



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Tideport #2  
Sale 341-13-23

District: Astoria

Date: January 08, 2013

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**cost summary**

|                         | Conifer        | Hardwood          | Total          |
|-------------------------|----------------|-------------------|----------------|
| Gross Timber Sale Value | \$1,396,656.56 | \$178,991.58      | \$1,575,648.14 |
|                         |                | Project Work:     | \$(21,578.00)  |
|                         |                | Advertised Value: | \$1,554,070.14 |



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**timber description**

**Location:** Portions of Section 22, T5N, R7W, W. M., Clatsop County, Oregon.

**Stand Stocking:** 80%

| SpecieName            | AvgDBH | Amortization (%) | Recovery (%) |
|-----------------------|--------|------------------|--------------|
| Douglas - Fir         | 23     | 0                | 96           |
| Western Hemlock / Fir | 18     | 0                | 94           |
| Sitka Spruce          | 30     | 0                | 94           |
| Alder (Red)           | 16     | 0                | 97           |
| Maple                 | 16     | 0                | 97           |

| Volume by Grade       | 2S    | 3S  | 4S  | Camprun | Total |
|-----------------------|-------|-----|-----|---------|-------|
| Douglas - Fir         | 2,755 | 429 | 64  | 0       | 3,248 |
| Western Hemlock / Fir | 528   | 128 | 34  | 0       | 690   |
| Sitka Spruce          | 0     | 82  | 3   | 0       | 85    |
| Alder (Red)           | 0     | 0   | 0   | 480     | 480   |
| Maple                 | 0     | 0   | 0   | 54      | 54    |
| Total                 | 3,283 | 639 | 101 | 534     | 4,557 |



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**comments:** Pond Values Used: 4th Quarter Calendar Year 2012.

Expected Log Markets: Warrenton, Clatskanie, Mist, and Tillamook in Oregon, and Longview, Chehalis, Aberdeen, and Randle in Washington.

Western redcedar and Other Cedars Stumpage Price = Pond Value  
minus Logging Cost  
 $\$796.68/\text{MBF} = \$985/\text{MBF} - \$188.32/\text{MBF}$

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$4.00/Gallon

HAULING COST ALLOWANCE

Hauling costs equivalent to \$780 daily truck cost.

Other Costs (with Profit & Risk to be added):

100% Branding and Painting:  $\$1/\text{MBF} \times 4,557 \text{ MBF} = \$4,557$

TOTAL Other Costs (with Profit & Risk to be added) = \$4,557

Other Costs (No Profit & Risk added):

Log Loader Slash & Landing Piling (includes Move-In and Pile Materials): = \$19,735 (See attached appraisal)

Machine Washing for Invasive Weed Compliance = \$3,000

Road Use Fee = \$15,403.84

TOTAL Other Costs (No Profit & Risk added) = \$38,138.84



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**logging conditions**

|                          |                                                                 |                          |                          |
|--------------------------|-----------------------------------------------------------------|--------------------------|--------------------------|
| <b>combination#:</b>     | <b>1</b>                                                        | Douglas - Fir            | 100.00%                  |
|                          |                                                                 | Western Hemlock / Fir    | 100.00%                  |
|                          |                                                                 | Sitka Spruce             | 100.00%                  |
|                          |                                                                 | Alder (Red)              | 100.00%                  |
|                          |                                                                 | Maple                    | 100.00%                  |
| <b>yarding distance:</b> | Medium (800 ft)                                                 | <b>downhill yarding:</b> | No                       |
| <b>logging system:</b>   | Shovel                                                          | <b>Process:</b>          | Manual Falling/Delimbing |
| <b>tree size:</b>        | Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF |                          |                          |
| <b>loads / day:</b>      | 10.0                                                            | <b>bd. ft / load:</b>    | 4,000                    |
| <b>cost / mbf:</b>       | \$62.62                                                         |                          |                          |
| <b>machines:</b>         | Shovel Logger                                                   |                          |                          |



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## logging costs

|                    |             |                    |             |
|--------------------|-------------|--------------------|-------------|
| Operating Seasons: | 2.00        | Profit Risk:       | 10.00%      |
| Project Costs:     | \$21,578.00 | Other Costs (P/R): | \$4,557.00  |
| Slash Disposal:    | \$0.00      | Other Costs:       | \$38,138.84 |

### Miles of Road

Road Maintenance: \$1.27

| Dirt | Rock<br>(Contractor) | Rock<br>(State) | Paved |
|------|----------------------|-----------------|-------|
| 0.0  | 0.0                  | 0.0             | 0.0   |

### Hauling Costs

| Species               | \$ / MBF | Trips/Day | MBF / Load |
|-----------------------|----------|-----------|------------|
| Douglas - Fir         | \$0.00   | 2.0       | 4.0        |
| Western Hemlock / Fir | \$0.00   | 3.0       | 3.8        |
| Sitka Spruce          | \$0.00   | 1.0       | 4.5        |
| Alder (Red)           | \$0.00   | 2.0       | 3.3        |
| Maple                 | \$0.00   | 2.0       | 3.3        |



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### logging costs breakdown

| Logging                      | Road Maint | Fire Protect | Hauling  | Other P/R appl | Profit & Risk | Slash Disposal | Scaling | Other  | Total    |
|------------------------------|------------|--------------|----------|----------------|---------------|----------------|---------|--------|----------|
| <b>Douglas - Fir</b>         |            |              |          |                |               |                |         |        |          |
| \$62.62                      | \$1.32     | \$1.92       | \$92.19  | \$1.00         | \$15.90       | \$0.00         | \$5.00  | \$8.37 | \$188.32 |
| <b>Western Hemlock / Fir</b> |            |              |          |                |               |                |         |        |          |
| \$62.62                      | \$1.35     | \$1.92       | \$66.81  | \$1.00         | \$13.37       | \$0.00         | \$5.00  | \$8.37 | \$160.44 |
| <b>Sitka Spruce</b>          |            |              |          |                |               |                |         |        |          |
| \$62.62                      | \$1.35     | \$1.92       | \$167.03 | \$1.00         | \$23.39       | \$0.00         | \$5.00  | \$8.37 | \$270.68 |
| <b>Alder (Red)</b>           |            |              |          |                |               |                |         |        |          |
| \$62.62                      | \$1.31     | \$1.92       | \$110.66 | \$1.00         | \$17.75       | \$0.00         | \$5.00  | \$8.37 | \$208.63 |
| <b>Maple</b>                 |            |              |          |                |               |                |         |        |          |
| \$62.62                      | \$1.31     | \$1.92       | \$110.66 | \$1.00         | \$17.75       | \$0.00         | \$5.00  | \$8.37 | \$208.63 |

| Specie                | Amortization | Pond Value | Stumpage | Amortized |
|-----------------------|--------------|------------|----------|-----------|
| Douglas - Fir         | \$0.00       | \$554.39   | \$366.07 | \$0.00    |
| Western Hemlock / Fir | \$0.00       | \$442.41   | \$281.97 | \$0.00    |
| Sitka Spruce          | \$0.00       | \$424.82   | \$154.14 | \$0.00    |
| Alder (Red)           | \$0.00       | \$560.00   | \$351.37 | \$0.00    |
| Maple                 | \$0.00       | \$400.00   | \$191.37 | \$0.00    |



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**summary**

**Amortized**

| Specie                | MBF | Value  | Total  |
|-----------------------|-----|--------|--------|
| Douglas - Fir         | 0   | \$0.00 | \$0.00 |
| Western Hemlock / Fir | 0   | \$0.00 | \$0.00 |
| Sitka Spruce          | 0   | \$0.00 | \$0.00 |
| Alder (Red)           | 0   | \$0.00 | \$0.00 |
| Maple                 | 0   | \$0.00 | \$0.00 |

**Unamortized**

| Specie                | MBF   | Value    | Total          |
|-----------------------|-------|----------|----------------|
| Douglas - Fir         | 3,248 | \$366.07 | \$1,188,995.36 |
| Western Hemlock / Fir | 690   | \$281.97 | \$194,559.30   |
| Sitka Spruce          | 85    | \$154.14 | \$13,101.90    |
| Alder (Red)           | 480   | \$351.37 | \$168,657.60   |
| Maple                 | 54    | \$191.37 | \$10,333.98    |

**Gross Timber Sale Value**

Recovery: \$1,575,648.14

Prepared by: Edward Holloran

Phone: 503-325-5451

| Vegetation Type/Zone | Vegetation Type/Zone Code | Production Rate (hr/ac) | Estimated Piles/Acre |
|----------------------|---------------------------|-------------------------|----------------------|
| Doug-fir             | A                         | 1.0                     | 3.0                  |
| Hemlock/Fir          | B                         | 1.5                     | 4.5                  |
| Hemlock/Spruce       | C                         | 2.0                     | 6.0                  |
| Hemlock              | D                         | 2.0                     | 6.0                  |
| Conifer/Hardwood     | E                         | 1.5                     | 4.5                  |
| Whole Tree Yarding   | F                         | 0.5                     | 0.5                  |

| Sale Area                                                   | Harvest Type                   | Veg Type/Zone           | Ground Based Yarding Acres | Estimated Piling Hours/Area | Cost/Hour          | Total Cost/Area         |
|-------------------------------------------------------------|--------------------------------|-------------------------|----------------------------|-----------------------------|--------------------|-------------------------|
| 1                                                           | MC                             | E                       | 92.0                       | 138                         | \$110.00           | \$15,180.00             |
|                                                             |                                |                         |                            |                             | In-unit Piling     | Sub Total = \$15,180.00 |
| Sale Area                                                   | Number of Landings to be Piled | Cost/Landing Pile       | Total Cost/Area            | Number of In-Unit Piles     | Material Cost/Pile | Total Cost/Area         |
| 1                                                           | 7                              | \$220.00                | \$1,540.00                 | 414                         | \$5.00             | \$2,070.00              |
| Costs include piling brush pockets in non-harvestable areas |                                |                         |                            |                             | Materials          | Sub Total = \$2,070.00  |
|                                                             |                                |                         |                            |                             | Landing Piling     | Sub Total = \$1,540.00  |
| Move-In Allowance                                           | Number of Move-In's            | Total Move-In Allowance |                            |                             | Move-In            | Sub Total = \$945.00    |
| \$945.00                                                    | 1                              | \$945.00                |                            |                             |                    |                         |
| Grand Total =                                               |                                |                         |                            |                             |                    | \$19,735.00             |



### Road Maintenance Cost Summary (Interim and Post Harvest)

**Sale:** Tideport #2  
**Date:** August 24, 2012  
**By:** Bryce Rodgers

**MBF:** 4,557  
**\$\$/MBF:** \$1.27

| Type                   | Equipment/Rationale      | Move-in Rate | Times | Hours | Rate  | Cost           |
|------------------------|--------------------------|--------------|-------|-------|-------|----------------|
| Final Road Maintenance | Grader 14G               | \$778        | 1     | 8     | \$100 | \$1,578        |
|                        | Dump Truck 12CY          | \$163        | 1     | 8     | \$79  | \$795          |
|                        | FE Loader C966           | \$778        | 1     | 4     | \$83  | \$1,110        |
|                        | Vibratory Roller         | \$778        | 1     | 8     | \$77  | \$1,394        |
|                        | Water Truck 2,500 gallon | \$190        | 1     | 8     | \$89  | \$902          |
| <b>Total</b>           |                          |              |       |       |       | <b>\$5,779</b> |

#### Final Road Maintenance

| Production Rates | Miles/day | Distance (miles) | Days | Hours |
|------------------|-----------|------------------|------|-------|
| Process - Grader | 1.5       | 1.2              | 0.8  | 8.0   |
| Vibratory Roller | 1.5       | 1.2              | 0.8  | 8.0   |

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**Process and Compact:** Haul road and 1A to 1B, to property line.

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Total Miles = 1.2 miles

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## SUMMARY OF ALL PROJECT COSTS

**SALE NAME:** Tideport #2

**ROAD CONSTRUCTION:**

| Project No. | Road segment  | Length/Sta | Cost     |
|-------------|---------------|------------|----------|
| 1           | 1A to 1B      | 9.00       | \$12,092 |
|             |               |            |          |
|             |               |            |          |
|             |               |            |          |
|             |               |            |          |
|             |               |            |          |
|             | <b>TOTALS</b> | 9.00       | \$12,092 |

**Vacating:**

| Project No.   | Road segment  | Length/Sta | Cost    |
|---------------|---------------|------------|---------|
| Project No. 2 | V1, V2,, V3,  |            | \$3,145 |
|               | V4, V5        |            |         |
|               | <b>TOTALS</b> |            | \$3,145 |

**SPECIAL PROJECTS:**

| <u>Description</u> | <u>Cost</u> |
|--------------------|-------------|
|                    |             |
|                    |             |
|                    |             |
|                    |             |
| <b>TOTAL</b>       |             |

**MOVE IN:**

| <u>Equipment</u>        | <u>Cost</u>       |
|-------------------------|-------------------|
| Excavator (330)         | \$1,406.00        |
| Dozer (D8)              | \$1,406.00        |
| Grader (14G)            | \$778.00          |
| dump trucks 6 x \$163   | \$978.00          |
| Vibratory Roller        | \$778.00          |
| Water Truck (2,500 gal) | \$190.00          |
| Excavator (315)         | \$805.00          |
| <b>TOTAL</b>            | <b>\$6,341.00</b> |

|             |             |
|-------------|-------------|
| GRAND TOTAL | \$21,578.00 |
|-------------|-------------|

Compiled By: B. Rodgers Date: 07/25/2012

# SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Tideport #2  
ROAD: 1A to 1B  
POINTS:

NEW CONSTRUCTION: 9.00 STATIONS  
IMPROVEMENT: STATIONS  
0.17 MILES  
MILES

## CLEARING & GRUBBING

| Method                          | Acres/amount | x | Rate    | = | Cost       |
|---------------------------------|--------------|---|---------|---|------------|
| Scatter outside of right of way | 0.8          | x | \$1,337 | = | \$1,069.60 |
|                                 |              | x |         | = |            |
|                                 |              | x |         | = |            |
|                                 |              | x |         | = |            |

SUB TOTAL FOR CLEARING & GRUBBING

\$1,070

## EXCAVATION

| Material                             | Cy/amount | x | Rate     | = | Cost       |
|--------------------------------------|-----------|---|----------|---|------------|
| Balanced Construction - Field Design | 9.00      | x | \$122.00 | = | \$1,098.00 |
| Landing Construction                 | 1.00      | x | \$389.00 | = | \$389.00   |
|                                      |           | x |          | = |            |
|                                      |           | x |          | = |            |
|                                      |           | x |          | = |            |
|                                      |           | x |          | = |            |
|                                      |           | x |          | = |            |
|                                      |           | x |          | = |            |
|                                      |           | x |          | = |            |
|                                      |           | x |          | = |            |

SUB TOTAL FOR EXCAVATION

\$1,487

## CULVERT MATERIALS AND INSTALLATION

| Location | Dia/type | Lineal ft. | Rate    | Cost     | Location | Dia/type | Lineal ft. | Rate | Cost |
|----------|----------|------------|---------|----------|----------|----------|------------|------|------|
| 1+00     | 18"CPP   | 30         | \$10.73 | \$321.90 |          |          |            |      |      |
| 4+00     | 18"CPP   | 30         | \$10.73 | \$321.90 |          |          |            |      |      |
| 7+50     | 18"CPP   | 30         | \$10.73 | \$321.90 |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |
|          |          |            |         |          |          |          |            |      |      |

| Other/miscellaneous:      | Description     | Quantity | Rate    | Cost    |
|---------------------------|-----------------|----------|---------|---------|
|                           |                 |          |         |         |
| Culvert stakes & markers: | Culvert Markers | 3        | \$20.00 | \$60.00 |
|                           |                 |          |         |         |

SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION

\$1,026

Subtotal of Clearing, Exc., Culv.

\$3,582

[illegible]

## CRUSHED ROCK COST

|            |              |
|------------|--------------|
| SALE NAME: | Tideport #2  |
| PROJECT:   | No. 1        |
| QUARRY:    | Buster Creek |

MATERIAL: Crushed

DATE: 07/25/2012  
BY: B. Rodgers

[illegible]

ROCK HAUL:

Truck type: D20 No. trucks:             
 Delay min.: 8 Efficiency: 85%

|           |        |     |
|-----------|--------|-----|
| Ave haul: | \$7.92 | /cy |
| Load:     | \$1.08 | /cy |
| Spread:   | \$1.92 | /cy |

Truck type: D12      No. trucks:             
 Delay min.: 6      Efficiency: 85%

Truck type: D10      No. trucks: 6  
 Delay min.: 5      Efficiency: 85%

Production: cy/day = 478

## CRUSHED ROCK HAUL COSTS

600 cy @ \$10.93 /cy

## PIT RUN ROCK COST

|            |              |
|------------|--------------|
| SALE NAME: | Tideport #2  |
| PROJECT:   | No. 1        |
| QUARRY:    | Buster Creek |

MATERIAL: Pit Run

DATE: 07/25/2012  
BY: B. Rodgers

[illegible]

ROCK HAUL:

Truck type: D20 No. trucks:             
 Delay min.: 8 Efficiency: 85%

|           |        |     |
|-----------|--------|-----|
| Ave haul: | \$7.92 | /cy |
| Load:     | \$1.08 | /cy |
| Spread:   | \$1.92 | /cy |

Truck type: D12 No. trucks:             
 Delay min.: 6 Efficiency: 85%

Truck type: D10 No. trucks: 6  
 Delay min.: 5 Efficiency: 85%

Production: cy/day = 478

### PIT RUN ROCK HAUL COSTS

60 cy @ \$10.93 /cy

## Vacating Cost Summary

Tideport #2

Project No. 2

| Location/Description | C315<br>Excavator | Labor     | Seeding    | Straw<br>Mulch | Total   |
|----------------------|-------------------|-----------|------------|----------------|---------|
| V1<br>Fill Removal   | 4 hrs             | 1 hr      |            | 6 Bales        |         |
| V2<br>Fill Removal   | 2 hrs             | 1 hr      |            | 4 Bales        |         |
| V3<br>Fill Removal   | 4 hrs             | 1 hr      |            | 6 Bales        |         |
| V4<br>Fill Removal   | 4 hrs             | 1 hr      |            | 6 Bales        |         |
| V5<br>Fill Removal   | 8 hrs             | 1 hr      |            | 10 Bales       |         |
| Total                | 22 hrs            | 1 ac      | 25 lb      | 32 Bales       |         |
| Rate                 | \$101 /hr         | \$540 /ac | \$1.60 /lb | \$10.73 /Bale  |         |
| Cost                 | \$2,222           | \$540     | \$40       | \$343.36       | \$3,145 |

Prepared by: Bryce Rodgers Date: 7/30/12

# Tideport #2 TIMBER CRUISE REPORT FY 2013

1. **Sale Area Location:** Areas 1 and 2 are located in portions of Sections 22, T5N, R7W, W.M., Clatsop County, Oregon.
2. **Fund Distribution:** BOF 100%  
Tax Code 8-01 (100%)
3. **Sale Acreage by Area:**

| Area         | Treatment         | Gross Acres | GTRA | Existing R/W Acres | New R/W | Stream Buffer | Non Harvest | Net Acres | Survey Method |
|--------------|-------------------|-------------|------|--------------------|---------|---------------|-------------|-----------|---------------|
| 1            | Modified Clearcut | 124         | 12   | 2                  | 1       | 2             | 15          | 92        | GIS           |
| 2            | Right-of-Way      |             |      |                    |         |               |             | 1         | GIS           |
| <b>TOTAL</b> |                   | <b>124</b>  |      |                    |         |               |             | <b>93</b> |               |

4. **Cruisers and Cruise Dates:** All areas were cruised by John Tillotson, Jon Long, Ed Holloran, Kevin Berry, and Bryce Rodgers, July 12, 2012.

5. **Cruise Method and Computation:** Area 1 is a modified clearcut and was variable plot cruised using a 54.4 BAF for conifer and a 33.6 BAF for hardwoods. These plots are located on a 3 chain by 6 chain grid, with every second plot measured and graded. A total of 53 plots were sampled, with 20 measured and graded plots, and 33 count plots. No cedar was cruised in Areas 1 and 2, but will be a reserved species in these two areas. Area 2 (R/W) is located within Area 1 and was cruised concurrently. Volume per acre from Area 1 was applied to Area 2.

All cruisers used Corvallis MicroTechnology (CMT) data collectors, and were downloaded to the Atterbury Super A.C.E. program in District for computing. See the attached Cruise Design for more details on the cruise method. The cruise calculations were processed in the Astoria district office.

| AREA    | CRUISE     | TRACT | TYPE | ACRES |
|---------|------------|-------|------|-------|
| 1       | T05NR07W22 | AREA1 | TAKE | 92    |
| 2 (R/W) | T05NR07W22 | AREA1 | R/W  | 1     |

## 6. Timber Description:

Area 1 is a modified clearcut unit, approximately 80 year-old, consisting of a Douglas-fir dominated mixed conifer stand with patches of hardwoods. The average Douglas-fir tree size to be harvested is approximately 23 inches DBH, with an average height of 81 feet to a merchantable top (6 inch d.i.b./40% fp). The average Grand fir tree size is approximately 26 inches DBH and 110 feet to a merchantable top. The average Western hemlock tree size is approximately 15 inches DBH and 43 feet to a merchantable top. The average Red alder tree size is approximately 16 inches DBH and 54 feet to a merchantable top. The average volume per acre to be harvested (net) is 48.9 MBF.

Area 2 (R/W) is the same timber type as Area 1.



**7. Statistical Analysis and Stand Summary:** (See "Statistics" - Type Reports, attached)

Statistics for Stand B.F. volumes

| Area   | Estimated CV | Target SE% | Actual CV | Actual SE% |
|--------|--------------|------------|-----------|------------|
| 1 (MC) | 60%          | 8%         | 63.5%     | 8.7%       |

**8. Volumes by Species and Log Grade:** (See "Species, Sort, Grade" - Project Report, attached).

Volumes by Species and Grade for All Sale Areas: (MBF) Volumes do not include "in-growth."

| Species       | DBH | Net Vol.     | 2 Saw        | 3Saw       | 4 Saw      | CampRun    | % D & B | % Sale      |
|---------------|-----|--------------|--------------|------------|------------|------------|---------|-------------|
| Douglas-fir   | 23" | 3,248        | 2,755        | 429        | 64         |            | 2.7     | 71          |
| Alder         | 16" | 480          |              |            |            | 480        | 2.1     | 11          |
| Hemlock       | 15" | 249          | 145          | 78         | 26         |            | 4.5     | 5           |
| Grand Fir     | 26" | 441          | 383          | 50         | 8          |            | 2.5     | 10          |
| Maple         | 16" | 54           |              |            |            | 54         | 12.4    | 1           |
| Spruce        | 30" | 85           |              | 82         | 3          |            | 0       | 2           |
| <b>TOTALS</b> |     | <b>4,557</b> | <b>3,283</b> | <b>639</b> | <b>101</b> | <b>534</b> |         | <b>100%</b> |

**9. Approvals:**

Prepared by: Bryce Rodgers Date: July 19, 2012

Unit Forester Approval:  Date: 10/15/2012

- 10. Attachments:**
- Cruise Designs and Maps - 3 pages
  - Volume Report - 3 pages
  - Statistics Report - 6 pages
  - Log Stock Tables - 3 pages
  - Stand Table Summary – 2 pages

X:\Sunset\_Unit\Timber Sales\2013\Tideport#2\Cruise\CruiseReport\_docx

**CRUISE DESIGN  
ASTORIA DISTRICT**

**Sale Name:** Tideport #2 **Area** 1

**Harvest Type:** (MC) Clearcut

**Approx. Cruise Acres:** 115 **Estimated CV%** 60 Net BF/Acre **SE% Objective** 8

**Planned Sale Volume :** 5.2 MMBF **Estimated Sale Area Value/Acre:** \$13,500/Ac  
(45 MBF/Ac.)

**A. Cruise Goals:** (a) Grade minimum 100 conifer and 10 hardwood trees:  
(b) Sample 22 cruise plots (1 grade/1 count); (c) Other goals (X Determine volume and quality)

**B. Cruise Design:**

**1. Plot Cruises:** BAF 54.4 Conifer 33.6 Hardwoods (Full point); Half point) (circle one) sighting at 4.5 feet.

Cruise Line Direction(s) Area 1 North/South  
Cruise Line Spacing 6 (chains)  
Cruise Plot Spacing 3 (chains)  
Grade/Count Ratio 1:3

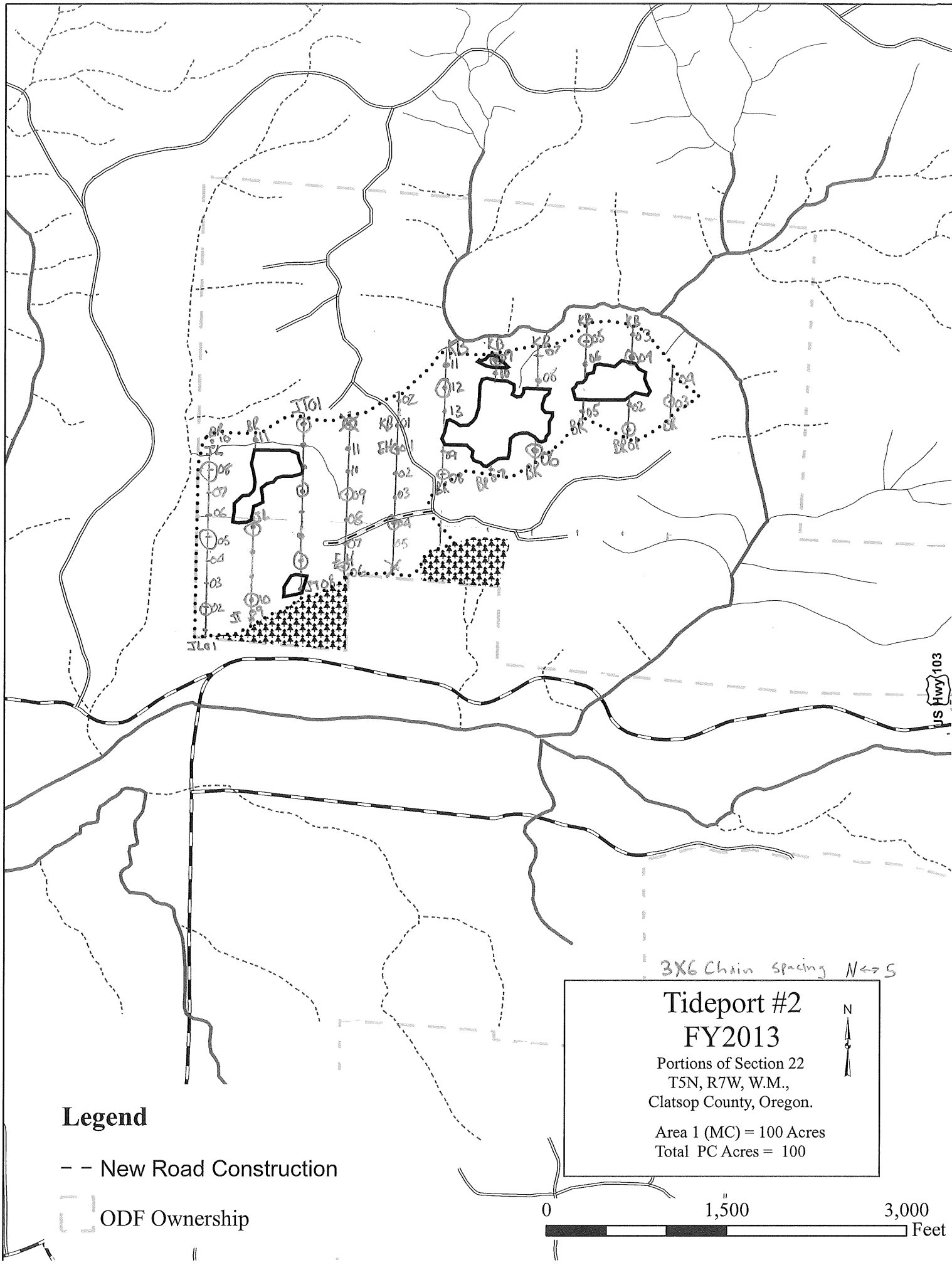
If a plot ends up in a buffer adjust by pacing on through or offsetting one chain. Take plots as marked on map. All cedar are leave trees. Record all snags as SN. Grade all hardwoods as CampRun.

**C. Tree Measurements:**

- 1. Diameter:** Minimum DBH to cruise is 8" for conifers and 8" for hardwoods. Record dbh to nearest 1/2" for trees < 16", to nearest 1" for trees 16-24", and to nearest 2" for trees > 24".
- 2. Bole Length:** Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.
- 3. Top Cruise Diameter (TCD):** Minimum top outside bark is 7" for conifers and 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for trees > 18" dbh.
- 4. Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area, and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.

5. **Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merchantable segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.
6. **Species, Sort, and Grade Codes:**
- A. **Species:** Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); SF (Silver fir); A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.)
- B. **Sort:** Use code "1" (Domestic).
- C. **Grade:** A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull  
Hardwoods: R = CampRun
7. **Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.
8. **Standard Field Procedures: Plot Type Cruises:** Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at inter-visible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.
9. **Cruising Equipment:** Relaskop, Rangefinder, Logger's Tape (with dbh on back) Biltmore Stick, Compass, Cruise Cards in Tatum OR Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint.
10. **Attachments:** A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by: Bryce Rodgers Approved by:  Date: 7/12/12



## Legend

-- New Road Construction

ODF Ownership

## Tideport #2 FY2013

Portions of Section 22  
T5N, R7W, W.M.,  
Clatsop County, Oregon.

Area 1 (MC) = 100 Acres  
Total PC Acres = 100

0 1,500 3,000 Feet

| TC                                                                      |               | PSPCSTGR   |                  | Species, Sort Grade - Board Foot Volumes (Project) |        |               |                                  |       |       |       |            |    |    |     |             |       |                 |                |  |  |
|-------------------------------------------------------------------------|---------------|------------|------------------|----------------------------------------------------|--------|---------------|----------------------------------|-------|-------|-------|------------|----|----|-----|-------------|-------|-----------------|----------------|--|--|
| <div>T05N R07W S22 TyTAKE92.00</div> <div>T05N R07W S22 TyR/W1.00</div> |               |            |                  | Project: TIDEPORT                                  |        |               |                                  |       |       |       |            |    |    |     |             |       | Page 1          |                |  |  |
|                                                                         |               |            |                  | Acres 93.00                                        |        |               |                                  |       |       |       |            |    |    |     |             |       | Date 10/16/2012 |                |  |  |
|                                                                         |               |            |                  |                                                    |        |               |                                  |       |       |       |            |    |    |     |             |       | Time 8:16:42AM  |                |  |  |
| S Spp                                                                   | So Gr T rt ad | % Net BdFt | Bd. Ft. per Acre |                                                    |        | Total Net MBF | Percent of Net Board Foot Volume |       |       |       |            |    |    |     | Average Log |       |                 | Logs Per /Acre |  |  |
|                                                                         |               |            |                  |                                                    |        |               | Log Scale Dia.                   |       |       |       | Log Length |    |    |     | Ln Ft       | Bd Ft | CF/ Lf          |                |  |  |
|                                                                         |               |            | 4-5              | 6-11                                               | 12-16  |               | 17+                              | 12-20 | 21-30 | 31-35 | 36-99      |    |    |     |             |       |                 |                |  |  |
| A                                                                       | DOCU          |            | 100.0            | 23                                                 |        |               |                                  |       |       |       |            |    |    |     | 4           |       | 0.00            | .8             |  |  |
| A                                                                       | DOCR          | 100        | 1.7              | 5,248                                              | 5,160  | 480           |                                  | 68    | 25    | 7     | 11         | 25 | 8  | 57  | 30          | 103   | 1.00            | 49.9           |  |  |
| A Totals                                                                |               | 11         | 2.1              | 5,271                                              | 5,160  | 480           |                                  | 68    | 25    | 7     | 11         | 25 | 8  | 57  | 30          | 102   | 1.00            | 50.7           |  |  |
| H                                                                       | DOCU          |            | 100.0            | 109                                                |        |               |                                  |       |       |       |            |    |    |     | 7           |       | 0.00            | .6             |  |  |
| H                                                                       | DO2S          | 58         | 1.1              | 1,572                                              | 1,556  | 145           |                                  |       | 28    | 72    | 7          |    |    | 93  | 37          | 388   | 2.33            | 4.0            |  |  |
| H                                                                       | DO3S          | 31         |                  | 834                                                | 834    | 78            |                                  | 100   |       |       |            |    | 39 | 61  | 36          | 111   | 0.89            | 7.5            |  |  |
| H                                                                       | DO4S          | 11         |                  | 282                                                | 282    | 26            |                                  | 100   |       |       | 80         | 20 |    |     | 17          | 21    | 0.37            | 13.2           |  |  |
| H Totals                                                                |               | 5          | 4.5              | 2,797                                              | 2,672  | 249 248       |                                  | 42    | 16    | 42    | 13         | 2  | 12 | 73  | 25          | 106   | 1.04            | 25.3           |  |  |
| D                                                                       | DOCU          |            | 100.0            | 591                                                |        |               |                                  |       |       |       |            |    |    |     | 8           |       | 0.00            | 3.2            |  |  |
| D                                                                       | DO2S          | 84         | 1.2              | 29,976                                             | 29,622 | 2,755         |                                  |       | 35    | 65    | 2          | 2  | 5  | 92  | 38          | 454   | 2.55            | 65.2           |  |  |
| D                                                                       | DO3S          | 14         | .9               | 4,652                                              | 4,611  | 429           |                                  | 76    | 17    | 8     | 4          | 19 | 32 | 45  | 33          | 91    | 0.84            | 50.9           |  |  |
| D                                                                       | DO4S          | 2          |                  | 685                                                | 685    | 64            | 8                                | 89    | 3     |       | 67         | 33 |    |     | 18          | 27    | 0.50            | 25.4           |  |  |
| D Totals                                                                |               | 71         | 2.7              | 35,904                                             | 34,917 | 3,240 3,247   | 0                                | 12    | 32    | 56    | 4          | 5  | 8  | 84  | 32          | 241   | 1.72            | 144.7          |  |  |
| GF                                                                      | DOCU          |            | 100.0            | 92                                                 |        |               |                                  |       |       |       |            |    |    |     | 3           |       | 0.00            | 1.1            |  |  |
| GF                                                                      | DO2S          | 87         | .7               | 4,153                                              | 4,123  | 383           |                                  |       | 38    | 62    |            |    | 9  | 91  | 39          | 460   | 2.43            | 9.0            |  |  |
| GF                                                                      | DO3S          | 11         |                  | 533                                                | 533    | 50            |                                  | 71    | 29    |       |            |    | 53 | 47  | 35          | 120   | 1.01            | 4.5            |  |  |
| GF                                                                      | DO4S          | 2          |                  | 82                                                 | 82     | 8             |                                  | 100   |       |       | 100        |    |    |     | 17          | 29    | 0.59            | 2.8            |  |  |
| GF Totals                                                               |               | 10         | 2.5              | 4,860                                              | 4,738  | 441           |                                  | 10    | 36    | 54    | 2          |    | 13 | 85  | 32          | 273   | 1.86            | 17.4           |  |  |
| S                                                                       | DO3S          | 96         |                  | 879                                                | 879    | 82            |                                  |       | 28    | 72    |            |    |    | 100 | 40          | 525   | 3.04            | 1.7            |  |  |
| S                                                                       | DO4S          | 4          |                  | 33                                                 | 33     | 3             |                                  | 100   |       |       | 100        |    |    |     | 16          | 40    | 0.88            | .8             |  |  |
| S Totals                                                                |               | 2          |                  | 912                                                | 912    | 85            |                                  | 4     | 27    | 70    | 4          |    |    | 96  | 32          | 363   | 2.68            | 2.5            |  |  |
| M                                                                       | DOCU          |            | 100.0            | 24                                                 |        |               |                                  |       |       |       |            |    |    |     | 3           |       | 0.00            | .2             |  |  |
| M                                                                       | DOCR          | 100        | 9.1              | 643                                                | 585    | 54            | 2                                | 44    | 53    |       | 19         |    | 39 | 42  | 30          | 81    | 0.95            | 7.2            |  |  |
| M Totals                                                                |               | 1          | 12.4             | 667                                                | 585    | 54            | 2                                | 44    | 53    |       | 19         |    | 39 | 42  | 30          | 79    | 0.94            | 7.4            |  |  |
| Totals                                                                  |               |            | 2.8              | 50,413                                             | 48,984 | 4,557 4,556   | 0                                | 19    | 31    | 49    | 5          | 6  | 9  | 80  | 31          | 197   | 1.52            | 248.0          |  |  |

| T TSPCSTGR                |     | Species, Sort Grade - Board Foot Volumes (Type) |                  |                                    |        |        |                  |                               |      |                     |    |                |     | Page 1 |     |             |          |           |                      |       |       |
|---------------------------|-----|-------------------------------------------------|------------------|------------------------------------|--------|--------|------------------|-------------------------------|------|---------------------|----|----------------|-----|--------|-----|-------------|----------|-----------|----------------------|-------|-------|
| Project: TIDEPORT         |     |                                                 |                  |                                    |        |        |                  |                               |      |                     |    | Date 7/24/2012 |     |        |     |             |          |           |                      |       |       |
|                           |     |                                                 |                  |                                    |        |        |                  |                               |      |                     |    | Time 8:41:41AM |     |        |     |             |          |           |                      |       |       |
| T05N R07W S22 TTAKE       |     |                                                 |                  |                                    |        |        |                  |                               |      | T05N R07W S22 TTAKE |    |                |     |        |     |             |          |           |                      |       |       |
| Twp                       | Rge | Sec                                             | Tract            | Type                               | Acres  | Plots  | Sample Trees     | CuFt                          | BdFt |                     |    |                |     |        |     |             |          |           |                      |       |       |
| 05N                       | 07W | 22                                              | AREA1            | TAKE                               | 92.00  | 53     | 108              | 1                             | W    |                     |    |                |     |        |     |             |          |           |                      |       |       |
| S So Gr<br>T rt ad<br>Spp |     |                                                 | %<br>Net<br>BdFt | Bd. Ft. per Acre<br>Def% Gross Net |        |        | Total<br>Net MBF | Percent Net Board Foot Volume |      |                     |    |                |     |        |     | Average Log |          |           | Logs<br>Per<br>/Acre |       |       |
|                           |     |                                                 |                  |                                    |        |        |                  | Log Scale Dia.                |      |                     |    | Log Length     |     |        |     | Ln<br>Ft    | Bd<br>Ft | CF/<br>Lf |                      |       |       |
| D                         | DO  | CU                                              |                  | 100.0                              | 591    |        |                  |                               |      |                     |    |                |     | 8      |     | 0.00        | 3.2      |           |                      |       |       |
| D                         | DO  | 2S                                              | 84               | 1.2                                | 29,973 | 29,618 | 2,725            |                               |      | 35                  | 65 | 2              | 2   | 5      | 92  | 38          | 454      | 2.55      | 65.2                 |       |       |
| D                         | DO  | 3S                                              | 14               | .9                                 | 4,651  | 4,610  | 424              |                               |      | 76                  | 17 | 8              | 4   | 19     | 32  | 45          | 33       | 91        | 0.84                 | 50.9  |       |
| D                         | DO  | 4S                                              | 2                |                                    | 685    | 685    | 63               |                               | 8    | 89                  | 3  |                | 67  | 33     |     |             | 18       | 27        | 0.50                 | 25.4  |       |
| D Totals                  |     |                                                 | 71               | 2.7                                | 35,900 | 34,913 | 3,212            |                               | 0    | 12                  | 32 | 56             | 4   | 5      | 8   | 84          | 32       | 241       | 1.72                 | 144.7 |       |
| A                         | DO  | CU                                              |                  | 100.0                              | 23     |        |                  |                               |      |                     |    |                |     | 4      |     | 0.00        | .8       |           |                      |       |       |
| A                         | DO  | CR                                              | 100              | 1.7                                | 5,248  | 5,160  | 475              |                               |      | 68                  | 25 | 7              | 11  | 25     | 8   | 57          | 30       | 103       | 1.00                 | 49.9  |       |
| A Totals                  |     |                                                 | 11               | 2.1                                | 5,271  | 5,160  | 475              |                               |      | 68                  | 25 | 7              | 11  | 25     | 8   | 57          | 30       | 102       | 1.00                 | 50.7  |       |
| H                         | DO  | CU                                              |                  | 100.0                              | 105    |        |                  |                               |      |                     |    |                |     | 6      |     | 0.00        | .6       |           |                      |       |       |
| H                         | DO  | 2S                                              | 58               | 1.1                                | 1,574  | 1,557  | 143              |                               |      |                     | 28 | 72             | 7   |        | 93  | 37          | 388      | 2.33      | 4.0                  |       |       |
| H                         | DO  | 3S                                              | 31               |                                    | 835    | 835    | 77               |                               | 100  |                     |    |                |     |        | 39  | 61          | 36       | 111       | 0.89                 | 7.5   |       |
| H                         | DO  | 4S                                              | 11               |                                    | 282    | 282    | 26               |                               | 100  |                     |    |                | 80  | 20     |     |             | 17       | 21        | 0.37                 | 13.2  |       |
| H Totals                  |     |                                                 | 5                | 4.4                                | 2,796  | 2,674  | 246              |                               |      | 42                  | 16 | 42             | 13  | 2      | 12  | 73          | 25       | 106       | 1.04                 | 25.3  |       |
| GF                        | DO  | CU                                              |                  | 100.0                              | 92     |        |                  |                               |      |                     |    |                |     | 3      |     | 0.00        | 1.1      |           |                      |       |       |
| GF                        | DO  | 2S                                              | 87               | .7                                 | 4,151  | 4,121  | 379              |                               |      |                     | 38 | 62             |     |        | 9   | 91          | 39       | 460       | 2.43                 | 9.0   |       |
| GF                        | DO  | 3S                                              | 11               |                                    | 533    | 533    | 49               |                               |      | 71                  | 29 |                |     |        | 53  | 47          | 35       | 120       | 1.01                 | 4.5   |       |
| GF                        | DO  | 4S                                              | 2                |                                    | 82     | 82     | 8                |                               | 100  |                     |    |                | 100 |        |     |             | 17       | 29        | 0.59                 | 2.8   |       |
| GF Totals                 |     |                                                 | 10               | 2.5                                | 4,857  | 4,735  | 436              |                               |      | 10                  | 36 | 54             | 2   |        | 13  | 85          | 32       | 273       | 1.86                 | 17.4  |       |
| M                         | DO  | CU                                              |                  | 100.0                              | 24     |        |                  |                               |      |                     |    |                |     | 3      |     | 0.00        | .2       |           |                      |       |       |
| M                         | DO  | CR                                              | 100              | 9.1                                | 643    | 585    | 54               |                               | 2    | 44                  | 53 |                | 19  |        | 39  | 42          | 30       | 81        | 0.95                 | 7.2   |       |
| M Totals                  |     |                                                 | 1                | 12.4                               | 667    | 585    | 54               |                               | 2    | 44                  | 53 |                | 19  |        | 39  | 42          | 30       | 79        | 0.94                 | 7.4   |       |
| S                         | DO  | 3S                                              | 96               |                                    | 879    | 879    | 81               |                               |      |                     | 28 | 72             |     |        | 100 |             | 40       | 525       | 3.04                 | 1.7   |       |
| S                         | DO  | 4S                                              | 4                |                                    | 33     | 33     | 3                |                               |      | 100                 |    |                | 100 |        |     |             | 16       | 40        | 0.88                 | .8    |       |
| S Totals                  |     |                                                 | 2                |                                    | 912    | 912    | 84               |                               |      | 4                   | 27 | 70             | 4   |        | 96  |             | 32       | 363       | 2.68                 | 2.5   |       |
| Type Totals               |     |                                                 |                  |                                    | 2.8    | 50,403 | 48,979           | 4,506                         |      | 0                   | 19 | 31             | 49  | 5      | 6   | 9           | 80       | 31        | 197                  | 1.52  | 248.0 |

| T                                     |  | TSPCSTGR |                  | Species, Sort Grade - Board Foot Volumes (Type) |        |        |                  |                               |      |                    |     |            |       |              |       | Page        |      | 1         |                      |       |
|---------------------------------------|--|----------|------------------|-------------------------------------------------|--------|--------|------------------|-------------------------------|------|--------------------|-----|------------|-------|--------------|-------|-------------|------|-----------|----------------------|-------|
|                                       |  |          |                  | Project: TIDEPORT                               |        |        |                  |                               |      |                    |     |            |       |              |       | Date        |      | 7/24/2012 |                      |       |
|                                       |  |          |                  |                                                 |        |        |                  |                               |      |                    |     |            |       |              |       | Time        |      | 8:42:03AM |                      |       |
| T05N R07W S22 TR/W                    |  |          |                  |                                                 |        |        |                  |                               |      | T05N R07W S22 TR/W |     |            |       |              |       |             |      |           |                      |       |
| Twp                                   |  | Rge      |                  | Sec                                             |        | Tract  |                  | Type                          |      | Acres              |     | Plots      |       | Sample Trees |       | CuFt        |      | BdFt      |                      |       |
| 05N                                   |  | 07W      |                  | 22                                              |        | AREA2  |                  | R/W                           |      | 1.00               |     | 53         |       | 109          |       | 1           |      | W         |                      |       |
| S<br>So<br>Gr<br>T<br>rt<br>ad<br>Spp |  |          | %<br>Net<br>BdFt | Bd. Ft. per Acre<br>Def% Gross Net              |        |        | Total<br>Net MBF | Percent Net Board Foot Volume |      |                    |     |            |       |              |       | Average Log |      |           | Logs<br>Per<br>/Acre |       |
|                                       |  |          |                  |                                                 |        |        |                  | Log Scale Dia.                |      |                    |     | Log Length |       |              |       | Ln          | Bd   | CF/<br>Lf |                      |       |
|                                       |  |          |                  |                                                 |        |        |                  | 4-5                           | 6-11 | 12-16              | 17+ | 12-20      | 21-30 | 31-35        | 36-99 | Ft          | Ft   |           |                      |       |
| D DO CU                               |  |          |                  | 00.0                                            | 598    |        |                  |                               |      |                    |     |            |       |              |       | 8           | 0.00 |           | 3.2                  |       |
| D DO 2S                               |  |          | 84               | 1.2                                             | 30,329 | 29,970 | 30               |                               |      | 35                 | 65  | 2          | 2     | 5            | 92    | 38          | 454  | 2.55      | 66.0                 |       |
| D DO 3S                               |  |          | 14               | .9                                              | 4,707  | 4,665  | 5                |                               | 76   | 17                 | 8   | 4          | 19    | 32           | 45    | 33          | 91   | 0.84      | 51.5                 |       |
| D DO 4S                               |  |          | 2                |                                                 | 693    | 693    | 1                | 8                             | 89   | 3                  |     | 67         | 33    |              |       | 18          | 27   | 0.50      | 25.7                 |       |
| D Totals                              |  |          | 71               | 2.7                                             | 36,327 | 35,329 | 35               | 0                             | 12   | 32                 | 56  | 4          | 5     | 8            | 84    | 32          | 241  | 1.72      | 146.4                |       |
| A DO CU                               |  |          |                  | 00.0                                            | 23     |        |                  |                               |      |                    |     |            |       |              |       | 4           | 0.00 |           | .8                   |       |
| A DO CR                               |  |          | 100              | 1.7                                             | 5,248  | 5,160  | 5                |                               | 68   | 25                 | 7   | 11         | 25    | 8            | 57    | 30          | 103  | 1.00      | 49.9                 |       |
| A Totals                              |  |          | 10               | 2.1                                             | 5,271  | 5,160  | 5                |                               | 68   | 25                 | 7   | 11         | 25    | 8            | 57    | 30          | 102  | 1.00      | 50.7                 |       |
| H DO CU                               |  |          |                  | 00.0                                            | 459    |        |                  |                               |      |                    |     |            |       |              |       | 36          | 0.00 |           | 1.1                  |       |
| H DO 2S                               |  |          | 57               | 1.1                                             | 1,454  | 1,438  | 1                |                               |      | 28                 | 72  | 7          |       |              | 93    | 37          | 388  | 2.33      | 3.7                  |       |
| H DO 3S                               |  |          | 32               |                                                 | 808    | 808    | 1                | 100                           |      |                    |     |            |       | 42           | 58    | 36          | 108  | 0.89      | 7.5                  |       |
| H DO 4S                               |  |          | 11               |                                                 | 261    | 261    | 0                | 100                           |      |                    |     | 80         | 20    |              |       | 17          | 21   | 0.37      | 12.2                 |       |
| H Totals                              |  |          | 5                | 15.9                                            | 2,981  | 2,507  | 3                |                               | 43   | 16                 | 42  | 12         | 2     | 13           | 72    | 26          | 102  | 0.98      | 24.5                 |       |
| GF DO CU                              |  |          |                  | 00.0                                            | 97     |        |                  |                               |      |                    |     |            |       |              |       | 3           | 0.00 |           | 1.2                  |       |
| GF DO 2S                              |  |          | 87               | .7                                              | 4,382  | 4,349  | 4                |                               |      | 38                 | 62  |            |       | 9            | 91    | 39          | 460  | 2.43      | 9.5                  |       |
| GF DO 3S                              |  |          | 11               |                                                 | 563    | 563    | 1                | 71                            | 29   |                    |     |            |       | 53           | 47    | 35          | 120  | 1.01      | 4.7                  |       |
| GF DO 4S                              |  |          | 2                |                                                 | 86     | 86     | 0                | 100                           |      |                    |     | 100        |       |              |       | 17          | 29   | 0.59      | 3.0                  |       |
| GF Totals                             |  |          | 10               | 2.5                                             | 5,127  | 4,998  | 5                |                               | 10   | 36                 | 54  | 2          |       | 13           | 85    | 32          | 273  | 1.86      | 18.3                 |       |
| M DO CU                               |  |          |                  | 00.0                                            | 24     |        |                  |                               |      |                    |     |            |       |              |       | 3           | 0.00 |           | .2                   |       |
| M DO CR                               |  |          | 100              | 9.1                                             | 643    | 585    | 1                | 2                             | 44   | 53                 |     | 19         |       | 39           | 42    | 30          | 81   | 0.95      | 7.2                  |       |
| M Totals                              |  |          | 1                | 12.4                                            | 667    | 585    | 1                | 2                             | 44   | 53                 |     | 19         |       | 39           | 42    | 30          | 79   | 0.94      | 7.4                  |       |
| S DO 3S                               |  |          | 96               |                                                 | 879    | 879    | 1                |                               |      | 28                 | 72  |            |       |              | 100   | 40          | 525  | 3.04      | 1.7                  |       |
| S DO 4S                               |  |          | 4                |                                                 | 33     | 33     | 0                | 100                           |      |                    |     | 100        |       |              |       | 16          | 40   | 0.88      | .8                   |       |
| S Totals                              |  |          | 2                |                                                 | 912    | 912    | 1                |                               | 4    | 27                 | 70  | 4          |       |              | 96    | 32          | 363  | 2.68      | 2.5                  |       |
| Type Totals                           |  |          |                  |                                                 | 3.5    | 51,286 | 49,490           | 49                            | 0    | 19                 | 31  | 49         | 5     | 6            | 9     | 80          | 31   | 198       | 1.52                 | 249.8 |

|                                                                  |     |                 |                |                   |                             |                            |               |                 |              |                |              |
|------------------------------------------------------------------|-----|-----------------|----------------|-------------------|-----------------------------|----------------------------|---------------|-----------------|--------------|----------------|--------------|
| TC TSTATS                                                        |     |                 |                | STATISTICS        |                             |                            |               | PAGE            | 1            |                |              |
|                                                                  |     |                 |                | PROJECT           | TIDEPORT                    | DATE 10/17/2012            |               |                 |              |                |              |
| TWP                                                              | RGE | SECT            | TRACT          | TYPE              | ACRES                       | PLOTS                      | TREES         | CuFt            | BdFt         |                |              |
| 05N                                                              | 07W | 22              | AREA1          | 00CC              | 93.00                       | 53                         | 305           | 1               | W            |                |              |
|                                                                  |     |                 |                |                   |                             |                            |               |                 |              |                |              |
|                                                                  |     | PLOTS           | TREES          | TREES<br>PER PLOT | ESTIMATED<br>TOTAL<br>TREES | PERCENT<br>SAMPLE<br>TREES |               |                 |              |                |              |
| TOTAL                                                            |     | 53              | 305            | 5.8               |                             |                            |               |                 |              |                |              |
| CRUISE                                                           |     | 22              | 114            | 5.2               | 11,346                      | 1.0                        |               |                 |              |                |              |
| DBH COUNT                                                        |     |                 |                |                   |                             |                            |               |                 |              |                |              |
| REFOREST                                                         |     |                 |                |                   |                             |                            |               |                 |              |                |              |
| COUNT                                                            |     | 31              | 165            | 5.3               |                             |                            |               |                 |              |                |              |
| BLANKS                                                           |     |                 |                |                   |                             |                            |               |                 |              |                |              |
| 100 %                                                            |     |                 |                |                   |                             |                            |               |                 |              |                |              |
| STAND SUMMARY                                                    |     |                 |                |                   |                             |                            |               |                 |              |                |              |
|                                                                  |     | SAMPLE<br>TREES | TREES<br>/ACRE | AVG<br>DBH        | BOLE<br>LEN                 | REL<br>DEN                 | BASAL<br>AREA | GROSS<br>BF/AC  | NET<br>BF/AC | GROSS<br>CF/AC | NET<br>CF/AC |
| DOUG FIR                                                         |     | 57              | 59.6           | 23.0              | 81                          |                            | 172.6         | 35,900          | 34,913       | 8,093          | 7,995        |
| R ALDER                                                          |     | 27              | 30.4           | 16.4              | 54                          |                            | 44.4          | 5,271           | 5,160        | 1,506          | 1,501        |
| GR FIR                                                           |     | 8               | 5.2            | 25.6              | 110                         | 4                          | 18.5          | 4,857           | 4,735        | 1,041          | 1,027        |
| WHEMLOCK                                                         |     | 7               | 15.7           | 14.7              | 43                          |                            | 18.5          | 2,796           | 2,674        | 685            | 668          |
| SNAG                                                             |     | 5               | 4.4            | 20.8              | 49                          |                            | 10.3          | 403             |              | 77             |              |
| BL MAPLE                                                         |     | 8               | 5.6            | 16.4              | 41                          |                            | 8.2           | 667             | 585          | 211            | 208          |
| S SPRUCE                                                         |     | 1               | .8             | 30.0              | 99                          |                            | 4.1           | 912             | 912          | 215            | 215          |
| HEMLEAV                                                          |     | 1               | .2             | 29.0              | 101                         |                            | 1.0           | 168             | 16           | 56             | 7            |
| TOTAL                                                            |     | 114             | 122.0          | 20.4              | 68                          |                            | 277.6         | 50,974          | 48,994       | 11,882         | 11,620       |
| CONFIDENCE LIMITS OF THE SAMPLE                                  |     |                 |                |                   |                             |                            |               |                 |              |                |              |
| 68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR |     |                 |                |                   |                             |                            |               |                 |              |                |              |
| CL: 68.1 %                                                       |     | COEFF           |                | SAMPLE TREES - BF |                             |                            |               | # OF TREES REQ. |              | INF. POP.      |              |
| SD: 1.0                                                          |     | VAR.%           | S.E.%          | LOW               | AVG                         | HIGH                       |               | 5               | 10           | 15             |              |
| DOUG FIR                                                         |     | 69.5            | 9.2            | 896               | 987                         | 1,077                      |               |                 |              |                |              |
| R ALDER                                                          |     | 60.2            | 11.8           | 189               | 214                         | 239                        |               |                 |              |                |              |
| GR FIR                                                           |     | 76.3            | 28.8           | 808               | 1,135                       | 1,462                      |               |                 |              |                |              |
| WHEMLOCK                                                         |     | 76.8            | 31.3           | 258               | 376                         | 493                        |               |                 |              |                |              |
| SNAG                                                             |     |                 |                |                   |                             |                            |               |                 |              |                |              |
| BL MAPLE                                                         |     | 78.3            | 29.5           | 98                | 139                         | 180                        |               |                 |              |                |              |
| S SPRUCE                                                         |     |                 |                |                   |                             |                            |               |                 |              |                |              |
| HEMLEAV                                                          |     |                 |                |                   |                             |                            |               |                 |              |                |              |
| TOTAL                                                            |     | 101.1           | 9.5            | 604               | 667                         | 730                        |               | 408             | 102          | 45             |              |
| CL: 68.1 %                                                       |     | COEFF           |                | TREES/ACRE        |                             |                            |               | # OF PLOTS REQ. |              | INF. POP.      |              |
| SD: 1.0                                                          |     | VAR.%           | S.E.%          | LOW               | AVG                         | HIGH                       |               | 5               | 10           | 15             |              |
| DOUG FIR                                                         |     | 108.8           | 14.9           | 51                | 60                          | 69                         |               |                 |              |                |              |
| R ALDER                                                          |     | 128.6           | 17.7           | 25                | 30                          | 36                         |               |                 |              |                |              |
| GR FIR                                                           |     | 180.6           | 24.8           | 4                 | 5                           | 6                          |               |                 |              |                |              |
| WHEMLOCK                                                         |     | 293.9           | 40.3           | 9                 | 16                          | 22                         |               |                 |              |                |              |
| SNAG                                                             |     | 336.9           | 46.2           | 2                 | 4                           | 6                          |               |                 |              |                |              |
| BL MAPLE                                                         |     | 329.3           | 45.2           | 3                 | 6                           | 8                          |               |                 |              |                |              |
| S SPRUCE                                                         |     | 353.3           | 48.5           | 0                 | 1                           | 1                          |               |                 |              |                |              |
| HEMLEAV                                                          |     | 728.0           | 99.9           | 0                 | 0                           | 0                          |               |                 |              |                |              |
| TOTAL                                                            |     | 59.5            | 8.2            | 112               | 122                         | 132                        |               | 141             | 35           | 16             |              |
| CL: 68.1 %                                                       |     | COEFF           |                | BASAL AREA/ACRE   |                             |                            |               | # OF PLOTS REQ. |              | INF. POP.      |              |
| SD: 1.0                                                          |     | VAR.%           | S.E.%          | LOW               | AVG                         | HIGH                       |               | 5               | 10           | 15             |              |
| DOUG FIR                                                         |     | 93.8            | 12.9           | 150               | 173                         | 195                        |               |                 |              |                |              |
| R ALDER                                                          |     | 114.8           | 15.8           | 37                | 44                          | 51                         |               |                 |              |                |              |
| GR FIR                                                           |     | 172.7           | 23.7           | 14                | 18                          | 23                         |               |                 |              |                |              |
| WHEMLOCK                                                         |     | 276.6           | 38.0           | 11                | 18                          | 26                         |               |                 |              |                |              |
| SNAG                                                             |     | 295.0           | 40.5           | 6                 | 10                          | 14                         |               |                 |              |                |              |
| BL MAPLE                                                         |     | 338.3           | 46.4           | 4                 | 8                           | 12                         |               |                 |              |                |              |
| S SPRUCE                                                         |     | 353.3           | 48.5           | 2                 | 4                           | 6                          |               |                 |              |                |              |
| HEMLEAV                                                          |     | 728.0           | 99.9           | 0                 | 1                           | 2                          |               |                 |              |                |              |



|           |        |       |       |                 |          |        |                 |      |            |
|-----------|--------|-------|-------|-----------------|----------|--------|-----------------|------|------------|
| TC TSTATS |        |       |       | STATISTICS      |          |        |                 | PAGE | 2          |
|           |        |       |       | PROJECT         | TIDEPORT |        |                 | DATE | 10/17/2012 |
| TWP       | RGE    | SECT  | TRACT | TYPE            | ACRES    | PLOTS  | TREES           | CuFt | BdFt       |
| 05N       | 07W    | 22    | AREA1 | 00CC            | 93.00    | 53     | 305             | 1    | W          |
| CL:       | 68.1 % | COEFF |       | BASAL AREA/ACRE |          |        | # OF PLOTS REQ. |      | INF. POP.  |
| SD:       | 1.0    | VAR.  | S.E.% | LOW             | AVG      | HIGH   | 5               | 10   | 15         |
| TOTAL     |        | 53.7  | 7.4   | 257             | 278      | 298    | 115             | 29   | 13         |
| CL:       | 68.1 % | COEFF |       | NET BF/ACRE     |          |        | # OF PLOTS REQ. |      | INF. POP.  |
| SD:       | 1.0    | VAR.% | S.E.% | LOW             | AVG      | HIGH   | 5               | 10   | 15         |
| DOUG FIR  |        | 92.7  | 12.7  | 30,469          | 34,913   | 39,356 |                 |      |            |
| R ALDER   |        | 113.1 | 15.5  | 4,359           | 5,160    | 5,960  |                 |      |            |
| GR FIR    |        | 175.5 | 24.1  | 3,595           | 4,735    | 5,876  |                 |      |            |
| WHEMLOCK  |        | 279.1 | 38.3  | 1,649           | 2,674    | 3,698  |                 |      |            |
| SNAG      |        |       |       |                 |          |        |                 |      |            |
| BL MAPLE  |        | 352.5 | 48.4  | 302             | 585      | 868    |                 |      |            |
| S SPRUCE  |        | 353.3 | 48.5  | 470             | 912      | 1,355  |                 |      |            |
| HEMLEAV   |        | 728.0 | 99.9  | 0               | 16       | 31     |                 |      |            |
| TOTAL     |        | 63.4  | 8.7   | 44,730          | 48,994   | 53,259 | 161             | 40   | 18         |

|                                                                  |     |       |       |                   |           |         |                 |        |           |        |
|------------------------------------------------------------------|-----|-------|-------|-------------------|-----------|---------|-----------------|--------|-----------|--------|
| TC TSTATS                                                        |     |       |       | STATISTICS        |           |         |                 | PAGE 1 |           |        |
|                                                                  |     |       |       | PROJECT           | TIDEPORT  |         |                 | DATE   | 7/24/2012 |        |
| TWP                                                              | RGE | SECT  | TRACT | TYPE              | ACRES     | PLOTS   | TREES           | CuFt   | BdFt      |        |
| 05N                                                              | 07W | 22    | AREA1 | TAKE              | 92.00     | 53      | 291             | 1      | W         |        |
|                                                                  |     |       |       | TREES             | ESTIMATED | PERCENT |                 |        |           |        |
|                                                                  |     |       |       | PER PLOT          | TOTAL     | SAMPLE  |                 |        |           |        |
|                                                                  |     |       |       |                   | TREES     | TREES   |                 |        |           |        |
| TOTAL                                                            |     | 53    | 291   | 5.5               |           |         |                 |        |           |        |
| CRUISE                                                           |     | 20    | 108   | 5.4               | 10,801    |         | 1.0             |        |           |        |
| DBH COUNT                                                        |     |       |       |                   |           |         |                 |        |           |        |
| REFOREST                                                         |     |       |       |                   |           |         |                 |        |           |        |
| COUNT                                                            |     | 33    | 179   | 5.4               |           |         |                 |        |           |        |
| BLANKS                                                           |     |       |       |                   |           |         |                 |        |           |        |
| 100 %                                                            |     |       |       |                   |           |         |                 |        |           |        |
| STAND SUMMARY                                                    |     |       |       |                   |           |         |                 |        |           |        |
| SAMPLE                                                           |     | TREES | AVG   | BOLE              | REL       | BASAL   | GROSS           | NET    | GROSS     | NET    |
| TREES                                                            |     | /ACRE | DBH   | LEN               | DEN       | AREA    | BF/AC           | BF/AC  | CF/AC     | CF/AC  |
| DOUG FIR                                                         |     | 57    | 59.6  | 23.0              | 81        | 172.6   | 35,900          | 34,913 | 8,093     | 7,995  |
| R ALDER                                                          |     | 27    | 30.4  | 16.4              | 54        | 44.4    | 5,271           | 5,160  | 1,506     | 1,501  |
| GR FIR                                                           |     | 8     | 5.2   | 25.6              | 110       | 4       | 18.5            | 4,857  | 4,735     | 1,041  |
| WHEMLOCK                                                         |     | 7     | 15.7  | 14.7              | 43        | 18.5    | 2,796           | 2,674  | 685       | 668    |
| BL MAPLE                                                         |     | 8     | 5.6   | 16.4              | 41        | 8.2     | 667             | 585    | 211       | 208    |
| S SPRUCE                                                         |     | 1     | .8    | 30.0              | 99        | 4.1     | 912             | 912    | 215       | 215    |
| TOTAL                                                            |     | 108   | 117.4 | 20.4              | 68        | 266.3   | 50,403          | 48,979 | 11,750    | 11,613 |
| CONFIDENCE LIMITS OF THE SAMPLE                                  |     |       |       |                   |           |         |                 |        |           |        |
| 68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR |     |       |       |                   |           |         |                 |        |           |        |
| CL: 68.1 %                                                       |     | COEFF |       | SAMPLE TREES - BF |           |         | # OF TREES REQ. |        | INF. POP. |        |
| SD: 1.0                                                          |     | VAR.% | S.E.% | LOW               | AVG       | HIGH    | 5               | 10     | 15        |        |
| DOUG FIR                                                         |     | 69.5  | 9.2   | 896               | 987       | 1,077   |                 |        |           |        |
| R ALDER                                                          |     | 60.2  | 11.8  | 189               | 214       | 239     |                 |        |           |        |
| GR FIR                                                           |     | 76.3  | 28.8  | 808               | 1,135     | 1,462   |                 |        |           |        |
| WHEMLOCK                                                         |     | 76.8  | 31.3  | 258               | 376       | 493     |                 |        |           |        |
| BL MAPLE                                                         |     | 78.3  | 29.5  | 98                | 139       | 180     |                 |        |           |        |
| S SPRUCE                                                         |     |       |       |                   |           |         |                 |        |           |        |
| TOTAL                                                            |     | 95.9  | 9.2   | 638               | 703       | 768     | 367             | 92     | 41        |        |
| CL: 68.1 %                                                       |     | COEFF |       | TREES/ACRE        |           |         | # OF PLOTS REQ. |        | INF. POP. |        |
| SD: 1.0                                                          |     | VAR.% | S.E.% | LOW               | AVG       | HIGH    | 5               | 10     | 15        |        |
| DOUG FIR                                                         |     | 108.8 | 14.9  | 51                | 60        | 69      |                 |        |           |        |
| R ALDER                                                          |     | 128.6 | 17.7  | 25                | 30        | 36      |                 |        |           |        |
| GR FIR                                                           |     | 180.6 | 24.8  | 4                 | 5         | 6       |                 |        |           |        |
| WHEMLOCK                                                         |     | 293.9 | 40.3  | 9                 | 16        | 22      |                 |        |           |        |
| BL MAPLE                                                         |     | 329.3 | 45.2  | 3                 | 6         | 8       |                 |        |           |        |
| S SPRUCE                                                         |     | 353.3 | 48.5  | 0                 | 1         | 1       |                 |        |           |        |
| TOTAL                                                            |     | 63.8  | 8.8   | 107               | 117       | 128     | 163             | 41     | 18        |        |
| CL: 68.1 %                                                       |     | COEFF |       | BASAL AREA/ACRE   |           |         | # OF PLOTS REQ. |        | INF. POP. |        |
| SD: 1.0                                                          |     | VAR.% | S.E.% | LOW               | AVG       | HIGH    | 5               | 10     | 15        |        |
| DOUG FIR                                                         |     | 93.8  | 12.9  | 150               | 173       | 195     |                 |        |           |        |
| R ALDER                                                          |     | 114.8 | 15.8  | 37                | 44        | 51      |                 |        |           |        |
| GR FIR                                                           |     | 172.7 | 23.7  | 14                | 18        | 23      |                 |        |           |        |
| WHEMLOCK                                                         |     | 276.6 | 38.0  | 11                | 18        | 26      |                 |        |           |        |
| BL MAPLE                                                         |     | 338.3 | 46.4  | 4                 | 8         | 12      |                 |        |           |        |
| S SPRUCE                                                         |     | 353.3 | 48.5  | 2                 | 4         | 6       |                 |        |           |        |
| TOTAL                                                            |     | 56.9  | 7.8   | 245               | 266       | 287     | 129             | 32     | 14        |        |
| CL: 68.1 %                                                       |     | COEFF |       | NET BF/ACRE       |           |         | # OF PLOTS REQ. |        | INF. POP. |        |
| SD: 1.0                                                          |     | VAR.% | S.E.% | LOW               | AVG       | HIGH    | 5               | 10     | 15        |        |
| DOUG FIR                                                         |     | 92.7  | 12.7  | 30,469            | 34,913    | 39,356  |                 |        |           |        |
| R ALDER                                                          |     | 113.1 | 15.5  | 4,359             | 5,160     | 5,960   |                 |        |           |        |
| GR FIR                                                           |     | 175.5 | 24.1  | 3,595             | 4,735     | 5,876   |                 |        |           |        |
| WHEMLOCK                                                         |     | 279.1 | 38.3  | 1,649             | 2,674     | 3,698   |                 |        |           |        |

|           |        |       |        |             |          |        |                 |           |           |
|-----------|--------|-------|--------|-------------|----------|--------|-----------------|-----------|-----------|
| TC TSTATS |        |       |        | STATISTICS  |          |        |                 | PAGE      | 2         |
|           |        |       |        | PROJECT     | TIDEPORT |        | DATE            | 7/24/2012 |           |
| TWP       | RGE    | SECT  | TRACT  | TYPE        | ACRES    | PLOTS  | TREES           | CuFt      | BdFt      |
| 05N       | 07W    | 22    | AREA1  | TAKE        | 92.00    | 53     | 291             | 1         | W         |
|           |        |       |        |             |          |        |                 |           |           |
| CL:       | 68.1 % | COEFF |        | NET BF/ACRE |          |        | # OF PLOTS REQ. |           | INF. POP. |
| SD:       | 1.0    | VAR.  | S.E. % | LOW         | AVG      | HIGH   | 5               | 10        | 15        |
| BL MAPLE  |        | 352.5 | 48.4   | 302         | 585      | 868    |                 |           |           |
| S SPRUCE  |        | 353.3 | 48.5   | 470         | 912      | 1,355  |                 |           |           |
| TOTAL     |        | 63.5  | 8.7    | 44,712      | 48,979   | 53,246 | 161             | 40        | 18        |

| TC TSTATS                                                        |       |                   |       | STATISTICS |           |                |                 | PAGE   | 1         |        |  |
|------------------------------------------------------------------|-------|-------------------|-------|------------|-----------|----------------|-----------------|--------|-----------|--------|--|
|                                                                  |       |                   |       | PROJECT    | TIDEPORT  | DATE 7/24/2012 |                 |        |           |        |  |
| TWP                                                              | RGE   | SECT              | TRACT | TYPE       | ACRES     | PLOTS          | TREES           | CuFt   | BdFt      |        |  |
| 05N                                                              | 07W   | 22                | AREA2 | R/W        | 1.00      | 53             | 295             | 1      | W         |        |  |
|                                                                  |       |                   |       | TREES      | ESTIMATED | PERCENT        |                 |        |           |        |  |
|                                                                  |       |                   |       | PER PLOT   | TOTAL     | SAMPLE         |                 |        |           |        |  |
|                                                                  |       |                   |       |            | TREES     | TREES          |                 |        |           |        |  |
| PLOTS                                                            |       | TREES             |       |            |           |                |                 |        |           |        |  |
| TOTAL                                                            |       | 53                | 295   | 5.6        |           |                |                 |        |           |        |  |
| CRUISE                                                           |       | 20                | 109   | 5.4        |           | 118            | 92.6            |        |           |        |  |
| DBH COUNT                                                        |       |                   |       |            |           |                |                 |        |           |        |  |
| REFOREST                                                         |       |                   |       |            |           |                |                 |        |           |        |  |
| COUNT                                                            |       | 33                | 182   | 5.5        |           |                |                 |        |           |        |  |
| BLANKS                                                           |       |                   |       |            |           |                |                 |        |           |        |  |
| 100 %                                                            |       |                   |       |            |           |                |                 |        |           |        |  |
| STAND SUMMARY                                                    |       |                   |       |            |           |                |                 |        |           |        |  |
| SAMPLE                                                           |       | TREES             | AVG   | BOLE       | REL       | BASAL          | GROSS           | NET    | GROSS     | NET    |  |
| TREES                                                            |       | /ACRE             | DBH   | LEN        | DEN       | AREA           | BF/AC           | BF/AC  | CF/AC     | CF/AC  |  |
| DOUG FIR                                                         |       | 57                | 60.3  | 23.0       | 81        | 174.6          | 36,327          | 35,329 | 8,189     | 8,090  |  |
| R ALDER                                                          |       | 27                | 30.4  | 16.4       | 54        | 44.4           | 5,271           | 5,160  | 1,506     | 1,501  |  |
| WHEMLOCK                                                         |       | 8                 | 15.1  | 15.4       | 45        | 19.5           | 2,981           | 2,507  | 764       | 633    |  |
| GR FIR                                                           |       | 8                 | 5.5   | 25.6       | 110       | 4 19.5         | 5,127           | 4,998  | 1,098     | 1,084  |  |
| BL MAPLE                                                         |       | 8                 | 5.6   | 16.4       | 41        | 8.2            | 667             | 585    | 211       | 208    |  |
| S SPRUCE                                                         |       | 1                 | .8    | 30.0       | 99        | 4.1            | 912             | 912    | 215       | 215    |  |
| TOTAL                                                            |       | 109               | 117.7 | 20.5       | 69        | 270.4          | 51,286          | 49,490 | 11,984    | 11,730 |  |
| CONFIDENCE LIMITS OF THE SAMPLE                                  |       |                   |       |            |           |                |                 |        |           |        |  |
| 68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR |       |                   |       |            |           |                |                 |        |           |        |  |
| CL: 68.1 %                                                       | COEFF | SAMPLE TREES - BF |       |            |           |                | # OF TREES REQ. |        | INF. POP. |        |  |
| SD: 1.0                                                          | VAR.% | S.E.%             | LOW   | AVG        | HIGH      | 5              | 10              | 15     |           |        |  |
| DOUG FIR                                                         |       | 69.5              | 9.2   | 896        | 987       | 1,077          |                 |        |           |        |  |
| R ALDER                                                          |       | 60.2              | 11.8  | 189        | 214       | 239            |                 |        |           |        |  |
| WHEMLOCK                                                         |       | 85.4              | 32.2  | 229        | 338       | 446            |                 |        |           |        |  |
| GR FIR                                                           |       | 76.3              | 28.8  | 808        | 1,135     | 1,462          |                 |        |           |        |  |
| BL MAPLE                                                         |       | 78.3              | 29.5  | 98         | 139       | 180            |                 |        |           |        |  |
| S SPRUCE                                                         |       |                   |       |            |           |                |                 |        |           |        |  |
| TOTAL                                                            |       | 96.6              | 9.2   | 633        | 697       | 762            | 373             | 93     | 41        |        |  |
| CL: 68.1 %                                                       | COEFF | TREES/ACRE        |       |            |           |                | # OF PLOTS REQ. |        | INF. POP. |        |  |
| SD: 1.0                                                          | VAR.% | S.E.%             | LOW   | AVG        | HIGH      | 5              | 10              | 15     |           |        |  |
| DOUG FIR                                                         |       | 107.5             | 14.8  | 51         | 60        | 69             |                 |        |           |        |  |
| R ALDER                                                          |       | 128.6             | 17.7  | 25         | 30        | 36             |                 |        |           |        |  |
| WHEMLOCK                                                         |       | 287.3             | 39.4  | 9          | 15        | 21             |                 |        |           |        |  |
| GR FIR                                                           |       | 189.0             | 25.9  | 4          | 5         | 7              |                 |        |           |        |  |
| BL MAPLE                                                         |       | 329.3             | 45.2  | 3          | 6         | 8              |                 |        |           |        |  |
| S SPRUCE                                                         |       | 353.3             | 48.5  | 0          | 1         | 1              |                 |        |           |        |  |
| TOTAL                                                            |       | 61.2              | 8.4   | 108        | 118       | 128            | 150             | 37     | 17        |        |  |
| CL: 68.1 %                                                       | COEFF | BASAL AREA/ACRE   |       |            |           |                | # OF PLOTS REQ. |        | INF. POP. |        |  |
| SD: 1.0                                                          | VAR.% | S.E.%             | LOW   | AVG        | HIGH      | 5              | 10              | 15     |           |        |  |
| DOUG FIR                                                         |       | 92.6              | 12.7  | 152        | 175       | 197            |                 |        |           |        |  |
| R ALDER                                                          |       | 114.8             | 15.8  | 37         | 44        | 51             |                 |        |           |        |  |
| WHEMLOCK                                                         |       | 274.0             | 37.6  | 12         | 20        | 27             |                 |        |           |        |  |
| GR FIR                                                           |       | 182.2             | 25.0  | 15         | 20        | 24             |                 |        |           |        |  |
| BL MAPLE                                                         |       | 338.3             | 46.4  | 4          | 8         | 12             |                 |        |           |        |  |
| S SPRUCE                                                         |       | 353.3             | 48.5  | 2          | 4         | 6              |                 |        |           |        |  |
| TOTAL                                                            |       | 55.1              | 7.6   | 250        | 270       | 291            | 121             | 30     | 13        |        |  |
| CL: 68.1 %                                                       | COEFF | NET BF/ACRE       |       |            |           |                | # OF PLOTS REQ. |        | INF. POP. |        |  |
| SD: 1.0                                                          | VAR.% | S.E.%             | LOW   | AVG        | HIGH      | 5              | 10              | 15     |           |        |  |
| DOUG FIR                                                         |       | 91.6              | 12.6  | 30,889     | 35,329    | 39,768         |                 |        |           |        |  |
| R ALDER                                                          |       | 113.1             | 15.5  | 4,359      | 5,160     | 5,960          |                 |        |           |        |  |
| WHEMLOCK                                                         |       | 271.5             | 37.3  | 1,573      | 2,507     | 3,441          |                 |        |           |        |  |
| GR FIR                                                           |       | 184.6             | 25.3  | 3,732      | 4,998     | 6,264          |                 |        |           |        |  |

|            |     |       |             |            |          |        |                 |           |           |
|------------|-----|-------|-------------|------------|----------|--------|-----------------|-----------|-----------|
| TC TSTATS  |     |       |             | STATISTICS |          |        |                 | PAGE      | 2         |
|            |     |       |             | PROJECT    | TIDEPORT |        | DATE            | 7/24/2012 |           |
| TWP        | RGE | SECT  | TRACT       | TYPE       | ACRES    | PLOTS  | TREES           | CuFt      | BdFt      |
| 05N        | 07W | 22    | AREA2       | R/W        | 1.00     | 53     | 295             | 1         | W         |
| CL: 68.1 % |     | COEFF | NET BF/ACRE |            |          |        | # OF PLOTS REQ. |           | INF. POP. |
| SD: 1.0    |     | VAR.  | S.E. %      | LOW        | AVG      | HIGH   | 5               | 10        | 15        |
| BL MAPLE   |     | 352.5 | 48.4        | 302        | 585      | 868    |                 |           |           |
| S SPRUCE   |     | 353.3 | 48.5        | 470        | 912      | 1,355  |                 |           |           |
| TOTAL      |     | 61.7  | 8.5         | 45,296     | 49,490   | 53,684 | 152             | 38        | 17        |

| TC PLOGSTVB                                            |        | Log Stock Table - MBF |            |                                  |          |            |          |                                          |     |     |     |       |       |                                            |       |       |       |       |     |
|--------------------------------------------------------|--------|-----------------------|------------|----------------------------------|----------|------------|----------|------------------------------------------|-----|-----|-----|-------|-------|--------------------------------------------|-------|-------|-------|-------|-----|
| T05N R07W S22 TyTAKE 92.00<br>T05N R07W S22 TyR/W 1.00 |        |                       |            | Project: TIDEPORT<br>Acres 93.00 |          |            |          |                                          |     |     |     |       |       | Page 1<br>Date 7/24/2012<br>Time 8:49:47AM |       |       |       |       |     |
| Spp                                                    | S<br>T | So Gr<br>rt de        | Log<br>Len | Gross<br>MBF                     | Def<br>% | Net<br>MBF | %<br>Spc | Net Volume by Scaling Diameter in Inches |     |     |     |       |       |                                            |       |       |       |       |     |
|                                                        |        |                       |            |                                  |          |            |          | 2-3                                      | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15                                      | 16-19 | 20-23 | 24-29 | 30-39 | 40+ |
| A                                                      |        | DO CU                 | 4          | 2                                | 100.0    |            |          |                                          |     |     |     |       |       |                                            |       |       |       |       |     |
| A                                                      |        | DO CR                 | 16         | 8                                | 25.0     | 6          | 1.2      |                                          |     | 6   |     |       |       |                                            |       |       |       |       |     |
| A                                                      |        | DO CR                 | 20         | 46                               |          | 46         | 9.5      |                                          |     | 31  |     | 11    | 4     |                                            |       |       |       |       |     |
| A                                                      |        | DO CR                 | 24         | 9                                |          | 9          | 1.8      |                                          |     | 6   | 3   |       |       |                                            |       |       |       |       |     |
| A                                                      |        | DO CR                 | 30         | 114                              | 2.9      | 110        | 23.0     |                                          |     | 4   | 3   | 57    |       | 14                                         | 32    |       |       |       |     |
| A                                                      |        | DO CR                 | 32         | 39                               | 5.2      | 37         | 7.7      |                                          |     |     | 4   | 17    | 16    |                                            |       |       |       |       |     |
| A                                                      |        | DO CR                 | 40         | 274                              |          | 273        | 56.8     |                                          |     | 39  | 10  | 134   | 15    | 56                                         | 19    |       |       |       |     |
| A                                                      |        | Totals                |            | 490                              | 2.1      | 480        | 10.5     |                                          |     | 80  | 25  | 219   | 34    | 70                                         | 51    |       |       |       |     |
| H                                                      |        | DO CU                 | 6          | 10                               | 100.0    |            |          |                                          |     |     |     |       |       |                                            |       |       |       |       |     |
| H                                                      |        | DO CU                 | 68         | 0                                | 100.0    |            |          |                                          |     |     |     |       |       |                                            |       |       |       |       |     |
| H                                                      |        | DO 2S                 | 20         | 10                               |          | 10         | 4.2      |                                          |     |     |     |       |       | 10                                         |       |       |       |       |     |
| H                                                      |        | DO 2S                 | 40         | 136                              | 1.1      | 134        | 54.1     |                                          |     |     |     |       |       | 30                                         | 105   |       |       |       |     |
| H                                                      |        | DO 3S                 | 32         | 24                               |          | 24         | 9.7      |                                          |     | 24  |     |       |       |                                            |       |       |       |       |     |
| H                                                      |        | DO 3S                 | 34         | 6                                |          | 6          | 2.5      |                                          |     | 6   |     |       |       |                                            |       |       |       |       |     |
| H                                                      |        | DO 3S                 | 40         | 47                               |          | 47         | 19.1     |                                          |     |     | 7   | 40    |       |                                            |       |       |       |       |     |
| H                                                      |        | DO 4S                 | 12         | 2                                |          | 2          | .6       |                                          |     | 2   |     |       |       |                                            |       |       |       |       |     |
| H                                                      |        | DO 4S                 | 16         | 19                               |          | 19         | 7.8      |                                          |     | 19  |     |       |       |                                            |       |       |       |       |     |
| H                                                      |        | DO 4S                 | 22         | 5                                |          | 5          | 2.1      |                                          |     | 5   |     |       |       |                                            |       |       |       |       |     |
| H                                                      |        | Totals                |            | 260                              | 4.5      | 248        | 5.5      |                                          |     | 31  | 33  | 40    |       | 40                                         | 105   |       |       |       |     |
| D                                                      |        | DO CU                 | 6          | 6                                | 100.0    |            |          |                                          |     |     |     |       |       |                                            |       |       |       |       |     |
| D                                                      |        | DO CU                 | 8          | 9                                | 100.0    |            |          |                                          |     |     |     |       |       |                                            |       |       |       |       |     |
| D                                                      |        | DO CU                 | 16         | 16                               | 100.0    |            |          |                                          |     |     |     |       |       |                                            |       |       |       |       |     |
| D                                                      |        | DO CU                 | 18         | 24                               | 100.0    |            |          |                                          |     |     |     |       |       |                                            |       |       |       |       |     |
| D                                                      |        | DO 2S                 | 20         | 57                               |          | 57         | 1.8      |                                          |     |     |     | 4     |       |                                            |       | 54    |       |       |     |
| D                                                      |        | DO 2S                 | 28         | 5                                |          | 5          | .2       |                                          |     |     |     | 5     |       |                                            |       |       |       |       |     |
| D                                                      |        | DO 2S                 | 30         | 38                               |          | 38         | 1.2      |                                          |     |     |     | 27    |       | 11                                         |       |       |       |       |     |
| D                                                      |        | DO 2S                 | 32         | 133                              |          | 133        | 4.1      |                                          |     |     |     | 82    |       | 51                                         |       |       |       |       |     |
| D                                                      |        | DO 2S                 | 40         | 2,554                            | 1.3      | 2,521      | 77.6     |                                          |     |     |     | 294   |       | 218                                        | 784   | 830   | 357   | 38    |     |
| D                                                      |        | DO 3S                 | 14         | 2                                |          | 2          | .0       |                                          |     | 2   |     |       |       |                                            |       |       |       |       |     |
| D                                                      |        | DO 3S                 | 16         | 4                                |          | 4          | .1       |                                          |     |     | 4   |       |       |                                            |       |       |       |       |     |
| D                                                      |        | DO 3S                 | 18         | 3                                |          | 3          | .1       |                                          |     |     | 3   |       |       |                                            |       |       |       |       |     |
| D                                                      |        | DO 3S                 | 20         | 7                                |          | 7          | .2       |                                          |     | 7   |     |       |       |                                            |       |       |       |       |     |
| D                                                      |        | DO 3S                 | 21         | 4                                |          | 4          | .1       |                                          |     |     | 4   |       |       |                                            |       |       |       |       |     |
| D                                                      |        | DO 3S                 | 22         | 8                                |          | 8          | .3       |                                          |     |     | 4   |       | 5     |                                            |       |       |       |       |     |

| TC PLOGSTVB                                 |          |                  |              | Log Stock Table - MBF |            |                                  |                                          |     |     |     |       |       |       |       |       |       |       |                                            |  |  |
|---------------------------------------------|----------|------------------|--------------|-----------------------|------------|----------------------------------|------------------------------------------|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|--------------------------------------------|--|--|
| T05N R07W S22 TyTAKE<br>T05N R07W S22 TyR/W |          |                  |              | 92.00<br>1.00         |            | Project: TIDEPORT<br>Acres 93.00 |                                          |     |     |     |       |       |       |       |       |       |       | Page 2<br>Date 7/24/2012<br>Time 8:49:47AM |  |  |
| S<br>T<br>Spp                               | Gr<br>rt | Log<br>de<br>Len | Gross<br>MBF | Def<br>%              | Net<br>MBF | %<br>Spc                         | Net Volume by Scaling Diameter in Inches |     |     |     |       |       |       |       |       |       |       |                                            |  |  |
|                                             |          |                  |              |                       |            |                                  | 2-3                                      | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 | 40+                                        |  |  |
| D                                           | DO       | 3S               | 24           | 4                     | 4          | .1                               |                                          |     |     | 4   |       |       |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 3S               | 26           | 47                    | 47         | 1.5                              |                                          |     | 5   | 15  | 21    | 6     |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 3S               | 28           | 14                    | 14         | .4                               |                                          |     | 4   | 4   | 5     |       |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 3S               | 30           | 5                     | 5          | .1                               |                                          |     |     | 5   |       |       |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 3S               | 32           | 139                   | 1.6        | 137                              | 4.2                                      |     | 5   | 68  | 23    | 28    |       | 13    |       |       |       |                                            |  |  |
| D                                           | DO       | 3S               | 36           | 31                    | 4.9        | 30                               | .9                                       |     |     |     | 15    |       | 15    |       |       |       |       |                                            |  |  |
| D                                           | DO       | 3S               | 40           | 165                   |            | 165                              | 5.1                                      |     |     | 73  | 54    |       | 18    |       |       | 20    |       |                                            |  |  |
| D                                           | DO       | 4S               | 12           | 5                     | 5          | .2                               |                                          |     | 3   |     |       | 2     |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 4S               | 14           | 3                     | 3          | .1                               |                                          |     | 3   |     |       |       |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 4S               | 16           | 22                    | 22         | .7                               |                                          |     | 14  | 5   | 3     |       |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 4S               | 19           | 6                     | 6          | .2                               |                                          |     | 6   |     |       |       |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 4S               | 20           | 6                     | 6          | .2                               |                                          |     |     | 6   |       |       |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 4S               | 24           | 16                    | 16         | .5                               |                                          |     | 13  | 4   |       |       |       |       |       |       |       |                                            |  |  |
| D                                           | DO       | 4S               | 28           | 5                     | 5          | .1                               |                                          | 5   |     |     |       |       |       |       |       |       |       |                                            |  |  |
| D                                           | Totals   |                  |              | 3,339                 | 2.7        | 3,247                            | 71.3                                     |     | 5   | 127 | 173   | 82    | 466   | 300   | 797   | 849   | 411   | 38                                         |  |  |
| GF                                          | DO       | CU               | 6            | 9                     | 100.0      |                                  |                                          |     |     |     |       |       |       |       |       |       |       |                                            |  |  |
| GF                                          | DO       | 2S               | 32           | 33                    | 33         | 7.5                              |                                          |     |     |     | 14    |       | 19    |       |       |       |       |                                            |  |  |
| GF                                          | DO       | 2S               | 40           | 353                   | 350        | 79.5                             |                                          |     |     |     | 14    | 76    | 158   | 38    | 26    | 39    |       |                                            |  |  |
| GF                                          | DO       | 3S               | 32           | 21                    | 21         | 4.8                              |                                          |     | 4   |     | 8     | 9     |       |       |       |       |       |                                            |  |  |
| GF                                          | DO       | 3S               | 34           | 5                     | 5          | 1.1                              |                                          |     |     | 5   |       |       |       |       |       |       |       |                                            |  |  |
| GF                                          | DO       | 3S               | 36           | 6                     | 6          | 1.3                              |                                          |     |     |     |       | 6     |       |       |       |       |       |                                            |  |  |
| GF                                          | DO       | 3S               | 40           | 17                    | 17         | 4.0                              |                                          |     |     | 5   | 12    |       |       |       |       |       |       |                                            |  |  |
| GF                                          | DO       | 4S               | 16           | 6                     | 6          | 1.3                              |                                          |     | 2   | 4   |       |       |       |       |       |       |       |                                            |  |  |
| GF                                          | DO       | 4S               | 18           | 2                     | 2          | .5                               |                                          |     |     | 2   |       |       |       |       |       |       |       |                                            |  |  |
| GF                                          | Totals   |                  |              | 452                   | 2.5        | 441                              | 9.7                                      |     | 6   | 16  | 20    | 37    | 82    | 177   | 38    | 26    | 39    |                                            |  |  |
| S                                           | DO       | 3S               | 40           | 82                    | 82         | 96.3                             |                                          |     |     |     |       |       | 23    |       | 59    |       |       |                                            |  |  |
| S                                           | DO       | 4S               | 16           | 3                     | 3          | 3.7                              |                                          |     |     | 3   |       |       |       |       |       |       |       |                                            |  |  |
| S                                           | Totals   |                  |              | 85                    | 85         | 1.9                              |                                          |     |     | 3   |       |       | 23    |       | 59    |       |       |                                            |  |  |
| M                                           | DO       | CU               | 3            | 2                     | 100.0      |                                  |                                          |     |     |     |       |       |       |       |       |       |       |                                            |  |  |
| M                                           | DO       | CR               | 16           | 9                     | 16.0       | 8                                | 14.0                                     |     | 1   | 1   |       |       | 5     |       |       |       |       |                                            |  |  |
| M                                           | DO       | CR               | 20           | 3                     | 20.0       | 3                                | 5.0                                      |     |     | 3   |       |       |       |       |       |       |       |                                            |  |  |
| M                                           | DO       | CR               | 32           | 23                    | 9.3        | 21                               | 39.0                                     | 1   | 3   |     |       | 8     | 9     |       |       |       |       |                                            |  |  |
| M                                           | DO       | CR               | 40           | 24                    | 4.7        | 23                               | 41.9                                     |     | 16  |     |       |       | 7     |       |       |       |       |                                            |  |  |

| TC                                          |             | PLOGSTVB      |            |                   |          |                   |          |                                          |     |     |     |       |       |       |       |       |       |       |     | Log Stock Table - MBF |  |           |  |     |  |    |  |  |  |
|---------------------------------------------|-------------|---------------|------------|-------------------|----------|-------------------|----------|------------------------------------------|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-----|-----------------------|--|-----------|--|-----|--|----|--|--|--|
| T05N R07W S22 TyTAKE<br>T05N R07W S22 TyR/W |             | 92.00<br>1.00 |            | Project:<br>Acres |          | TIDEPORT<br>93.00 |          |                                          |     |     |     |       |       |       |       |       |       |       |     | Page                  |  | 3         |  |     |  |    |  |  |  |
|                                             |             |               |            |                   |          |                   |          |                                          |     |     |     |       |       |       |       |       |       |       |     | Date                  |  | 7/24/2012 |  |     |  |    |  |  |  |
|                                             |             |               |            |                   |          |                   |          |                                          |     |     |     |       |       |       |       |       |       |       |     | Time                  |  | 8:49:47AM |  |     |  |    |  |  |  |
| S<br>T                                      | So<br>rt    | Gr<br>de      | Log<br>Len | Gross<br>MBF      | Def<br>% | Net<br>MBF        | %<br>Spc | Net Volume by Scaling Diameter in Inches |     |     |     |       |       |       |       |       |       |       |     |                       |  |           |  |     |  |    |  |  |  |
|                                             |             |               |            |                   |          |                   |          | 2-3                                      | 4-5 | 6-7 | 8-9 | 10-11 | 12-13 | 14-15 | 16-19 | 20-23 | 24-29 | 30-39 | 40+ |                       |  |           |  |     |  |    |  |  |  |
| M                                           | Totals      |               |            | 62                | 12.4     | 54                | 1.2      | 1                                        |     | 20  |     | 4     |       | 8     |       | 21    |       |       |     |                       |  |           |  |     |  |    |  |  |  |
| Total                                       | All Species |               |            | 4,688             | 2.8      | 4,556             | 100.0    | 6                                        |     | 265 |     | 254   |       | 361   |       | 545   |       | 536   |     | 1129                  |  | 946       |  | 436 |  | 77 |  |  |  |



| TC                                                     |   | PSTNDSUM |                 |           |          |                |             |              |               |               |               | Stand Table Summary   |                       |             |             |       |           |  |  |  |  | Page  |  | 1         |  |
|--------------------------------------------------------|---|----------|-----------------|-----------|----------|----------------|-------------|--------------|---------------|---------------|---------------|-----------------------|-----------------------|-------------|-------------|-------|-----------|--|--|--|--|-------|--|-----------|--|
|                                                        |   |          |                 |           |          |                |             |              |               |               |               |                       |                       |             |             |       |           |  |  |  |  | Date: |  | 7/24/2012 |  |
| T05N R07W S22 TyTAKE 92.00<br>T05N R07W S22 TyR/W 1.00 |   |          |                 |           | Project  |                |             |              |               | TIDEPORT      |               |                       |                       |             | Time:       |       | 8:52:23AM |  |  |  |  |       |  |           |  |
|                                                        |   |          |                 |           | Acres    |                |             |              |               | 93.00         |               |                       |                       |             | Grown Year: |       |           |  |  |  |  |       |  |           |  |
| S<br>Spec                                              | T | DBH      | Sample<br>Trees | Tot       |          | Trees/<br>Acre | BA/<br>Acre | Logs<br>Acre | Average Log   |               | Tons/<br>Acre | Net<br>Cu.Ft.<br>Acre | Net<br>Bd.Ft.<br>Acre | T o t a l s |             |       |           |  |  |  |  |       |  |           |  |
|                                                        |   |          |                 | FF<br>16' | Av<br>Ht |                |             |              | Net<br>Cu.Ft. | Net<br>Bd.Ft. |               |                       |                       | Tons        | Cunits      | MBF   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 12       | 2               | 92        | 67       | 3.855          | 3.03        | 3.86         | 21.0          | 70.0          |               | 81                    | 270                   |             | 75          | 25    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 13       | 6               | 87        | 59       | 9.855          | 9.08        | 16.42        | 13.6          | 44.0          |               | 223                   | 723                   |             | 208         | 67    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 14       | 2               | 89        | 83       | 2.832          | 3.03        | 5.66         | 17.0          | 55.0          |               | 96                    | 312                   |             | 90          | 29    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 15       | 2               | 83        | 56       | 2.467          | 3.03        | 2.47         | 27.0          | 60.0          |               | 67                    | 148                   |             | 62          | 14    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 17       | 2               | 88        | 75       | 1.921          | 3.03        | 3.84         | 25.5          | 90.0          |               | 98                    | 346                   |             | 91          | 32    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 18       | 6               | 87        | 97       | 5.140          | 9.08        | 10.28        | 34.0          | 118.3         |               | 350                   | 1,217                 |             | 325         | 113   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 19       | 2               | 89        | 113      | 1.538          | 3.03        | 4.61         | 29.7          | 116.7         |               | 137                   | 538                   |             | 127         | 50    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 20       | 2               | 86        | 125      | 1.388          | 3.03        | 4.16         | 34.7          | 126.7         |               | 144                   | 527                   |             | 134         | 49    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 21       | 4               | 86        | 105      | 2.518          | 6.06        | 5.04         | 47.8          | 165.0         |               | 240                   | 831                   |             | 224         | 77    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 22       | 2               | 85        | 120      | 1.147          | 3.03        | 3.44         | 41.0          | 176.7         |               | 141                   | 608                   |             | 131         | 57    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 23       | 2               | 86        | 116      | 1.049          | 3.03        | 3.15         | 42.0          | 163.3         |               | 132                   | 514                   |             | 123         | 48    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 24       | 12              | 85        | 130      | 5.783          | 18.17       | 17.35        | 50.9          | 203.3         |               | 884                   | 3,527                 |             | 822         | 328   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 25       | 2               | 89        | 141      | .888           | 3.03        | 2.66         | 61.7          | 266.7         |               | 164                   | 711                   |             | 153         | 66    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 26       | 6               | 87        | 133      | 2.464          | 9.08        | 7.39         | 62.7          | 260.0         |               | 463                   | 1,922                 |             | 431         | 179   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 27       | 6               | 88        | 128      | 2.285          | 9.08        | 6.85         | 65.8          | 295.6         |               | 451                   | 2,026                 |             | 419         | 188   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 28       | 10              | 87        | 144      | 3.540          | 15.14       | 11.33        | 72.5          | 345.0         |               | 821                   | 3,909                 |             | 764         | 364   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 29       | 2               | 86        | 138      | .660           | 3.03        | 1.98         | 74.3          | 330.0         |               | 147                   | 653                   |             | 137         | 61    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 30       | 4               | 85        | 169      | 1.234          | 6.06        | 4.32         | 82.9          | 394.3         |               | 358                   | 1,702                 |             | 333         | 158   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 31       | 8               | 86        | 132      | 2.311          | 12.11       | 7.51         | 80.2          | 370.8         |               | 603                   | 2,784                 |             | 560         | 259   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 32       | 6               | 87        | 134      | 1.626          | 9.08        | 4.88         | 92.4          | 422.2         |               | 451                   | 2,060                 |             | 419         | 192   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 33       | 2               | 83        | 148      | .510           | 3.03        | 1.53         | 103.0         | 473.3         |               | 158                   | 724                   |             | 146         | 67    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 34       | 6               | 85        | 147      | 1.441          | 9.08        | 4.80         | 100.7         | 487.0         |               | 484                   | 2,339                 |             | 450         | 218   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 36       | 2               | 82        | 128      | .428           | 3.03        | 1.29         | 110.3         | 496.7         |               | 142                   | 638                   |             | 132         | 59    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 37       | 2               | 83        | 146      | .406           | 3.03        | 1.22         | 129.3         | 630.0         |               | 157                   | 766                   |             | 146         | 71    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 38       | 2               | 83        | 105      | .384           | 3.03        | 1.15         | 77.7          | 386.7         |               | 90                    | 446                   |             | 83          | 41    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 39       | 2               | 84        | 146      | .365           | 3.03        | 1.09         | 146.7         | 720.0         |               | 161                   | 788                   |             | 149         | 73    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 40       | 6               | 88        | 144      | 1.041          | 9.08        | 3.12         | 158.8         | 818.9         |               | 496                   | 2,557                 |             | 461         | 238   |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 42       | 2               | 80        | 132      | .315           | 3.03        | .94          | 149.7         | 696.7         |               | 141                   | 658                   |             | 131         | 61    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | 47       | 2               | 86        | 158      | .251           | 3.03        | .75          | 154.3         | 893.3         |               | 116                   | 674                   |             | 108         | 63    |           |  |  |  |  |       |  |           |  |
| D                                                      |   | Totals   | 114             | 87        | 105      | 59.641         | 172.59      | 143.11       | 55.9          | 244.0         |               | 7,996                 | 34,917                |             | 7,436       | 3,247 |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 12       | 6               | 87        | 59       | 6.280          | 4.93        | 6.28         | 19.3          | 56.7          |               | 121                   | 356                   |             | 113         | 33    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 13       | 2               | 86        | 67       | 1.784          | 1.64        | 1.78         | 26.0          | 70.0          |               | 46                    | 125                   |             | 43          | 12    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 14       | 4               | 86        | 79       | 3.076          | 3.29        | 6.15         | 19.5          | 75.0          |               | 120                   | 461                   |             | 112         | 43    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 15       | 4               | 87        | 72       | 2.679          | 3.29        | 5.36         | 20.0          | 70.0          |               | 107                   | 375                   |             | 100         | 35    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 16       | 8               | 86        | 75       | 4.710          | 6.58        | 8.24         | 27.9          | 91.4          |               | 230                   | 754                   |             | 214         | 70    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 17       | 8               | 86        | 79       | 4.172          | 6.58        | 8.34         | 29.6          | 100.0         |               | 247                   | 834                   |             | 230         | 78    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 18       | 6               | 86        | 78       | 2.791          | 4.93        | 4.65         | 35.6          | 120.0         |               | 166                   | 558                   |             | 154         | 52    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 20       | 2               | 86        | 78       | .754           | 1.64        | 1.51         | 36.0          | 120.0         |               | 54                    | 181                   |             | 50          | 17    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 21       | 4               | 87        | 78       | 1.367          | 3.29        | 2.05         | 53.0          | 186.7         |               | 109                   | 383                   |             | 101         | 36    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 22       | 6               | 87        | 84       | 1.868          | 4.93        | 3.74         | 49.3          | 185.0         |               | 184                   | 691                   |             | 171         | 64    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 24       | 2               | 87        | 74       | .523           | 1.64        | 1.05         | 54.0          | 190.0         |               | 57                    | 199                   |             | 53          | 18    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | 28       | 2               | 86        | 82       | .384           | 1.64        | .77          | 78.0          | 315.0         |               | 60                    | 242                   |             | 56          | 23    |           |  |  |  |  |       |  |           |  |
| A                                                      |   | Totals   | 54              | 86        | 73       | 30.389         | 44.39       | 49.92        | 30.1          | 103.3         |               | 1,501                 | 5,160                 |             | 1,396       | 480   |           |  |  |  |  |       |  |           |  |
| GF                                                     |   | 21       | 2               | 85        | 131      | .961           | 2.31        | 2.88         | 44.0          | 190.0         |               | 127                   | 548                   |             | 118         | 51    |           |  |  |  |  |       |  |           |  |
| GF                                                     |   | 22       | 2               | 80        | 121      | .876           | 2.31        | 2.63         | 42.3          | 150.0         |               | 111                   | 394                   |             | 103         | 37    |           |  |  |  |  |       |  |           |  |
| GF                                                     |   | 24       | 2               | 91        | 125      | .736           | 2.31        | 2.21         | 56.3          | 253.3         |               | 124                   | 559                   |             | 116         | 52    |           |  |  |  |  |       |  |           |  |
| GF                                                     |   | 26       | 4               | 87        | 151      | 1.254          | 4.63        | 4.39         | 64.7          | 305.7         |               | 284                   | 1,342                 |             | 264         | 125   |           |  |  |  |  |       |  |           |  |
| GF                                                     |   | 27       | 2               | 86        | 166      | .582           | 2.31        | 2.33         | 65.0          | 325.0         |               | 151                   | 756                   |             | 141         | 70    |           |  |  |  |  |       |  |           |  |
| GF                                                     |   | 28       | 2               | 92        | 99       | .541           | 2.31        | 1.08         | 79.5          | 350.0         |               | 86                    | 379                   |             | 80          | 35    |           |  |  |  |  |       |  |           |  |
| GF                                                     |   | 42       | 2               | 89        | 148      | .240           | 2.31        | .72          | 198.7         | 1053.3        |               | 143                   | 760                   |             | 133         | 71    |           |  |  |  |  |       |  |           |  |
| GF                                                     |   | Totals   | 16              | 87        | 135      | 5.191          | 18.50       | 16.24        | 63.2          | 291.7         |               | 1,027                 | 4,738                 |             | 955         | 441   |           |  |  |  |  |       |  |           |  |

| TC    PSTNDSUM                                                                  |   | Stand Table Summary |                 |           |                     |                |             |              |               |                    |               | Page    2          |                |      |        |       |
|---------------------------------------------------------------------------------|---|---------------------|-----------------|-----------|---------------------|----------------|-------------|--------------|---------------|--------------------|---------------|--------------------|----------------|------|--------|-------|
|                                                                                 |   |                     |                 |           |                     |                |             |              |               |                    |               | Date:    7/24/2012 |                |      |        |       |
| <div>T05N R07W S22 TyTAKE    92.00</div> <div>T05N R07W S22 TyR/W    1.00</div> |   |                     |                 |           | Project    TIDEPORT |                |             |              |               | Time:    8:52:23AM |               |                    |                |      |        |       |
|                                                                                 |   |                     |                 |           | Acres    93.00      |                |             |              |               | Grown Year:        |               |                    |                |      |        |       |
| S<br>Sp                                                                         | T | Tot                 |                 |           |                     | Average Log    |             |              | Net    Net    |                    |               | T o t a l s        |                |      |        |       |
|                                                                                 |   | DBH                 | Sample<br>Trees | FF<br>16' | Av<br>Ht            | Trees/<br>Acre | BA/<br>Acre | Logs<br>Acre | Net<br>Cu.Ft. | Net<br>Bd.Ft.      | Tons/<br>Acre | Cu.Ft.<br>Acre     | Bd.Ft.<br>Acre | Tons | Cunits | MBF   |
| H                                                                               |   | 8                   | 2               | 85        | 20                  | 7.561          | 2.64        | 7.56         | 5.0           | 20.0               |               | 38                 | 151            |      | 35     | 14    |
| H                                                                               |   | 13                  | 2               | 88        | 71                  | 2.863          | 2.64        | 5.73         | 14.5          | 55.0               |               | 83                 | 315            |      | 77     | 29    |
| H                                                                               |   | 16                  | 2               | 88        | 82                  | 1.890          | 2.64        | 3.78         | 24.5          | 90.0               |               | 93                 | 340            |      | 86     | 32    |
| H                                                                               |   | 21                  | 2               | 85        | 92                  | 1.097          | 2.64        | 2.19         | 50.0          | 175.0              |               | 110                | 384            |      | 102    | 36    |
| H                                                                               |   | 24                  | 4               | 89        | 107                 | 1.680          | 5.28        | 4.20         | 59.6          | 238.0              |               | 250                | 1,000          |      | 233    | 93    |
| H                                                                               |   | 28                  | 2               | 86        | 112                 | .617           | 2.64        | 1.23         | 76.0          | 390.0              |               | 94                 | 481            |      | 87     | 45    |
| H                                                                               |   | 29                  | 1               | 81        | 124                 | .006           | .03         | .01          | 30.0          | 70.0               |               | 0                  | 0              |      | 0      | 0     |
| H                                                                               |   | Totals              | 15              | 86        | 55                  | 15.714         | 18.50       | 24.70        | 27.0          | 108.2              |               | 667                | 2,672          |      | 621    | 248   |
| S                                                                               |   | 30                  | 2               | 82        | 121                 | .837           | 4.11        | 2.51         | 85.7          | 363.3              |               | 215                | 912            |      | 200    | 85    |
| S                                                                               |   | Totals              | 2               | 82        | 121                 | .837           | 4.11        | 2.51         | 85.7          | 363.3              |               | 215                | 912            |      | 200    | 85    |
| M                                                                               |   | 12                  | 4               | 87        | 67                  | 2.624          | 2.06        | 2.62         | 23.0          | 65.0               |               | 60                 | 171            |      | 56     | 16    |
| M                                                                               |   | 16                  | 2               | 87        | 26                  | .738           | 1.03        | 1.48         | 9.5           | 20.0               |               | 14                 | 30             |      | 13     | 3     |
| M                                                                               |   | 18                  | 4               | 86        | 62                  | 1.166          | 2.06        | 2.33         | 25.8          | 80.0               |               | 60                 | 187            |      | 56     | 17    |
| M                                                                               |   | 20                  | 2               | 87        | 36                  | .472           | 1.03        | .47          | 32.0          | 30.0               |               | 15                 | 14             |      | 14     | 1     |
| M                                                                               |   | 22                  | 2               | 86        | 65                  | .390           | 1.03        | .78          | 41.0          | 140.0              |               | 32                 | 109            |      | 30     | 10    |
| M                                                                               |   | 28                  | 2               | 86        | 66                  | .241           | 1.03        | .24          | 108.0         | 310.0              |               | 26                 | 75             |      | 24     | 7     |
| M                                                                               |   | Totals              | 16              | 87        | 58                  | 5.632          | 8.24        | 7.93         | 26.2          | 73.8               |               | 208                | 585            |      | 193    | 54    |
| Totals                                                                          |   |                     | 217             | 87        | 89                  | 117.405        | 266.33      | 244.41       | 47.5          | 200.4              |               | 11,614             | 48,984         |      | 10,801 | 4,556 |

