

Timed Release Analysis
Stockton Seam
(Figures 19, 25, 27, 29, 39, 40, 44)

**Timed Release Analysis (Test 1)
Stockton Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 22.70 | 4.90% | 5.29% | 95.10% | 13.83% | 1.11 | 1.20 | 21.59 | Concentrate 1 | 22.70 | 13.83% | 1.11 | 1.20 | 21.59 | 97.97% | 97.97% | 4.90% | 19.76% | 0.68 |
| Concentrate 2 | 68.60 | 10.60% | 11.44% | 89.41% | 41.80% | 7.27 | 7.85 | 61.33 | Concentrate 2 | 91.30 | 55.64% | 8.38 | 9.05 | 82.92 | 84.71% | 84.71% | 9.18% | 75.88% | 5.11 |
| Concentrate 3 | 24.80 | 30.35% | 32.78% | 69.65% | 15.11% | 7.53 | 8.13 | 17.27 | Concentrate 3 | 116.10 | 70.75% | 15.91 | 17.18 | 100.19 | 70.99% | 70.99% | 13.70% | 91.69% | 9.69 |
| Concentrate 4 | 4.40 | 49.52% | 53.49% | 50.48% | 2.68% | 2.18 | 2.35 | 2.22 | Concentrate 4 | 120.50 | 73.43% | 18.09 | 19.53 | 102.41 | 67.01% | 67.01% | 15.01% | 93.72% | 11.02 |
| Tailings | 43.60 | 84.27% | 91.01% | 15.73% | 26.57% | 36.74 | 39.68 | 6.86 | Tailings | 164.10 | 100.00% | 54.83 | 59.21 | 109.27 | 0.00% | 0.00% | 33.41% | 100.00% | 33.41 |
| | 164.10 | | | | 100.00% | 54.83 | 59.21 | 109.27 | | | | | | | | | | | |

**Timed Release Analysis (Test 2)
Stockton Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 17.80 | 4.80% | 5.18% | 95.20% | 13.51% | 0.85 | 0.92 | 16.95 | Concentrate 1 | 17.80 | 13.51% | 0.85 | 0.92 | 16.95 | 98.05% | 98.05% | 4.80% | 19.24% | 0.65 |
| Concentrate 2 | 54.60 | 10.24% | 11.06% | 89.76% | 41.43% | 5.59 | 6.04 | 49.01 | Concentrate 2 | 72.40 | 54.93% | 6.45 | 6.96 | 65.95 | 85.26% | 85.26% | 8.90% | 74.89% | 4.89 |
| Concentrate 3 | 18.30 | 28.40% | 30.68% | 71.60% | 13.88% | 5.20 | 5.61 | 13.10 | Concentrate 3 | 90.70 | 68.82% | 11.64 | 12.57 | 79.06 | 73.38% | 73.38% | 12.84% | 89.77% | 8.83 |
| Concentrate 4 | 5.10 | 46.89% | 50.64% | 53.11% | 3.87% | 2.39 | 2.58 | 2.71 | Concentrate 4 | 95.80 | 72.69% | 14.03 | 15.16 | 81.77 | 67.91% | 67.91% | 14.65% | 92.84% | 10.65 |
| Tailings | 36.00 | 82.50% | 89.10% | 17.50% | 27.31% | 29.70 | 32.07 | 6.30 | Tailings | 131.80 | 100.00% | 43.73 | 47.23 | 88.07 | 0.00% | 0.00% | 33.18% | 100.00% | 33.18 |
| | 131.80 | | | | 100.00% | 43.73 | 47.23 | 88.07 | | | | | | | | | | | |

**Timed Release Analysis (Test 3)
Stockton Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 8.00 | 3.81% | 4.12% | 96.19% | 4.15% | 0.31 | 0.33 | 7.70 | Concentrate 1 | 8.00 | 4.15% | 0.31 | 0.33 | 7.70 | 99.52% | 99.52% | 3.81% | 5.93% | 0.16 |
| Concentrate 2 | 56.40 | 6.41% | 6.92% | 93.59% | 29.27% | 3.62 | 3.90 | 52.78 | Concentrate 2 | 64.40 | 33.42% | 3.92 | 4.23 | 60.48 | 93.78% | 93.78% | 6.09% | 46.64% | 2.03 |
| Concentrate 3 | 54.50 | 15.03% | 16.23% | 84.97% | 28.28% | 8.19 | 8.85 | 46.31 | Concentrate 3 | 118.90 | 61.70% | 12.11 | 13.08 | 106.79 | 80.78% | 80.78% | 10.19% | 82.34% | 6.29 |
| Concentrate 4 | 11.20 | 33.31% | 35.97% | 66.70% | 5.81% | 3.73 | 4.03 | 7.47 | Concentrate 4 | 130.10 | 67.51% | 15.84 | 17.11 | 114.26 | 74.86% | 74.86% | 12.18% | 88.10% | 8.22 |
| Tailings | 62.60 | 75.35% | 81.38% | 24.65% | 32.49% | 47.17 | 50.94 | 15.43 | Tailings | 192.70 | 100.00% | 63.01 | 68.05 | 129.69 | 0.00% | 0.00% | 32.70% | 100.00% | 32.70 |
| | 192.70 | | | | 100.00% | 63.01 | 68.05 | 129.69 | | | | | | | | | | | |

Simplified Release Analysis
 Stockton Seam
 (Figures 5, 21, 25, 27, 29, 39, 40, 44)

**Simplified Release Analysis (Test 1)
 Stockton Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 34.70 | 6.89% | 7.44% | 93.11% | 17.64% | 2.39 | 2.58 | 32.31 | Concentrate 1 | 34.70 | 17.64% | 2.39 | 2.58 | 32.31 | 96.34% | 96.34% | 6.89% | 24.60% | 1.22 |
| Concentrate 2 | 31.40 | 8.70% | 9.39% | 91.30% | 15.96% | 2.73 | 2.95 | 28.67 | Concentrate 2 | 66.10 | 33.60% | 5.12 | 5.53 | 60.98 | 92.17% | 92.17% | 7.75% | 46.43% | 2.60 |
| Concentrate 3 | 67.20 | 17.73% | 19.15% | 82.27% | 34.16% | 11.92 | 12.87 | 55.28 | Concentrate 3 | 133.30 | 67.77% | 17.04 | 18.40 | 116.26 | 73.94% | 73.94% | 12.78% | 88.53% | 8.66 |
| Concentrate 4 | 11.60 | 39.67% | 42.85% | 60.33% | 5.90% | 4.60 | 4.97 | 7.00 | Concentrate 4 | 144.90 | 73.67% | 21.64 | 23.37 | 123.26 | 66.90% | 66.90% | 14.93% | 93.86% | 11.00 |
| Tailings | 51.80 | 84.42% | 91.18% | 15.58% | 26.33% | 43.73 | 47.23 | 8.07 | Tailings | 196.70 | 100.00% | 65.37 | 70.60 | 131.33 | 0.00% | 0.00% | 33.23% | 100.00% | 33.23 |
| | 196.70 | | | | 100.00% | 65.37 | 70.60 | 131.33 | | | | | | | | | | | |

**Simplified Release Analysis (Test 2)
 Stockton Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 46.30 | 6.82% | 7.37% | 93.18% | 23.44% | 3.16 | 3.41 | 43.14 | Concentrate 1 | 46.30 | 23.44% | 3.16 | 3.41 | 43.14 | 95.29% | 95.29% | 6.82% | 33.07% | 1.60 |
| Concentrate 2 | 58.90 | 11.51% | 12.43% | 88.49% | 29.82% | 6.78 | 7.32 | 52.12 | Concentrate 2 | 105.20 | 53.27% | 9.94 | 10.73 | 95.26 | 85.18% | 85.18% | 9.44% | 73.02% | 5.03 |
| Concentrate 3 | 31.30 | 25.24% | 27.26% | 74.76% | 15.85% | 7.90 | 8.53 | 23.40 | Concentrate 3 | 136.50 | 69.11% | 17.84 | 19.26 | 118.66 | 73.40% | 73.40% | 13.07% | 90.96% | 9.03 |
| Concentrate 4 | 9.60 | 50.95% | 55.03% | 49.05% | 4.86% | 4.89 | 5.28 | 4.71 | Concentrate 4 | 146.10 | 73.97% | 22.73 | 24.55 | 123.37 | 66.10% | 66.10% | 15.56% | 94.57% | 11.51 |
| Tailings | 51.40 | 86.22% | 93.11% | 13.78% | 26.03% | 44.32 | 47.86 | 7.08 | Tailings | 197.50 | 100.00% | 67.04 | 72.41 | 130.46 | 0.00% | 0.00% | 33.95% | 100.00% | 33.95 |
| | 197.50 | | | | 100.00% | 67.04 | 72.41 | 130.46 | | | | | | | | | | | |

**Simplified Release Analysis (Test 3)
 Stockton Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 28.40 | 5.68% | 6.14% | 94.32% | 14.68% | 1.61 | 1.74 | 26.79 | Concentrate 1 | 28.40 | 14.68% | 1.61 | 1.74 | 26.79 | 97.53% | 97.53% | 5.68% | 20.92% | 0.83 |
| Concentrate 2 | 61.30 | 9.32% | 10.06% | 90.68% | 31.70% | 5.71 | 6.17 | 55.59 | Concentrate 2 | 89.70 | 46.38% | 7.32 | 7.91 | 82.38 | 88.79% | 88.79% | 8.17% | 64.33% | 3.79 |
| Concentrate 3 | 41.70 | 22.33% | 24.12% | 77.67% | 21.56% | 9.31 | 10.06 | 32.39 | Concentrate 3 | 131.40 | 67.94% | 16.64 | 17.97 | 114.76 | 74.54% | 74.54% | 12.66% | 89.63% | 8.60 |
| Concentrate 4 | 6.80 | 43.56% | 47.04% | 56.45% | 3.52% | 2.96 | 3.20 | 3.84 | Concentrate 4 | 138.20 | 71.46% | 19.60 | 21.17 | 118.60 | 70.01% | 70.01% | 14.18% | 92.62% | 10.13 |
| Tailings | 55.20 | 82.89% | 89.52% | 17.11% | 28.54% | 45.76 | 49.42 | 9.44 | Tailings | 193.40 | 100.00% | 65.35 | 70.58 | 128.05 | 0.00% | 0.00% | 33.79% | 100.00% | 33.79 |
| | 193.40 | | | | 100.00% | 65.35 | 70.58 | 128.05 | | | | | | | | | | | |

Tree Analysis
Stockton Seam
(Figures 23, 25, 27, 29, 39, 40, 44)

Tree Analysis (Test 1)
Stockton Seam

| Individual | | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|-------|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Fraction 1 | 95.90 | 8.84% | 9.55% | | 49.92% | 8.48 | 9.16 | | 87.42 | Fraction 1 | 95.90 | 49.92% | 8.48 | 9.16 | 87.42 | 85.78% | 85.78% | 8.84% | 65.99% | 4.41 |
| Fraction 2 | 1.60 | 16.32% | 17.63% | | 83.68% | 0.83 | 0.26 | 0.28 | 1.34 | Fraction 2 | 97.50 | 50.75% | 8.74 | 9.44 | 88.76 | 85.34% | 85.34% | 8.96% | 67.00% | 4.55 |
| Fraction 3 | 2.90 | 17.05% | 18.41% | | 82.95% | 1.51 | 0.49 | 0.53 | 2.41 | Fraction 3 | 100.40 | 52.26% | 9.23 | 9.97 | 91.17 | 84.51% | 84.51% | 9.20% | 68.82% | 4.81 |
| Fraction 4 | 7.60 | 18.00% | 19.44% | | 82.00% | 3.96% | 1.37 | 1.48 | 6.23 | Fraction 4 | 108.00 | 56.22% | 10.60 | 11.45 | 97.40 | 82.22% | 82.22% | 9.82% | 73.52% | 5.52 |
| Fraction 5 | 0.60 | 19.02% | 20.54% | | 80.98% | 0.31% | 0.11 | 0.12 | 0.49 | Fraction 5 | 108.60 | 56.53% | 10.72 | 11.57 | 97.88 | 82.03% | 82.03% | 9.87% | 73.89% | 5.58 |
| Fraction 6 | 5.00 | 21.06% | 22.74% | | 78.94% | 2.60% | 1.05 | 1.14 | 3.95 | Fraction 6 | 113.60 | 59.14% | 11.77 | 12.71 | 101.83 | 80.26% | 80.26% | 10.36% | 76.87% | 6.13 |
| Fraction 7 | 0.70 | 22.52% | 24.32% | | 77.48% | 0.36% | 0.16 | 0.17 | 0.54 | Fraction 7 | 114.30 | 59.50% | 11.93 | 12.88 | 102.37 | 80.00% | 80.00% | 10.43% | 77.28% | 6.21 |
| Fraction 8 | 0.90 | 23.20% | 25.06% | | 76.80% | 0.47% | 0.21 | 0.23 | 0.69 | Fraction 8 | 115.20 | 59.97% | 12.13 | 13.11 | 103.07 | 79.65% | 79.65% | 10.53% | 77.80% | 6.32 |
| Fraction 9 | 7.00 | 23.24% | 25.10% | | 76.76% | 3.64% | 1.63 | 1.76 | 5.37 | Fraction 9 | 122.20 | 63.61% | 13.76 | 14.86 | 108.44 | 76.92% | 76.92% | 11.26% | 81.85% | 7.16 |
| Fraction 10 | 3.70 | 28.98% | 31.30% | | 71.02% | 1.93% | 1.07 | 1.16 | 2.63 | Fraction 10 | 125.90 | 65.54% | 14.83 | 16.02 | 111.07 | 75.12% | 75.12% | 11.78% | 83.84% | 7.72 |
| Fraction 11 | 8.10 | 33.87% | 36.58% | | 66.13% | 4.22% | 2.74 | 2.96 | 5.36 | Fraction 11 | 134.00 | 69.76% | 17.58 | 18.98 | 116.42 | 70.52% | 70.52% | 13.12% | 87.88% | 9.15 |
| Fraction 12 | 5.50 | 35.91% | 38.78% | | 64.09% | 2.86% | 1.98 | 2.13 | 3.52 | Fraction 12 | 139.50 | 72.62% | 19.55 | 21.12 | 119.95 | 67.21% | 67.21% | 14.02% | 90.54% | 10.18 |
| Fraction 13 | 1.50 | 36.10% | 38.99% | | 63.90% | 0.78% | 0.54 | 0.58 | 0.96 | Fraction 13 | 141.00 | 73.40% | 20.09 | 21.70 | 120.91 | 66.30% | 66.30% | 14.25% | 91.27% | 10.46 |
| Fraction 14 | 4.80 | 49.02% | 52.94% | | 50.98% | 2.50% | 2.35 | 2.54 | 2.45 | Fraction 14 | 145.80 | 75.90% | 22.45 | 24.24 | 123.35 | 62.35% | 62.35% | 15.40% | 93.11% | 11.68 |
| Fraction 15 | 4.70 | 54.65% | 59.02% | | 45.35% | 2.45% | 2.57 | 2.77 | 2.13 | Fraction 15 | 150.50 | 78.34% | 25.02 | 27.02 | 125.48 | 58.04% | 58.04% | 16.62% | 94.72% | 13.02 |
| Fraction 16 | 41.60 | 83.19% | 89.85% | | 16.81% | 21.66% | 34.61 | 37.38 | 6.99 | Fraction 16 | 192.10 | 100.00% | 59.62 | 64.39 | 132.48 | 0.00% | 0.00% | 31.04% | 100.00% | 31.04 |
| | 192.10 | | | | 100.00% | 59.62 | 64.39 | 132.48 | | | | | | | | | | | | |

Tree Analysis (Test 2)
Stockton Seam

| Individual | | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|-------|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Fraction 1 | 98.00 | 9.21% | 9.95% | | 90.79% | 52.52% | 9.03 | 9.75 | 88.97 | Fraction 1 | 98.00 | 52.52% | 9.03 | 9.75 | 88.97 | 84.32% | 84.32% | 9.21% | 68.95% | 4.84 |
| Fraction 2 | 9.80 | 18.36% | 19.83% | | 81.64% | 5.25% | 1.80 | 1.94 | 8.00 | Fraction 2 | 107.80 | 57.77% | 10.83 | 11.69 | 96.97 | 81.19% | 81.19% | 10.04% | 75.15% | 5.80 |
| Fraction 3 | 3.50 | 22.22% | 24.00% | | 77.78% | 1.88% | 0.78 | 0.84 | 2.72 | Fraction 3 | 111.30 | 59.65% | 11.60 | 12.53 | 99.70 | 79.84% | 79.84% | 10.42% | 77.26% | 6.22 |
| Fraction 4 | 3.70 | 23.92% | 25.83% | | 76.08% | 1.98% | 0.89 | 0.96 | 2.81 | Fraction 4 | 115.00 | 61.63% | 12.49 | 13.49 | 102.51 | 78.30% | 78.30% | 10.86% | 79.44% | 6.69 |
| Fraction 5 | 4.00 | 25.49% | 27.53% | | 74.51% | 2.14% | 1.02 | 1.10 | 2.98 | Fraction 5 | 119.00 | 63.77% | 13.51 | 14.59 | 105.49 | 76.53% | 76.53% | 11.35% | 81.75% | 7.24 |
| Fraction 6 | 1.20 | 26.00% | 28.08% | | 74.00% | 0.64% | 0.31 | 0.34 | 0.89 | Fraction 6 | 120.20 | 64.42% | 13.82 | 14.92 | 106.38 | 75.99% | 75.99% | 11.50% | 82.44% | 7.41 |
| Fraction 7 | 4.50 | 27.17% | 29.34% | | 72.83% | 2.41% | 1.22 | 1.32 | 3.28 | Fraction 7 | 124.70 | 66.83% | 15.04 | 16.25 | 109.66 | 73.87% | 73.87% | 12.06% | 84.98% | 8.06 |
| Fraction 8 | 0.70 | 28.53% | 30.81% | | 71.47% | 0.38% | 0.20 | 0.22 | 0.50 | Fraction 8 | 125.40 | 67.20% | 15.24 | 16.46 | 110.16 | 73.52% | 73.52% | 12.15% | 85.37% | 8.17 |
| Fraction 9 | 0.50 | 30.13% | 32.54% | | 69.87% | 0.27% | 0.15 | 0.16 | 0.35 | Fraction 9 | 125.90 | 67.47% | 15.39 | 16.62 | 110.51 | 73.26% | 73.26% | 12.23% | 85.64% | 8.25 |
| Fraction 10 | 0.70 | 31.65% | 34.18% | | 68.35% | 0.38% | 0.22 | 0.24 | 0.48 | Fraction 10 | 126.60 | 67.85% | 15.61 | 16.86 | 110.99 | 72.87% | 72.87% | 12.33% | 86.01% | 8.37 |
| Fraction 11 | 1.40 | 34.14% | 36.87% | | 65.86% | 0.75% | 0.48 | 0.52 | 0.92 | Fraction 11 | 128.00 | 68.60% | 16.09 | 17.38 | 111.91 | 72.04% | 72.04% | 12.57% | 86.72% | 8.62 |
| Fraction 12 | 4.30 | 45.16% | 48.77% | | 54.84% | 2.30% | 1.94 | 2.10 | 2.36 | Fraction 12 | 132.30 | 70.90% | 18.03 | 19.48 | 114.27 | 68.67% | 68.67% | 13.63% | 88.55% | 9.66 |
| Fraction 13 | 2.40 | 45.50% | 49.14% | | 54.50% | 1.29% | 1.09 | 1.18 | 1.31 | Fraction 13 | 134.70 | 72.19% | 19.13 | 20.66 | 115.57 | 66.77% | 66.77% | 14.20% | 89.56% | 10.25 |
| Fraction 14 | 4.60 | 45.87% | 49.54% | | 54.13% | 2.47% | 2.11 | 2.28 | 2.49 | Fraction 14 | 139.30 | 74.65% | 21.24 | 22.93 | 118.06 | 63.11% | 63.11% | 15.24% | 91.49% | 11.38 |
| Fraction 15 | 3.10 | 48.58% | 52.47% | | 51.42% | 1.66% | 1.51 | 1.63 | 1.59 | Fraction 15 | 142.40 | 76.31% | 22.74 | 24.56 | 119.66 | 60.49% | 60.49% | 15.97% | 92.73% | 12.19 |
| Fraction 16 | 44.20 | 78.77% | 85.07% | | 21.23% | 23.69% | 34.82 | 37.60 | 9.38 | Fraction 16 | 186.60 | 100.00% | 57.56 | 62.16 | 129.04 | 0.00% | 0.00% | 30.85% | 100.00% | 30.85 |
| | 186.60 | | | | 100.00% | 57.56 | 62.16 | 129.04 | | | | | | | | | | | | |

Tree Analysis (Test 3)
Stockton Seam

| Individual | | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|-------|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Fraction 1 | 92.00 | 7.51% | 8.11% | | 92.49% | 48.27% | 6.91 | 7.46 | 85.09 | Fraction 1 | 92.00 | 48.27% | 6.91 | 7.46 | 85.09 | 87.80% | 87.80% | 7.51% | 63.52% | 3.62 |
| Fraction 2 | 2.40 | 14.63% | 15.80% | | 85.37% | 1.26% | 0.35 | 0.38 | 2.05 | Fraction 2 | 94.40 | 49.53% | 7.26 | 7.84 | 87.14 | 87.18% | 87.18% | 7.69% | 65.05% | 3.81 |
| Fraction 3 | 0.20 | 14.88% | 16.07% | | 85.12% | 0.10% | 0.03 | 0.03 | 0.17 | Fraction 3 | 94.60 | 49.63% | 7.29 | 7.87 | 87.31 | 87.13% | 87.13% | 7.71% | 65.18% | 3.82 |
| Fraction 4 | 0.40 | 16.11% | 17.40% | | 83.89% | 0.21% | 0.06 | 0.07 | 0.34 | Fraction 4 | 95.00 | 49.84% | 7.35 | 7.94 | 87.65 | 87.02% | 87.02% | 7.74% | 65.43% | 3.86 |
| Fraction 5 | 1.10 | 18.75% | 20.25% | | 81.25% | 0.58% | 0.21 | 0.22 | 0.89 | Fraction 5 | 96.10 | 50.42% | 7.56 | 8.17 | 88.54 | 86.65% | 86.65% | 7.87% | 66.10% | 3.97 |
| Fraction 6 | 30.90 | 22.07% | 23.84% | | 77.93% | 16.21% | 6.82 | 7.37 | 24.08 | Fraction 6 | 127.00 | 66.83% | 14.38 | 15.53 | 112.62 | 74.62% | 74.62% | 11.32% | 84.08% | 7.54 |
| Fraction 7 | 3.30 | 23.79% | 25.69% | | 76.21% | 1.73% | 0.79 | 0.85 | 2.51 | Fraction 7 | 130.30 | 68.36% | 15.17 | 16.38 | 115.13 | 73.23% | 73.23% | 11.64% | 85.95% | 7.96 |
| Fraction 8 | 0.60 | 27.00% | 29.18% | | 73.00% | 0.31% | 0.16 | 0.17 | 0.44 | Fraction 8 | 130.90 | 68.68% | 15.33 | 16.55 | 115.57 | 72.94% | 72.94% | 11.71% | 86.28% | 8.04 |
| Fraction 9 | 2.10 | 32.33% | 34.92% | | 67.67% | 1.10% | 0.68 | 0.73 | 1.42 | Fraction 9 | 133.00 | 69.78% | 16.01 | 17.29 | 116.99 | 71.75% | 71.75% | 12.03% | 87.34% | 8.40 |
| Fraction 10 | 2.30 | 35.46% | 38.30% | | 64.54% | 1.21% | 0.82 | 0.88 | 1.48 | Fraction 10 | 135.30 | 70.99% | 16.82 | 18.17 | 118.48 | 70.31% | 70.31% | 12.43% | 88.45% | 8.83 |
| Fraction 11 | 6.80 | 45.32% | 48.95% | | 54.68% | 3.57% | 3.08 | 3.33 | 3.72 | Fraction 11 | 142.10 | 74.55% | 19.90 | 21.50 | 122.20 | 64.87% | 64.87% | 14.01% | 91.23% | 10.44 |
| Fraction 12 | 4.70 | 47.66% | 51.47% | | 52.34% | 2.47% | 2.24 | 2.42 | 2.46 | Fraction 12 | 146.80 | 77.02% | 22.14 | 23.92 | 124.66 | 60.91% | 60.91% | 15.08% | 93.06% | 11.62 |
| Fraction 13 | 1.80 | 53.67% | 57.96% | | 46.33% | 0.94% | 0.97 | 1.04 | 0.83 | Fraction 13 | 148.60 | 77.96% | 23.11 | 24.96 | 125.49 | 59.21% | 59.21% | 15.55% | 93.68% | 12.12 |
| Fraction 14 | 7.70 | 56.73% | 61.27% | | 43.27% | 4.04% | 4.37 | 4.72 | 3.33 | Fraction 14 | 156.30 | 82.00% | 27.48 | 29.68 | 128.82 | 51.50% | 51.50% | 17.58% | 96.17% | 14.42 |
| Fraction 15 | 3.5 | 65.00% | 70.20% | | 35.00% | 1.84% | 2.28 | 2.46 | 1.23 | Fraction 15 | 159.80 | 83.84% | 29.75 | 32.13 | 130.05 | 47.48% | 47.48% | 18.62% | 97.09% | 15.61 |
| Fraction 16 | 30.80 | 87.33% | 94.32% | | 12.67% | 16.16% | 26.90 | 29.05 | 3.90 | Fraction 16 | 190.60 | 100.00% | 56.65 | 61.18 | 133.95 | 0.00% | 0.00% | 29.72% | 100.00% | 29.72 |
| | 190.60 | | | | 100.00% | 56.65 | 61.18 | 133.95 | | | | | | | | | | | | |

Tree Analysis
Stockton Seam
(Figures 23, 25, 27, 29, 39, 40, 44)

Tree Analysis (Test4)
Stockton Seam

| Individual | | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|--|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Fraction 1 | 105.50 | 9.88% | 10.67% | 90.12% | 55.41% | 10.42 | 11.26 | 95.08 | | Fraction 1 | 105.50 | 55.41% | 10.42 | 11.26 | 95.08 | 83.05% | 83.05% | 9.88% | 73.75% | 5.47 |
| Fraction 2 | 0.70 | 16.13% | 17.42% | 83.87% | 0.37% | 0.11 | 0.12 | 0.59 | | Fraction 2 | 106.20 | 55.78% | 10.54 | 11.38 | 95.66 | 82.86% | 82.86% | 9.92% | 74.20% | 5.53 |
| Fraction 3 | 2.90 | 20.27% | 21.89% | 79.73% | 1.52% | 0.59 | 0.63 | 2.31 | | Fraction 3 | 109.10 | 57.30% | 11.12 | 12.01 | 97.98 | 81.91% | 81.91% | 10.20% | 76.00% | 5.84 |
| Fraction 4 | 3.40 | 21.05% | 22.73% | 78.95% | 1.79% | 0.72 | 0.77 | 2.68 | | Fraction 4 | 112.50 | 59.09% | 11.84 | 12.79 | 100.66 | 80.74% | 80.74% | 10.52% | 78.08% | 6.22 |
| Fraction 5 | 0.40 | 27.24% | 29.42% | 72.76% | 0.21% | 0.11 | 0.12 | 0.29 | | Fraction 5 | 112.90 | 59.30% | 11.95 | 12.90 | 100.95 | 80.56% | 80.56% | 10.58% | 78.30% | 6.28 |
| Fraction 6 | 8.50 | 30.00% | 32.40% | 70.00% | 4.46% | 2.55 | 2.75 | 5.95 | | Fraction 6 | 121.40 | 63.76% | 14.50 | 15.66 | 106.90 | 76.42% | 76.42% | 11.94% | 82.92% | 7.61 |
| Fraction 7 | 4.30 | 32.88% | 35.51% | 67.12% | 2.26% | 1.41 | 1.53 | 2.89 | | Fraction 7 | 125.70 | 66.02% | 15.91 | 17.19 | 109.79 | 74.12% | 74.12% | 12.66% | 85.16% | 8.36 |
| Fraction 8 | 2.50 | 34.66% | 37.43% | 65.34% | 1.31% | 0.87 | 0.94 | 1.63 | | Fraction 8 | 128.20 | 67.33% | 16.78 | 18.12 | 111.42 | 72.71% | 72.71% | 13.09% | 86.43% | 8.81 |
| Fraction 9 | 0.30 | 41.64% | 44.97% | 58.36% | 0.16% | 0.12 | 0.13 | 0.18 | | Fraction 9 | 128.50 | 67.49% | 16.90 | 18.26 | 111.60 | 72.50% | 72.50% | 13.15% | 86.56% | 8.88 |
| Fraction 10 | 2.50 | 43.26% | 46.72% | 56.74% | 1.31% | 1.08 | 1.17 | 1.42 | | Fraction 10 | 131.00 | 68.80% | 17.99 | 19.42 | 113.01 | 70.75% | 70.75% | 13.73% | 87.66% | 9.45 |
| Fraction 11 | 5.10 | 43.52% | 47.00% | 56.48% | 2.68% | 2.22 | 2.40 | 2.88 | | Fraction 11 | 136.10 | 71.48% | 20.21 | 21.82 | 115.89 | 67.13% | 67.13% | 14.85% | 89.90% | 10.61 |
| Fraction 12 | 4.40 | 52.45% | 56.65% | 47.55% | 2.31% | 2.31 | 2.49 | 2.09 | | Fraction 12 | 140.50 | 73.79% | 22.51 | 24.31 | 117.99 | 63.38% | 63.38% | 16.02% | 91.52% | 11.82 |
| Fraction 13 | 3.10 | 64.35% | 69.50% | 35.65% | 1.63% | 1.99 | 2.15 | 1.11 | | Fraction 13 | 143.60 | 75.42% | 24.51 | 26.47 | 119.09 | 60.14% | 60.14% | 17.07% | 92.38% | 12.87 |
| Fraction 14 | 3.60 | 70.45% | 76.09% | 29.55% | 1.89% | 2.54 | 2.74 | 1.06 | | Fraction 14 | 147.20 | 77.31% | 27.04 | 29.21 | 120.16 | 56.01% | 56.01% | 18.37% | 93.20% | 14.20 |
| Fraction 15 | 43.20 | 79.71% | 86.09% | 20.29% | 22.69% | 34.43 | 37.19 | 8.77 | | Fraction 15 | 190.40 | 100.00% | 61.48 | 66.40 | 128.92 | 0.00% | 0.00% | 32.29% | 100.00% | 32.29 |
| | 190.40 | | | | 100.00% | 61.48 | 66.40 | 128.92 | | | | | | | | | | | | |

Tree Analysis (Test 5)
Stockton Seam

| Individual | | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|--|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Fraction 1 | 130.70 | 11.29% | 12.19% | 88.71% | 58.53% | 14.76 | 15.94 | 115.94 | | Fraction 1 | 130.70 | 58.53% | 14.76 | 15.94 | 115.94 | 79.44% | 79.44% | 11.29% | 76.51% | 6.61 |
| Fraction 2 | 3.80 | 22.67% | 24.48% | 77.33% | 1.70% | 0.86 | 0.93 | 2.94 | | Fraction 2 | 134.50 | 60.23% | 15.62 | 16.87 | 118.88 | 78.24% | 78.24% | 11.61% | 78.45% | 6.99 |
| Fraction 3 | 0.90 | 23.42% | 25.29% | 76.58% | 0.40% | 0.21 | 0.23 | 0.69 | | Fraction 3 | 135.40 | 60.64% | 15.83 | 17.09 | 119.57 | 77.94% | 77.94% | 11.69% | 78.91% | 7.09 |
| Fraction 4 | 1.90 | 23.50% | 25.38% | 76.50% | 0.85% | 0.45 | 0.48 | 1.45 | | Fraction 4 | 137.30 | 61.49% | 16.27 | 17.58 | 121.03 | 77.32% | 77.32% | 11.85% | 79.87% | 7.29 |
| Fraction 5 | 1.20 | 25.16% | 27.17% | 74.84% | 0.54% | 0.30 | 0.33 | 0.90 | | Fraction 5 | 138.50 | 62.02% | 16.58 | 17.90 | 121.92 | 76.90% | 76.90% | 11.97% | 80.46% | 7.42 |
| Fraction 6 | 6.60 | 25.80% | 27.86% | 74.20% | 2.96% | 1.70 | 1.84 | 4.90 | | Fraction 6 | 145.10 | 64.98% | 18.28 | 19.74 | 126.82 | 74.53% | 74.53% | 12.60% | 83.69% | 8.19 |
| Fraction 7 | 0.90 | 25.80% | 27.86% | 74.20% | 0.40% | 0.23 | 0.25 | 0.67 | | Fraction 7 | 146.00 | 65.38% | 18.51 | 19.99 | 127.49 | 74.20% | 74.20% | 12.68% | 84.13% | 8.29 |
| Fraction 8 | 2.20 | 25.81% | 27.87% | 74.19% | 0.99% | 0.57 | 0.61 | 1.63 | | Fraction 8 | 148.20 | 66.37% | 19.08 | 20.61 | 129.12 | 73.41% | 73.41% | 12.87% | 85.21% | 8.54 |
| Fraction 9 | 1.20 | 28.68% | 30.97% | 71.32% | 0.54% | 0.34 | 0.37 | 0.86 | | Fraction 9 | 149.40 | 66.91% | 19.42 | 20.98 | 129.98 | 72.93% | 72.93% | 13.00% | 85.77% | 8.70 |
| Fraction 10 | 4.00 | 29.47% | 31.83% | 70.53% | 1.79% | 1.18 | 1.27 | 2.82 | | Fraction 10 | 153.40 | 68.70% | 20.60 | 22.25 | 132.80 | 71.29% | 71.29% | 13.43% | 87.63% | 9.23 |
| Fraction 11 | 2.00 | 36.95% | 39.91% | 63.05% | 0.90% | 0.74 | 0.80 | 1.26 | | Fraction 11 | 155.40 | 69.59% | 21.34 | 23.05 | 134.06 | 70.26% | 70.26% | 13.73% | 88.47% | 9.56 |
| Fraction 12 | 4.90 | 48.78% | 52.68% | 51.22% | 2.19% | 2.39 | 2.58 | 2.51 | | Fraction 12 | 160.30 | 71.79% | 23.73 | 25.63 | 136.57 | 66.93% | 66.93% | 14.80% | 90.12% | 10.63 |
| Fraction 13 | 4.20 | 56.42% | 60.93% | 43.58% | 1.88% | 2.37 | 2.56 | 1.83 | | Fraction 13 | 164.50 | 73.67% | 26.10 | 28.19 | 138.40 | 63.63% | 63.63% | 15.87% | 91.33% | 11.69 |
| Fraction 14 | 3.80 | 55.43% | 59.86% | 44.57% | 1.70% | 2.11 | 2.27 | 1.69 | | Fraction 14 | 168.30 | 75.37% | 28.21 | 30.46 | 140.09 | 60.69% | 60.69% | 16.76% | 92.45% | 12.63 |
| Fraction 15 | 3.30 | 67.03% | 72.39% | 32.97% | 1.48% | 2.21 | 2.39 | 1.09 | | Fraction 15 | 171.60 | 76.85% | 30.42 | 32.85 | 141.18 | 57.61% | 57.61% | 17.73% | 93.17% | 13.62 |
| Fraction 16 | 51.70 | 79.97% | 86.37% | 20.03% | 23.15% | 41.34 | 44.65 | 10.36 | | Fraction 16 | 223.30 | 100.00% | 71.76 | 77.51 | 151.54 | 0.00% | 0.00% | 32.14% | 100.00% | 32.14 |
| | 223.30 | | | | 100.00% | 71.76 | 77.51 | 151.54 | | | | | | | | | | | | |

Reverse Release Analysis
Stockton Seam
(Figures 38, 39, 40, 44)

Reverse Release Analysis (Test 1)
Stockton Seam

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate | 103.20 | 9.54% | 10.30% | 90.46% | 53.97% | 9.85 | 10.83 | 93.35 | Concentrate | 103.20 | 53.97% | 9.85 | 10.83 | 93.35 | 84.33% | 84.33% | 9.54% | 72.72% | 5.15 |
| Tails 5 | 24.00 | 23.77% | 25.67% | 76.23% | 12.55% | 5.70 | 6.16 | 18.30 | Tails 5 | 127.20 | 66.53% | 15.55 | 16.79 | 111.65 | 75.25% | 75.25% | 12.22% | 86.97% | 8.13 |
| Tails 4 | 2.90 | 35.75% | 38.60% | 64.26% | 1.52% | 1.04 | 1.12 | 1.86 | Tails 4 | 130.10 | 68.04% | 16.59 | 17.91 | 113.51 | 73.60% | 73.60% | 12.75% | 88.42% | 8.68 |
| Tails 3 | 2.90 | 39.13% | 42.26% | 60.87% | 1.52% | 1.13 | 1.23 | 1.77 | Tails 3 | 133.00 | 69.56% | 17.72 | 19.14 | 115.28 | 71.79% | 71.79% | 13.32% | 89.80% | 9.27 |
| Tails 2 | 0.90 | 28.60% | 30.89% | 71.40% | 0.47% | 0.26 | 0.28 | 0.64 | Tails 2 | 133.90 | 70.03% | 17.98 | 19.42 | 115.92 | 71.38% | 71.38% | 13.43% | 90.30% | 9.40 |
| Tails 1 | 57.30 | 78.27% | 84.53% | 21.73% | 29.97% | 44.85 | 48.44 | 12.45 | Tails 1 | 191.20 | 100.00% | 62.83 | 67.85 | 128.37 | 0.00% | 0.00% | 32.86% | 100.00% | 32.86 |
| | 191.20 | | | | 100.00% | 62.83 | 67.85 | 128.37 | | | | | | | | | | | |

Reverse Release Analysis (Test 2)
Stockton Seam

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate | 108.80 | 9.80% | 10.59% | 90.20% | 54.98% | 10.67 | 11.52 | 98.13 | Concentrate | 108.80 | 54.98% | 10.67 | 11.52 | 98.13 | 84.01% | 84.01% | 9.80% | 74.81% | 5.39 |
| Tails 5 | 12.80 | 23.58% | 25.46% | 76.43% | 6.47% | 3.02 | 3.26 | 9.78 | Tails 5 | 121.60 | 61.45% | 13.68 | 14.78 | 107.92 | 79.49% | 79.49% | 11.25% | 82.26% | 6.91 |
| Tails 4 | 6.20 | 36.19% | 39.08% | 63.82% | 3.13% | 2.24 | 2.42 | 3.96 | Tails 4 | 127.80 | 64.58% | 15.93 | 17.20 | 111.87 | 76.13% | 76.13% | 12.46% | 85.28% | 8.05 |
| Tails 3 | 4.50 | 37.97% | 41.01% | 62.03% | 2.27% | 1.71 | 1.85 | 2.79 | Tails 3 | 132.30 | 66.85% | 17.64 | 19.05 | 114.66 | 73.57% | 73.57% | 13.33% | 87.41% | 8.91 |
| Tails 2 | 3.00 | 35.72% | 38.58% | 64.28% | 1.52% | 1.07 | 1.16 | 1.93 | Tails 2 | 135.30 | 68.37% | 18.71 | 20.20 | 116.59 | 71.96% | 71.96% | 13.83% | 88.88% | 9.45 |
| Tails 1 | 62.60 | 76.70% | 82.83% | 23.31% | 31.63% | 48.01 | 51.85 | 14.59 | Tails 1 | 197.90 | 100.00% | 66.72 | 72.06 | 131.18 | 0.00% | 0.00% | 33.71% | 100.00% | 33.71 |
| | 197.90 | | | | 100.00% | 66.72 | 72.06 | 131.18 | | | | | | | | | | | |

Reverse Release Analysis (Test 3)
Stockton Seam

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate | 16.30 | 4.94% | 5.34% | 95.06% | 7.91% | 0.81 | 0.87 | 15.49 | Concentrate | 16.30 | 7.91% | 0.81 | 0.87 | 15.49 | 98.79% | 98.79% | 4.94% | 11.10% | 0.39 |
| Tails 4 | 109.80 | 11.17% | 12.07% | 88.83% | 53.28% | 12.27 | 13.25 | 97.53 | Tails 4 | 126.10 | 61.18% | 13.07 | 14.12 | 113.03 | 80.34% | 80.34% | 10.37% | 80.97% | 6.34 |
| Tails 3 | 7.90 | 30.91% | 33.38% | 69.09% | 3.83% | 2.44 | 2.64 | 5.46 | Tails 3 | 134.00 | 65.02% | 15.52 | 16.76 | 118.48 | 76.67% | 76.67% | 11.58% | 84.88% | 7.53 |
| Tails 2 | 1.70 | 40.63% | 43.88% | 59.37% | 0.82% | 0.69 | 0.75 | 1.01 | Tails 2 | 135.70 | 65.84% | 16.21 | 17.50 | 119.49 | 75.64% | 75.64% | 11.94% | 85.61% | 7.86 |
| Tails 1 | 2.40 | 31.85% | 34.40% | 68.15% | 1.16% | 0.76 | 0.83 | 1.64 | Tails 1 | 138.10 | 67.01% | 16.97 | 18.33 | 121.13 | 74.49% | 74.49% | 12.29% | 86.78% | 8.23 |
| Initial Tails | 68.00 | 72.86% | 78.69% | 27.14% | 32.99% | 49.55 | 53.51 | 18.45 | Initial Tails | 206.10 | 100.00% | 66.52 | 71.84 | 139.58 | 0.00% | 0.00% | 32.27% | 100.00% | 32.27 |
| | 206.10 | | | | 100.00% | 66.52 | 71.84 | 139.58 | | | | | | | | | | | |

Reverse Release Analysis (Test 4)
Stockton Seam

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate | 18.10 | 5.70% | 6.16% | 94.30% | 9.06% | 1.03 | 1.11 | 17.07 | Concentrate | 18.10 | 9.06% | 1.03 | 1.11 | 17.07 | 98.37% | 98.37% | 5.70% | 12.51% | 0.52 |
| Tails 4 | 94.10 | 9.84% | 10.63% | 90.16% | 47.10% | 9.26 | 10.00 | 84.84 | Tails 4 | 112.20 | 56.16% | 10.29 | 11.12 | 101.91 | 83.76% | 83.76% | 9.17% | 74.69% | 5.15 |
| Tails 3 | 17.30 | 26.22% | 28.31% | 73.79% | 8.66% | 4.54 | 4.90 | 12.76 | Tails 3 | 129.50 | 64.81% | 14.83 | 16.01 | 114.67 | 76.60% | 76.60% | 11.45% | 84.04% | 7.42 |
| Tails 2 | 2.60 | 34.18% | 36.91% | 65.82% | 1.30% | 0.89 | 0.96 | 1.71 | Tails 2 | 132.10 | 66.12% | 15.72 | 16.97 | 116.38 | 75.19% | 75.19% | 11.90% | 85.30% | 7.87 |
| Tails 1 | 3.20 | 34.70% | 37.48% | 65.30% | 1.60% | 1.11 | 1.20 | 2.09 | Tails 1 | 135.30 | 67.72% | 16.83 | 18.17 | 118.47 | 73.44% | 73.44% | 12.44% | 86.83% | 8.42 |
| Initial Tails | 64.50 | 72.14% | 77.91% | 27.86% | 32.28% | 46.53 | 50.25 | 17.97 | Initial Tails | 199.80 | 100.00% | 63.35 | 68.42 | 136.45 | 0.00% | 0.00% | 31.71% | 100.00% | 31.71 |
| | 199.80 | | | | 100.00% | 63.35 | 68.42 | 136.45 | | | | | | | | | | | |

Timed Release Analysis
Beckley Seam
(Figures 20, 26, 28, 30, 42, 43, 45)

**Timed Release Analysis (Test 1)
Beckley Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 22.20 | 4.07% | 4.40% | 95.93% | 11.07% | 0.90 | 0.98 | 21.30 | Concentrate 1 | 22.20 | 11.07% | 0.90 | 0.98 | 21.30 | 98.71% | 98.71% | 4.07% | 16.33% | 0.45 |
| Concentrate 2 | 80.60 | 7.45% | 8.04% | 92.56% | 40.20% | 6.00 | 6.48 | 74.60 | Concentrate 2 | 102.80 | 51.27% | 6.90 | 7.46 | 95.90 | 90.15% | 90.15% | 6.72% | 73.54% | 3.44 |
| Concentrate 3 | 38.00 | 30.27% | 32.69% | 69.73% | 18.95% | 11.50 | 12.42 | 26.50 | Concentrate 3 | 140.80 | 70.22% | 18.41 | 19.88 | 122.39 | 73.74% | 73.74% | 13.07% | 93.86% | 9.18 |
| Concentrate 4 | 7.80 | 71.10% | 76.79% | 28.90% | 3.89% | 5.55 | 5.99 | 2.25 | Concentrate 4 | 148.60 | 74.11% | 23.95 | 25.87 | 124.65 | 65.83% | 65.83% | 16.12% | 95.59% | 11.95 |
| Tailings | 51.90 | 88.91% | 96.03% | 11.09% | 25.89% | 46.15 | 49.84 | 5.75 | Tailings | 200.50 | 100.00% | 70.10 | 75.71 | 130.40 | 0.00% | 0.00% | 34.96% | 100.00% | 34.96 |
| | 200.50 | | | | 100.00% | 70.10 | 75.71 | 130.40 | | | | | | | | | | | |

**Timed Release Analysis (Test 2)
Beckley Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 32.00 | 3.08% | 3.33% | 96.92% | 16.66% | 0.99 | 1.06 | 31.01 | Concentrate 1 | 32.00 | 16.66% | 0.99 | 1.06 | 31.01 | 98.48% | 98.48% | 3.08% | 24.35% | 0.51 |
| Concentrate 2 | 82.50 | 11.85% | 12.80% | 88.15% | 42.95% | 9.78 | 10.56 | 72.72 | Concentrate 2 | 114.50 | 59.60% | 10.76 | 11.62 | 103.74 | 83.37% | 83.37% | 9.40% | 81.45% | 5.60 |
| Concentrate 3 | 31.50 | 49.25% | 53.19% | 50.75% | 16.40% | 15.51 | 16.75 | 15.99 | Concentrate 3 | 146.00 | 76.00% | 26.28 | 28.38 | 119.72 | 59.41% | 59.41% | 18.00% | 94.00% | 13.68 |
| Concentrate 4 | 8.90 | 77.21% | 83.39% | 22.79% | 4.63% | 6.87 | 7.42 | 2.03 | Concentrate 4 | 154.90 | 80.64% | 33.15 | 35.80 | 121.75 | 48.79% | 48.79% | 21.40% | 95.59% | 17.26 |
| Tailings | 37.20 | 84.90% | 91.69% | 15.10% | 19.36% | 31.58 | 34.11 | 5.62 | Tailings | 192.10 | 100.00% | 64.73 | 69.91 | 127.37 | 0.00% | 0.00% | 33.70% | 100.00% | 33.70 |
| | 192.10 | | | | 100.00% | 64.73 | 69.91 | 127.37 | | | | | | | | | | | |

**Timed Release Analysis (Test 3)
Beckley Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 21.30 | 4.59% | 4.96% | 95.41% | 11.08% | 0.98 | 1.06 | 20.32 | Concentrate 1 | 21.30 | 11.08% | 0.98 | 1.06 | 20.32 | 98.51% | 98.51% | 4.59% | 16.04% | 0.51 |
| Concentrate 2 | 80.90 | 8.20% | 8.86% | 91.80% | 42.09% | 6.63 | 7.16 | 74.27 | Concentrate 2 | 102.20 | 53.17% | 7.61 | 8.22 | 94.59 | 88.38% | 88.38% | 7.45% | 74.65% | 3.96 |
| Concentrate 3 | 43.20 | 40.77% | 44.03% | 59.23% | 22.48% | 17.61 | 19.02 | 25.59 | Concentrate 3 | 145.40 | 75.65% | 25.22 | 27.24 | 120.18 | 61.48% | 61.48% | 17.35% | 94.84% | 13.12 |
| Concentrate 4 | 8.50 | 74.64% | 80.61% | 25.36% | 4.42% | 6.34 | 6.85 | 2.16 | Concentrate 4 | 153.90 | 80.07% | 31.57 | 34.09 | 122.33 | 51.80% | 51.80% | 20.51% | 96.55% | 16.42 |
| Tailings | 38.30 | 88.57% | 95.66% | 11.43% | 19.93% | 33.92 | 36.64 | 4.38 | Tailings | 192.20 | 100.00% | 65.49 | 70.73 | 126.71 | 0.00% | 0.00% | 34.07% | 100.00% | 34.07 |
| | 192.20 | | | | 100.00% | 65.49 | 70.73 | 126.71 | | | | | | | | | | | |

Simplified Release Analysis
Beckley Seam
(Figures 6, 22, 26, 28, 30, 42, 43, 45)

**Simplified Release Analysis (Test 1)
Beckley Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 58.90 | 4.64% | 5.01% | 95.36% | 32.60% | 2.73 | 2.95 | 56.17 | Concentrate 1 | 58.90 | 32.60% | 2.73 | 2.95 | 56.17 | 95.67% | 95.67% | 4.64% | 47.78% | 1.51 |
| Concentrate 2 | 33.70 | 7.25% | 7.83% | 92.75% | 18.65% | 2.44 | 2.64 | 31.26 | Concentrate 2 | 92.60 | 51.25% | 5.17 | 5.59 | 87.43 | 91.81% | 91.81% | 5.59% | 74.38% | 2.86 |
| Concentrate 3 | 26.40 | 23.82% | 25.72% | 76.18% | 14.61% | 6.29 | 6.79 | 20.11 | Concentrate 3 | 119.00 | 65.86% | 11.46 | 12.38 | 107.54 | 81.85% | 81.85% | 9.63% | 91.49% | 6.34 |
| Concentrate 4 | 7.50 | 50.28% | 54.30% | 49.72% | 4.15% | 3.77 | 4.07 | 3.73 | Concentrate 4 | 126.50 | 70.01% | 15.23 | 16.45 | 111.27 | 75.88% | 75.88% | 12.04% | 94.66% | 8.43 |
| Tailings | 54.20 | 88.42% | 95.49% | 11.59% | 29.99% | 47.92 | 51.75 | 6.28 | Tailings | 180.70 | 100.00% | 63.15 | 68.21 | 117.55 | 0.00% | 0.00% | 34.95% | 100.00% | 34.95 |
| | 180.70 | | | | 100.00% | 63.15 | 68.21 | 117.55 | | | | | | | | | | | |

**Simplified Release Analysis (Test 2)
Beckley Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 28.50 | 3.57% | 3.86% | 96.43% | 14.68% | 1.02 | 1.10 | 27.48 | Concentrate 1 | 28.50 | 14.68% | 1.02 | 1.10 | 27.48 | 98.52% | 98.52% | 3.57% | 21.89% | 0.52 |
| Concentrate 2 | 48.40 | 5.50% | 5.93% | 94.51% | 24.94% | 2.66 | 2.87 | 45.74 | Concentrate 2 | 76.90 | 39.62% | 3.68 | 3.97 | 73.22 | 94.64% | 94.64% | 4.78% | 58.33% | 1.89 |
| Concentrate 3 | 43.50 | 13.06% | 14.10% | 86.95% | 22.41% | 5.68 | 6.13 | 37.82 | Concentrate 3 | 120.40 | 62.03% | 9.36 | 10.10 | 111.04 | 86.35% | 86.35% | 7.77% | 88.46% | 4.82 |
| Concentrate 4 | 15.80 | 48.51% | 52.39% | 51.49% | 8.14% | 7.66 | 8.28 | 8.14 | Concentrate 4 | 136.20 | 70.17% | 17.02 | 18.38 | 119.18 | 75.18% | 75.18% | 12.50% | 94.94% | 8.77 |
| Tailings | 57.90 | 89.02% | 96.14% | 10.98% | 29.83% | 51.54 | 55.67 | 6.36 | Tailings | 194.10 | 100.00% | 68.56 | 74.05 | 125.54 | 0.00% | 0.00% | 35.32% | 100.00% | 35.32 |
| | 194.10 | | | | 100.00% | 68.56 | 74.05 | 125.54 | | | | | | | | | | | |

**Simplified Release Analysis (Test 3)
Beckley Seam**

| Individual | | | | | | | | | Cumulative | | | | | | | | | | |
|---------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|---------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate 1 | 30.40 | 4.12% | 4.45% | 95.88% | 15.30% | 1.25 | 1.35 | 29.15 | Concentrate 1 | 30.40 | 15.30% | 1.25 | 1.35 | 29.15 | 98.26% | 98.26% | 4.12% | 23.03% | 0.63 |
| Concentrate 2 | 51.00 | 6.25% | 6.75% | 93.75% | 25.67% | 3.19 | 3.44 | 47.81 | Concentrate 2 | 81.40 | 40.97% | 4.44 | 4.79 | 76.96 | 93.85% | 93.85% | 5.45% | 60.82% | 2.23 |
| Concentrate 3 | 33.90 | 13.24% | 14.30% | 86.76% | 17.06% | 4.49 | 4.85 | 29.41 | Concentrate 3 | 115.30 | 58.03% | 8.93 | 9.64 | 106.37 | 87.63% | 87.63% | 7.74% | 84.06% | 4.49 |
| Concentrate 4 | 21.10 | 36.84% | 39.79% | 63.16% | 10.62% | 7.77 | 8.40 | 13.33 | Concentrate 4 | 136.40 | 68.65% | 16.70 | 18.04 | 119.70 | 76.86% | 76.86% | 12.24% | 94.60% | 8.41 |
| Tailings | 62.30 | 89.02% | 96.14% | 10.98% | 31.35% | 55.46 | 59.90 | 6.84 | Tailings | 198.70 | 100.00% | 72.16 | 77.94 | 126.54 | 0.00% | 0.00% | 36.32% | 100.00% | 36.32 |
| | 198.70 | | | | 100.00% | 72.16 | 77.94 | 126.54 | | | | | | | | | | | |

Tree Analysis
Beckley Seam
(Figures 24, 26, 28, 30, 42, 43, 45)

Tree Analysis (Test 1)
Beckley Seam

| Individual | | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|--|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Fraction 1 | 119.60 | 6.00% | 6.48% | 94.00% | 48.19% | 7.18 | 7.75 | 112.42 | | Fraction 1 | 119.60 | 48.19% | 7.18 | 7.75 | 112.42 | 91.63% | 91.63% | 6.00% | 69.18% | 2.89 |
| Fraction 2 | 3.20 | 27.60% | 29.81% | 72.40% | 1.29% | 0.88 | 0.95 | 2.32 | | Fraction 2 | 122.80 | 49.48% | 8.06 | 8.70 | 114.74 | 90.60% | 90.60% | 6.56% | 70.61% | 3.25 |
| Fraction 3 | 12.10 | 26.01% | 28.09% | 73.99% | 4.88% | 3.15 | 3.40 | 8.95 | | Fraction 3 | 134.90 | 54.35% | 11.21 | 12.10 | 123.69 | 86.92% | 86.92% | 8.31% | 76.11% | 4.52 |
| Fraction 4 | 28.70 | 34.05% | 36.77% | 65.95% | 11.56% | 9.77 | 10.55 | 18.93 | | Fraction 4 | 163.60 | 65.91% | 20.98 | 22.66 | 142.62 | 75.52% | 75.52% | 12.82% | 87.76% | 8.45 |
| Fraction 5 | 19.20 | 44.93% | 48.52% | 55.07% | 7.74% | 8.63 | 9.32 | 10.57 | | Fraction 5 | 182.80 | 73.65% | 29.61 | 31.97 | 153.19 | 65.45% | 65.45% | 16.20% | 94.27% | 11.93 |
| Fraction 6 | 1.60 | 62.46% | 67.46% | 37.54% | 0.64% | 1.00 | 1.08 | 0.60 | | Fraction 6 | 184.40 | 74.29% | 30.60 | 33.05 | 153.80 | 64.28% | 64.28% | 16.60% | 94.64% | 12.33 |
| Fraction 7 | 0.40 | 70.63% | 76.28% | 29.37% | 0.16% | 0.28 | 0.31 | 0.12 | | Fraction 7 | 184.80 | 74.46% | 30.89 | 33.36 | 153.91 | 63.96% | 63.96% | 16.71% | 94.71% | 12.44 |
| Fraction 8 | 2.50 | 71.21% | 76.91% | 28.79% | 1.01% | 1.78 | 1.92 | 0.72 | | Fraction 8 | 187.30 | 75.46% | 32.67 | 35.28 | 154.63 | 61.88% | 61.88% | 17.44% | 95.15% | 13.14 |
| Fraction 9 | 3.90 | 71.41% | 77.12% | 28.59% | 1.57% | 2.78 | 3.01 | 1.12 | | Fraction 9 | 191.20 | 77.03% | 35.45 | 38.29 | 155.75 | 58.63% | 58.63% | 18.54% | 95.84% | 14.28 |
| Fraction 10 | 2.70 | 76.25% | 82.35% | 23.75% | 1.09% | 2.06 | 2.22 | 0.64 | | Fraction 10 | 193.90 | 78.12% | 37.51 | 40.51 | 156.39 | 56.22% | 56.22% | 19.35% | 96.23% | 15.11 |
| Fraction 11 | 4.80 | 80.14% | 86.55% | 19.86% | 1.93% | 3.85 | 4.15 | 0.95 | | Fraction 11 | 198.70 | 80.06% | 41.36 | 44.67 | 157.34 | 51.74% | 51.74% | 20.81% | 96.82% | 16.66 |
| Fraction 12 | 2.90 | 82.88% | 89.51% | 17.12% | 1.17% | 2.40 | 2.60 | 0.50 | | Fraction 12 | 201.60 | 81.22% | 43.76 | 47.26 | 157.84 | 48.93% | 48.93% | 21.71% | 97.13% | 17.63 |
| Fraction 13 | 7.30 | 86.14% | 93.03% | 13.86% | 2.94% | 6.29 | 6.79 | 1.01 | | Fraction 13 | 208.90 | 84.17% | 50.05 | 54.05 | 158.85 | 41.59% | 41.59% | 23.96% | 97.75% | 20.17 |
| Fraction 14 | 3.10 | 86.24% | 93.14% | 13.76% | 1.25% | 2.67 | 2.89 | 0.43 | | Fraction 14 | 212.00 | 85.41% | 52.72 | 56.94 | 159.28 | 38.47% | 38.47% | 24.87% | 98.01% | 21.24 |
| Fraction 15 | 4.10 | 86.38% | 93.29% | 13.62% | 1.65% | 3.54 | 3.82 | 0.56 | | Fraction 15 | 216.10 | 87.07% | 56.26 | 60.77 | 159.84 | 34.34% | 34.34% | 26.04% | 98.35% | 22.67 |
| Fraction 16 | 32.10 | 91.67% | 99.00% | 8.33% | 12.93% | 29.43 | 31.78 | 2.67 | | Fraction 16 | 248.20 | 100.00% | 85.69 | 92.55 | 162.51 | 0.00% | 0.00% | 34.52% | 100.00% | 34.52 |
| | 248.20 | | | | | 85.69 | 92.55 | 162.51 | | | | | | | | | | | | |

Tree Analysis (Test 2)
Beckley Seam

| Individual | | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|--------|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Fraction 1 | 103.40 | 4.87% | 5.26% | 95.13% | 40.71% | 5.04 | 5.44 | 98.36 | | Fraction 1 | 103.40 | 40.71% | 5.04 | 5.44 | 98.36 | 94.37% | 94.37% | 4.87% | 59.75% | 1.98 |
| Fraction 2 | 1.50 | 20.57% | 22.22% | 79.43% | 0.59% | 0.31 | 0.33 | 1.19 | | Fraction 2 | 104.90 | 41.30% | 5.34 | 5.77 | 99.56 | 94.02% | 94.02% | 5.09% | 60.48% | 2.10 |
| Fraction 3 | 9.00 | 22.63% | 24.44% | 77.37% | 3.54% | 2.04 | 2.20 | 6.96 | | Fraction 3 | 113.90 | 44.84% | 7.38 | 7.97 | 106.52 | 91.74% | 91.74% | 6.48% | 64.71% | 2.91 |
| Fraction 4 | 6.30 | 23.35% | 25.22% | 76.65% | 2.48% | 1.47 | 1.59 | 4.83 | | Fraction 4 | 120.20 | 47.32% | 8.85 | 9.56 | 111.35 | 90.10% | 90.10% | 7.36% | 67.64% | 3.48 |
| Fraction 5 | 54.00 | 26.61% | 28.74% | 73.39% | 21.26% | 14.37 | 15.52 | 39.63 | | Fraction 5 | 174.20 | 68.58% | 23.22 | 25.08 | 150.98 | 74.02% | 74.02% | 13.33% | 91.72% | 9.14 |
| Fraction 6 | 1.80 | 60.80% | 66.66% | 39.20% | 0.71% | 1.09 | 1.18 | 0.71 | | Fraction 6 | 176.00 | 69.29% | 24.32 | 26.26 | 151.68 | 72.80% | 72.80% | 13.82% | 92.15% | 9.57 |
| Fraction 7 | 0.80 | 61.66% | 66.59% | 38.34% | 0.31% | 0.49 | 0.53 | 0.31 | | Fraction 7 | 176.80 | 69.61% | 24.81 | 26.79 | 151.99 | 72.25% | 72.25% | 14.03% | 92.33% | 9.77 |
| Fraction 8 | 0.50 | 62.82% | 67.85% | 37.18% | 0.20% | 0.31 | 0.34 | 0.19 | | Fraction 8 | 177.30 | 69.80% | 25.12 | 27.13 | 152.18 | 71.89% | 71.89% | 14.17% | 92.44% | 9.89 |
| Fraction 9 | 0.50 | 64.48% | 69.64% | 35.52% | 0.20% | 0.32 | 0.35 | 0.18 | | Fraction 9 | 177.80 | 70.00% | 25.45 | 27.48 | 152.35 | 71.53% | 71.53% | 14.31% | 92.55% | 10.02 |
| Fraction 10 | 6.80 | 65.25% | 70.47% | 34.75% | 2.68% | 4.44 | 4.79 | 2.36 | | Fraction 10 | 184.60 | 72.68% | 29.88 | 32.27 | 154.72 | 66.57% | 66.57% | 16.19% | 93.99% | 11.76 |
| Fraction 11 | 11.50 | 70.39% | 76.02% | 29.61% | 4.53% | 8.09 | 8.74 | 3.41 | | Fraction 11 | 196.10 | 77.20% | 37.98 | 41.02 | 158.12 | 57.51% | 57.51% | 19.37% | 96.06% | 14.95 |
| Fraction 12 | 0.90 | 75.69% | 81.75% | 24.31% | 0.35% | 0.68 | 0.74 | 0.22 | | Fraction 12 | 197.00 | 77.56% | 38.66 | 41.75 | 158.34 | 56.75% | 56.75% | 19.62% | 96.19% | 15.22 |
| Fraction 13 | 8.90 | 80.83% | 87.30% | 19.17% | 3.50% | 7.19 | 7.77 | 1.71 | | Fraction 13 | 205.90 | 81.06% | 45.85 | 49.52 | 160.05 | 48.70% | 48.70% | 22.27% | 97.23% | 18.05 |
| Fraction 14 | 1.50 | 82.43% | 89.02% | 17.57% | 0.59% | 1.24 | 1.34 | 0.26 | | Fraction 14 | 207.40 | 81.65% | 47.09 | 50.86 | 160.31 | 47.32% | 47.32% | 22.70% | 97.39% | 18.54 |
| Fraction 15 | 6.00 | 84.99% | 91.79% | 15.01% | 2.36% | 5.10 | 5.51 | 0.90 | | Fraction 15 | 213.40 | 84.02% | 52.19 | 56.36 | 161.21 | 41.61% | 41.61% | 24.46% | 97.93% | 20.55 |
| Fraction 16 | 40.60 | 91.62% | 98.95% | 8.38% | 15.98% | 37.20 | 40.17 | 3.40 | | Fraction 16 | 254.00 | 100.00% | 89.39 | 96.54 | 164.61 | 0.00% | 0.00% | 35.19% | 100.00% | 35.19 |
| | 254.00 | | | | | 100.00% | 89.39 | 96.54 | 164.61 | | | | | | | | | | | |

Tree Analysis (Test 3)
Beckley Seam

| Individual | | | | | | | | | | Cumulative | | | | | | | | | | |
|-------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|--|-------------|--------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| Fraction | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Fraction 1 | 127.00 | 10.78% | 11.64% | 89.22% | 64.37% | 13.69 | 14.79 | 113.31 | | Fraction 1 | 127.00 | 64.37% | 13.69 | 14.79 | 113.31 | 79.12% | 79.12% | 10.78% | 86.02% | 6.94 |
| Fraction 2 | 4.80 | 31.45% | 33.97% | 68.55% | 2.43% | 1.51 | 1.63 | 3.29 | | Fraction 2 | 131.80 | 66.80% | 15.20 | 16.42 | 116.60 | 76.82% | 76.82% | 11.53% | 88.51% | 7.70 |
| Fraction 3 | 2.70 | 48.08% | 51.93% | 51.92% | 1.37% | 1.30 | 1.40 | 1.40 | | Fraction 3 | 134.50 | 68.17% | 16.50 | 17.82 | 118.00 | 74.84% | 74.84% | 12.27% | 89.58% | 8.36 |
| Fraction 4 | 1.70 | 52.07% | 56.24% | 47.93% | 0.86% | 0.89 | 0.96 | 0.81 | | Fraction 4 | 136.20 | 69.03% | 17.38 | 18.77 | 118.82 | 73.49% | 73.49% | 12.76% | 90.20% | 8.81 |
| Fraction 5 | 18.10 | 60.16% | 64.97% | 39.84% | 9.17% | 10.89 | 11.76 | 7.21 | | Fraction 5 | 154.30 | 78.21% | 28.27 | 30.53 | 126.03 | 56.88% | 56.88% | 18.32% | 95.67% | 14.33 |
| Fraction 6 | 0.20 | 70.35% | 75.98% | 29.65% | 0.10% | 0.14 | 0.15 | 0.06 | | Fraction 6 | 154.50 | 78.31% | 28.41 | 30.69 | 126.09 | 56.67% | 56.67% | 18.39% | 95.72% | 14.40 |
| Fraction 7 | 0.80 | 73.29% | 79.15% | 26.71% | 0.41% | 0.59 | 0.63 | 0.21 | | Fraction 7 | 155.30 | 78.71% | 29.00 | 31.32 | 126.30 | 55.77% | 55.77% | 18.67% | 95.88% | 14.70 |
| Fraction 8 | 1.10 | 76.12% | 82.21% | 23.88% | 0.56% | 0.84 | 0.90 | 0.26 | | Fraction 8 | 156.40 | 79.27% | 29.84 | 32.22 | 126.56 | 54.50% | 54.50% | 19.08% | 96.08% | 15.12 |
| Fraction 9 | 0.40 | 76.23% | 82.33% | 23.77% | 0.20% | 0.30 | 0.33 | 0.10 | | Fraction 9 | 156.80 | 79.47% | 30.14 | 32.55 | 126.66 | 54.03% | 54.03% | 19.22% | 96.15% | 15.28 |
| Fraction 10 | 1.80 | 77.00% | 83.16% | 23.00% | 0.91% | 1.39 | 1.50 | 0.41 | | Fraction 10 | 158.60 | 80.39% | 31.53 | 34.05 | 127.07 | 51.92% | 51.92% | 19.88% | 96.46% | 15.98 |
| Fraction 11 | 0.50 | 77.40% | 83.59% | 22.60% | 0.25% | 0.39 | 0.42 | 0.11 | | Fraction 11 | 159.10 | 80.64% | 31.91 | 34.47 | 127.19 | 51.33% | 51.33% | 20.06% | 96.55% | 16.18 |
| Fraction 12 | 4.40 | 78.85% | 85.16% | 21.15% | 2.23% | 3.47 | 3.75 | 0.93 | | Fraction 12 | 163.50 | 82.87% | 35.38 | 38.21 | 128.12 | 46.04% | 46.04% | 21.64% | 97.26% | 17.93 |
| Fraction 13 | 3.50 | 85.35% | 92.18% | 14.65% | 1.77% | 2.99 | 3.23 | 0.51 | | Fraction 13 | 167.00 | 84.64% | 38.37 | 41.44 | 128.63 | 41.48% | 41.48% | 22.98% | 97.65% | 19.45 |
| Fraction 14 | 4.00 | 86.73% | 93.67% | 13.27% | 2.03% | 3.47 | 3.75 | 0.53 | | Fraction 14 | 171.00 | 86.67% | 41.84 | 45.19 | 129.16 | 36.19% | 36.19% | 24.47% | 98.05% | 21.21 |
| Fraction 15 | 3.3 | 87.55% | 94.55% | 12.45% | 1.67% | 2.89 | 3.12 | 0.41 | | Fraction 15 | 174.30 | 88.34% | 44.73 | 48.31 | 129.57 | 31.78% | 31.78% | 25.66% | 98.36% | 22.67 |
| Fraction 16 | 23.00 | 90.61% | 97.86% | 9.39% | 11.66% | 20.84 | 22.51 | 2.16 | | Fraction 16 | 197.30 | 100.00% | 65.57 | 70.82 | 131.73 | 0.00% | 0.00% | 33.23% | 100.00% | 33.23 |
| | 197.30 | | | | | 65.57 | 70.82 | 131.73 | | | | | | | | | | | | |

Reverse Release Analysis
Beckley Seam
(Figures 41, 42, 43, 45)

**Reverse Release Analysis (Test 1)
Beckley Seam**

| Individual Fraction | | | | | | | | | | Cumulative | | | | | | | | | |
|---------------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|--------------------|------------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate | 62.60 | 5.38% | 5.81% | 94.62% | 30.85% | 3.37 | 3.64 | 59.23 | Concentrate | 62.60 | 30.85% | 3.37 | 3.64 | 59.23 | 95.19% | 95.19% | 5.38% | 44.54% | 1.66 |
| Tails 5 | 55.90 | 13.64% | 14.73% | 86.36% | 27.55% | 7.62 | 8.23 | 48.28 | Tails 5 | 118.50 | 58.40% | 10.99 | 11.87 | 107.51 | 84.28% | 84.28% | 9.27% | 80.85% | 5.42 |
| Tails 4 | 22.60 | 27.50% | 29.69% | 72.51% | 11.14% | 6.21 | 6.71 | 16.39 | Tails 4 | 141.10 | 69.54% | 17.20 | 18.58 | 123.90 | 75.40% | 75.40% | 12.19% | 93.17% | 8.48 |
| Tails 3 | 1.30 | 50.00% | 54.00% | 50.00% | 0.64% | 0.65 | 0.70 | 0.65 | Tails 3 | 142.40 | 70.18% | 17.85 | 19.28 | 124.55 | 74.47% | 74.47% | 12.54% | 93.66% | 8.80 |
| Tails 2 | 1.80 | 64.99% | 70.19% | 35.01% | 0.89% | 1.17 | 1.26 | 0.63 | Tails 2 | 144.20 | 71.07% | 19.02 | 20.54 | 125.18 | 72.80% | 72.80% | 13.19% | 94.13% | 9.38 |
| Tails 1 | 58.70 | 86.71% | 93.65% | 13.29% | 28.93% | 50.90 | 54.97 | 7.80 | Tails 1 | 202.90 | 100.00% | 69.92 | 75.52 | 132.98 | 0.00% | 0.00% | 34.46% | 100.00% | 34.46 |
| | 202.90 | | | | 100.00% | 69.92 | 75.52 | 132.98 | | | | | | | | | | | |

**Reverse Release Analysis (Test2)
Beckley Seam**

| Individual Fraction | | | | | | | | | | Cumulative | | | | | | | | | |
|---------------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|--------------------|------------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate | 62.10 | 5.86% | 6.32% | 94.15% | 29.96% | 3.64 | 3.93 | 58.46 | Concentrate | 62.10 | 29.96% | 3.64 | 3.93 | 58.46 | 95.12% | 95.12% | 5.86% | 44.03% | 1.75 |
| Tails 5 | 42.60 | 8.94% | 9.66% | 91.06% | 20.55% | 3.81 | 4.11 | 38.79 | Tails 5 | 104.70 | 50.51% | 7.44 | 8.04 | 97.26 | 90.01% | 90.01% | 7.11% | 73.25% | 3.59 |
| Tails 4 | 25.00 | 16.26% | 17.56% | 83.74% | 12.06% | 4.07 | 4.39 | 20.94 | Tails 4 | 129.70 | 62.57% | 11.51 | 12.43 | 118.19 | 84.56% | 84.56% | 8.87% | 89.02% | 5.55 |
| Tails 3 | 10.20 | 42.05% | 45.41% | 57.95% | 4.92% | 4.29 | 4.63 | 5.91 | Tails 3 | 139.90 | 67.49% | 15.80 | 17.06 | 124.10 | 78.80% | 78.80% | 11.29% | 93.47% | 7.62 |
| Tails 2 | 1.40 | 72.55% | 78.35% | 27.45% | 0.68% | 1.02 | 1.10 | 0.38 | Tails 2 | 141.30 | 68.16% | 16.81 | 18.16 | 124.49 | 77.44% | 77.44% | 11.90% | 93.76% | 8.11 |
| Tails 1 | 66.00 | 87.45% | 94.45% | 12.55% | 31.84% | 57.72 | 62.33 | 8.28 | Tails 1 | 207.30 | 100.00% | 74.53 | 80.49 | 132.77 | 0.00% | 0.00% | 35.95% | 100.00% | 35.95 |
| | 207.30 | | | | 100.00% | 74.53 | 80.49 | 132.77 | | | | | | | | | | | |

**Reverse Release Analysis (Test 3)
Beckley Seam**

| Individual Fraction | | | | | | | | | | Cumulative | | | | | | | | | |
|---------------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|--------------------|------------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate | 61.70 | 2.56% | 2.76% | 97.45% | 30.50% | 1.58 | 1.70 | 60.12 | Concentrate | 61.70 | 30.50% | 1.58 | 1.70 | 60.12 | 97.78% | 97.78% | 2.56% | 45.83% | 0.78 |
| Tails 5 | 13.70 | 6.64% | 7.17% | 93.37% | 6.77% | 0.91 | 0.98 | 12.79 | Tails 5 | 75.40 | 37.27% | 2.49 | 2.68 | 72.91 | 96.51% | 96.51% | 3.30% | 55.58% | 1.23 |
| Tails 4 | 61.80 | 19.70% | 21.28% | 80.30% | 30.55% | 12.17 | 13.15 | 49.63 | Tails 4 | 137.20 | 67.82% | 14.66 | 15.83 | 122.54 | 79.39% | 79.39% | 10.69% | 93.41% | 7.25 |
| Tails 3 | 2.70 | 57.84% | 62.47% | 42.16% | 1.33% | 1.56 | 1.69 | 1.14 | Tails 3 | 139.90 | 69.15% | 16.22 | 17.52 | 123.68 | 77.19% | 77.19% | 11.60% | 94.28% | 8.02 |
| Tails 2 | 1.40 | 54.61% | 58.98% | 45.39% | 0.69% | 0.76 | 0.83 | 0.64 | Tails 2 | 141.30 | 69.85% | 16.99 | 18.35 | 124.31 | 76.12% | 76.12% | 12.02% | 94.76% | 8.40 |
| Tails 1 | 61.00 | 88.74% | 95.84% | 11.26% | 30.15% | 54.13 | 58.46 | 6.87 | Tails 1 | 202.30 | 100.00% | 71.12 | 76.81 | 131.18 | 0.00% | 0.00% | 35.15% | 100.00% | 35.15 |
| | 202.30 | | | | 100.00% | 71.12 | 76.81 | 131.18 | | | | | | | | | | | |

**Reverse Release Analysis (Test 4)
Beckley Seam**

| Individual Fraction | | | | | | | | | | Cumulative | | | | | | | | | |
|----------------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|----------------------|------------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate | 35.10 | 4.22% | 4.55% | 95.78% | 17.03% | 1.48 | 1.60 | 33.62 | Concentrate | 35.10 | 17.03% | 1.48 | 1.60 | 33.62 | 97.99% | 97.99% | 4.22% | 25.38% | 0.72 |
| Tails 4 | 93.80 | 9.40% | 10.16% | 90.60% | 45.51% | 8.82 | 9.53 | 84.98 | Tails 4 | 128.90 | 62.54% | 10.30 | 11.12 | 118.60 | 86.01% | 86.01% | 7.99% | 89.53% | 5.00 |
| Tails 3 | 7.20 | 47.18% | 50.95% | 52.82% | 3.49% | 3.40 | 3.67 | 3.80 | Tails 3 | 136.10 | 66.04% | 13.70 | 14.79 | 122.40 | 81.40% | 81.40% | 10.06% | 92.40% | 6.65 |
| Tails 2 | 4.70 | 68.43% | 73.90% | 31.57% | 2.28% | 3.22 | 3.47 | 1.48 | Tails 2 | 140.80 | 68.32% | 16.91 | 18.27 | 123.89 | 77.03% | 77.03% | 12.01% | 93.52% | 8.21 |
| Tails 1 | 2.10 | 60.16% | 64.97% | 39.84% | 1.02% | 1.26 | 1.36 | 0.84 | Tails 1 | 142.90 | 69.34% | 18.18 | 19.63 | 124.72 | 75.31% | 75.31% | 12.72% | 94.15% | 8.82 |
| Initial Tails | 63.20 | 87.75% | 94.77% | 12.25% | 30.66% | 55.46 | 59.89 | 7.74 | Initial Tails | 206.10 | 100.00% | 73.63 | 79.52 | 132.47 | 0.00% | 0.00% | 35.73% | 100.00% | 35.73 |
| | 206.10 | | | | 100.00% | 73.63 | 79.52 | 132.47 | | | | | | | | | | | |

**Reverse Release Analysis (Test 5)
Beckley Seam**

| Individual Fraction | | | | | | | | | | Cumulative | | | | | | | | | |
|----------------------|--------|--------|--------|----------------|---------|-----------|----------|-------------------|----------------------|------------|---------|-----------|----------|-------------------|---------------|--------------|--------|----------------------|-------------|
| | Wt. | Ash % | MM % | Combustibles % | Yield % | Ash Units | MM Units | Combustible Units | Fraction | Wt. | Yield | Ash Units | MM Units | Combustible Units | Ash Rejection | MM Rejection | Ash % | Combustible Recovery | Ash per 100 |
| Concentrate | 29.20 | 4.86% | 5.25% | 95.14% | 15.67% | 1.42 | 1.53 | 27.78 | Concentrate | 29.20 | 15.67% | 1.42 | 1.53 | 27.78 | 97.93% | 97.93% | 4.86% | 23.58% | 0.76 |
| Tails 4 | 84.60 | 9.94% | 10.73% | 90.06% | 45.39% | 8.41 | 9.08 | 76.19 | Tails 4 | 113.80 | 61.05% | 9.83 | 10.61 | 103.97 | 85.68% | 85.68% | 8.63% | 88.27% | 5.27 |
| Tails 3 | 9.30 | 43.15% | 46.60% | 56.85% | 4.99% | 4.01 | 4.33 | 5.29 | Tails 3 | 123.10 | 66.04% | 13.84 | 14.95 | 109.26 | 79.83% | 79.83% | 11.24% | 92.76% | 7.42 |
| Tails 2 | 2.50 | 62.93% | 67.96% | 37.07% | 1.34% | 1.57 | 1.70 | 0.93 | Tails 2 | 125.60 | 67.38% | 15.41 | 16.64 | 110.19 | 77.54% | 77.54% | 12.27% | 93.54% | 8.27 |
| Tails 1 | 1.70 | 63.55% | 68.63% | 36.45% | 0.91% | 1.08 | 1.17 | 0.62 | Tails 1 | 127.30 | 68.29% | 16.49 | 17.81 | 110.81 | 75.96% | 75.96% | 12.96% | 94.07% | 8.85 |
| Initial Tails | 59.10 | 88.18% | 95.24% | 11.82% | 31.71% | 52.12 | 56.28 | 6.98 | Initial Tails | 186.40 | 100.00% | 68.61 | 74.10 | 117.79 | 0.00% | 0.00% | 36.81% | 100.00% | 36.81 |
| | 186.40 | | | | 100.00% | 68.61 | 74.10 | 117.79 | | | | | | | | | | | |