | 5.20 | 26.76 | 61 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 573   | WB1-573   | micrite              | 0.71205 | 1.06 | 25.86 | 83 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 574   | WB1-574   | micrite              | 0.71225 | 1.78 | 26.36 | 83 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 575   | WB1-575   | dolomitic            | 0.71269 | 0.99 | 27.79 | 35 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 576   | WB1-576   | micrite              | 0.71251 | 3.04 | 27.06 | 48 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 577   | WB1-577   | micrite              | 0.71258 | 3.19 | 27.55 | 80 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 578   | WB1-578   | stromatolite         | 0.71222 | 3.06 | 29.02 | 0  |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 579   | WB1-579   | micrite              | 0.71224 | 3.74 | 27.20 | 56 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 580   | WB1-580   | micrite              | 0.71222 | 2.70 | 27.34 | 87 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 581   | WB1-581   | micrite              | 0.71251 | 3.74 | 26.91 | 78 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 582   | WB1-582   | micrite              | 0.71266 | 3.84 | 26.40 | 98 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 583   | WB1-583   | micrite              | 0.71268 | 2.75 | 27.66 | 50 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 589.4 | WB1-589.4 | micrite              | 0.71300 | 2.45 | 26.79 | 66 |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 593   | WB1-593   | micrite              | 0.71244 | 2.28 | 25.72 | 95 |

**Rejected Analyses**

|                      |      |                     |     |         |         |         |      |       |           |
|----------------------|------|---------------------|-----|---------|---------|---------|------|-------|-----------|
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 341 | WB1-341 | micrite | 0.71187 | 4.74 | 21.48 | 51 1st ir |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 344 | WB1-344 | micrite | 0.71158 | 3.11 | 20.92 | 96 1st ir |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 347 | WB1-347 | micrite | 0.71190 | 4.15 | 22.29 | 82 1st ir |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 422 | WB1-422 | micrite |         | 6.26 | 26.25 | 83 signa  |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 565 | WB1-565 | micrite | 0.71209 | 5.05 | 26.89 | 81 1st ir |
| Arco Oil & Gas WB #1 | U895 | T14N, R99W, Sec. 17 | 587 | WB1-587 | micrite | 0.71226 | 3.03 | 26.44 | 94 1st ir |