### Beltrami County NRM Timber Appraisal

Page: 1 of 3

Appraised By:

Sale Type:

Appraisal Number: Air Fryer Aspen NP

Corey Campbell

Appraisal Date:

REGULAR AUCTION SALE
Auction Date: 04/04/2024

Permit Number: 224014 Expiration Date: 04/04/2026

01/23/2024

Access:

Public Access

**Legal Description** 

| _                            |               |              |            |           |            |  |        |            |  |
|------------------------------|---------------|--------------|------------|-----------|------------|--|--------|------------|--|
| RE Code                      | Sec.          | Twp.         | Rge.       | School    | City/Twp   | <u>Subd</u>                                    |        |            |  |
| 200000100                    | 1             | 146          | 35         | 31        | Jones      | SE 1/4 NE 1/4                                  |        |            |  |
| 150014500                    | 6             | 146          | 34         | 31        | Grant Vall | ey NW 1/4 SW 1/4                               |        |            |  |
| 200001100                    | 1             | 146          | 35         | 31        | Jones      | NW 1/4 SE 1/4                                  |        |            |  |
| 150013900                    | 6             | 146          | 34         | 31        | Grant Vall | ey NE 1/4 NE 1/4                               |        |            |  |
| 150013900                    | 6             | 146          | 34         | 31        | Grant Vall | ey NE 1/4 NE 1/4                               |        |            |  |
| Block 1 Species              | <u>Volume</u> | <u>Units</u> | Unit Price | <u>Va</u> | <u>lue</u> | Comments                                       | Bolt % | <u>Bid</u> |  |
| Aspen pulp                   | 750           | Cords        | \$25.00    | \$18,     | 750.00     | 2-6 stick, 10.5 avg DBH                        |        | ٨          |  |
| Red Pine Pulp &<br>Bolts     | 75            | Cords        | \$28.00    | \$2,      | 100.00     |  | 70     | ٨          |  |
| Jack Pine Pulp &<br>Bolts    | 40            | Cords        | \$20.00    | \$        | 800.00     |  |        | ٨          |  |
| Mixed Hardwoods              | 80            | Cords        | \$10.00    | \$        | 800.00     | 85% Bur oak, small amount of birch, ash, maple |        | +          |  |
| White Spruce<br>Pulp & Bolts | 5             | Cords        | \$10.00    | ;         | \$50.00    | Includes 1 cord of balsam fir                  |        | +          |  |

\$22,500.00

Subtotal

Total Cords: 950 Total MBF: 0

\$22,500.00 Total

\$3,375.00

15% Down Payment

Bid Symbols: ^ = Bid Species; # = Non-Bid Species; + = Sold Area Estimate; \* = Sold Area Estimate & Non-Bid Species All species woodsrun unless listed otherwise.

Species Scaled:

Aspen pulp, Jack Pine Pulp & Bolts, Red Pine Pulp & Bolts

Species SAE:

Mixed Hardwoods, White Spruce Pulp & Bolts

Operability:

Firm or frozen ground

Soil Type:

loamy sand

Topography:

flat

Acres:

44

**DRAIN** 

Type:

Acres Cut:

REGULAR AUCTION SALE

44.00

Total: 44.00

#### **Harvest Specifications**

### Access

Sale is located in NE corner of Jones Township and NW corner of Grant Valley Township. Forest roads and old pipeline run through sale blocks. Accessible from Northwoods Rd NW or Buttercup Ln NW. Coordinates: -95.057222 47.491962

### **Cutting and Skidding**

Sale is primarily an aspen clearcut with reserves across multiple blocks; one block is an intermediate pine thin. Cut all species listed on appraisal. Reserve clumps of non-merchantable ash, birch, and balsam where possible.

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#### **Harvest and Reserves**

Blue paint boundary. Reserve all white pine, elm, blue painted trees, dead & den trees, and non-hazardous snags. Block #1 – Aspen clearcut w/blue painted reserves. Block #3 – Red pine intermediate thin w/blue painted leave trees. Block #4 – Aspen w/small amount of jack pine, clearcut w/blue painted reserves. Block #5 – Aspen w/small amount of jack pine, clearcut w/blue painted reserves.

#### Landings, Access Roads, and Skid Trails

Road network through most of sale blocks. Blocks #4 & #5 are located on either side of Enbridge pipeline, with county forest roads/trails in each direction. County will provide 150 yards of gravel or equivalent material for roads. Use any preexisting skid trails and landings. Private land adjacent to Block #2, if private wood is harvested during keep all piled wood and landings separate.

#### Site, Soil, and Water Protection

Wetlands present in and around various blocks. Block #1 is very low lying, should be harvested during frozen or very dry, firm conditions. Block #4 has wetland adjacent to SW corner of stand, minimize scarification along edge. Block #5 has RMZ along west edge and is flagged with pink ribbon, only harvest aspen and jack pine within RMZ.

#### Slash Disposal

Scatter slash.

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Page: 3 of 3

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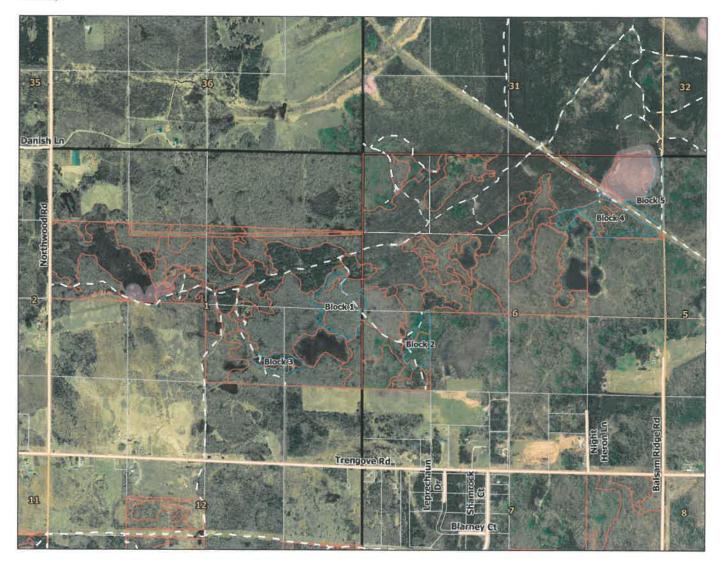
Public Access

Appraisal Number: Air Fryer Aspen NP

**Permit Number:** 

Expiration Date: 04/04/2026

#### Site Map:



Appraisal examined and approved by

Appraisal examined and approved by

Forester

Land Department

2/15/24

Date

16/24

Date

| Timber Sale Name:          | Air Fryer Aspen NP  |  |             |               |              |             |                      |  |  |  |
|----------------------------|---|--|-------------|---------------|--------------|-------------|----------------------|--|--|--|
| Description:               |   |  |             |               |              |             |                      |  |  |  |
| RE Code                    | Sec.  | Twp.   | Rge.        | <u>School</u> | City/Twp     |             | <u>Subd</u>          |  |  |  |
| 200000100                  | 1   | 146  | 35          | 31            | Jones        |             | SE 1/4 NE 1/4        |  |  |  |
| 150014500                  | 6   | 146  | 34          | 31            | Grant Valley |             | NW 1/4 SW 1/4        |  |  |  |
| 200001100                  | 1   | 146  | 35          | 31            | Jones        |             | NW 1/4 SE 1/4        |  |  |  |
| 150013900                  | 6   | 146  | 34          | 31            | Grant Valley |             | NE 1/4 NE 1/4        |  |  |  |
| 150013900                  | 6   | 146  | 34          | 31            | Grant Valley |             | NE 1/4 NE 1/4        |  |  |  |
| Block:                     | 1   |  |             |               |              |             |                      |  |  |  |
| Stand Details              |   |  |             |               |              |             |                      |  |  |  |
| Section Townsh             | ip Ran  | ige T  | imber Type  |               | Stand Age    | NPC         | Harv Meth Desc       |  |  |  |
| 1 146                      | 3   |  | 12          | 13            | 49           | MHn44       | Clear Cut w/Reserves |  |  |  |
| *NPC                       | MHn44   | - Northe   | rn Wet-Mesi | c Boreal F    | lardwood-Con | ifer Forest |                      |  |  |  |
| No Basal Data              |   |  |             |               |              |             |                      |  |  |  |
| Current Site<br>Conditions | compon  | Current CTYPE is aspen, with SI 74, and overall BA of 130 sq.ft./ac. Aspen stand with small components of bur oak and birch, very homogenous and tall. |             |               |              |             |                      |  |  |  |
| Timber Objectives          | Stand is a 49 year-old aspen. Silvicultural objective is a clearcut with reserves to harvest aspen and regenerate the site through root suckering.  |  |             |               |              |             |                      |  |  |  |
| Regeneration               | Aspen root suckering will regenerate the stand.   |  |             |               |              |             |                      |  |  |  |
| Wetlands                   | No wetlands present within sale boundary. Wetland adjacent to west edge of stand, topography is very low lying in this block, should be harvested during frozen or very dry, firm conditions. |  |             |               |              |             |                      |  |  |  |
| Soil Types                 | Morph fi  | Morph fine loamy sand  |             |               |              |             |                      |  |  |  |
| Environmental<br>Impact    | Harvest will occur under firm or frozen conditions to minimize impact.  |  |             |               |              |             |                      |  |  |  |
| Visual Sensitivity         | There are no visual concerns for this harvest area.   |  |             |               |              |             |                      |  |  |  |
| Natural Heritage           | Database was checked and no resources found.  |  |             |               |              |             |                      |  |  |  |
| Cultural Resources         | Databas   | Database was checked and no resources found.   |             |               |              |             |                      |  |  |  |
| Block:                     | 2   |  |             |               |              |             |                      |  |  |  |
| Stand Details              |   |  |             |               |              |             |                      |  |  |  |
| Section Townsh             | ip Rar  | nge T  | imber Type  | Acres         | Stand Age    | NPC         | Harv Meth Desc       |  |  |  |
| 6 146                      | 3   | 4  | 12          | 6             | 50           | FDc23       | Clear Cut w/Reserves |  |  |  |
| *NPC                       | FDc23 -   | Central  | Dry Pine W  | oodland       |              |             |                      |  |  |  |
| No Basal Data              |   |  |             |               |              |             |                      |  |  |  |
| Current Site<br>Conditions | Current CTYPE is aspen, with SI 69, and overall BA of 130 sq.ft./ac. Mixed aspen stand with a wide range of size and diameter, and small components of bur oak and birch.                     |  |             |               |              |             |                      |  |  |  |
| Timber Objectives          |   | Stand is a 50 year-old aspen. Silvicultural objective is a clearcut with reserves to harvest aspen and regenerate the site through root suckering.     |             |               |              |             |                      |  |  |  |
| Regeneration               | Aspen r   | Aspen root suckering will regenerate the stand.  |             |               |              |             |                      |  |  |  |
| Wetlands                   | Small seasonal wetland present on east edge of block, no operations in wetland, minimize scarification in filter strip.   |  |             |               |              |             |                      |  |  |  |

<sup>\*</sup> Cited from: MNDNR (2003). Field Guide to the Native Plant Communities of Minnesota: the Laurentian Mixed Forest Province. Ecological Land Classification asdfasdf

| Soil Types  | Karlstad loam<br>Hamre muck | Karlstad loamy sand<br>Hamre muck                                      |  |                |             |  |  |  |  |  |
|---|-----------------------------|--|--|----------------|-------------|--|--|--|--|--|
| Environmental<br>Impact   | Harvest will o              | Harvest will occur under firm or frozen conditions to minimize impact. |  |                |             |  |  |  |  |  |
| Visual Sensitivity  | There are no                | visual concerns  | for this ha  | arvest area.   |             |  |  |  |  |  |
| Natural Heritage  | Database wa                 | s checked and n  | o resourc  | es found.      |             |  |  |  |  |  |
| Cultural Resource   | Database wa                 | s checked and n  | o resourc  | es found.      |             |  |  |  |  |  |
| Block:  | 3                           | 3  |  |                |             |  |  |  |  |  |
| Stand Details   |                             |  |  |                |             |  |  |  |  |  |
| Section Towns   | hip Range                   | Timber Type  | Acres  | Stand Age      | NPC         | Harv Meth Desc   |  |  |  |  |
| 1 146   | 35                          | 52   | 4  | 69             | FDc23       | Intermediate Thin  |  |  |  |  |
| *NPC  | FDc23 - Cent                | tral Dry Pine Wo   | odland   |                |             |  |  |  |  |  |
| No Basal Data   |                             |  |  |                |             |  |  |  |  |  |
| Current Site<br>Conditions  | must have be overly dense   | een planted but n<br>in areas.   | ever thini   | ned. Many tal  | l, straight | sq.ft./ac. Older red pine stand that trees of various diameters, and |  |  |  |  |
| Stand is a 69 year-old red pine. Silvicultural objective is an intermediate thinning, removing n of the declining trees, while retaining individuals with good live crown, and a target residual larea of 50-60 sq ft per acre. Stand appears to have never been thinned resulting in dense, overcrowded stand with many trees visibly declining and having weak crown. |                             |  |  |                |             | e crown, and a target residual basal en thinned resulting in dense,  |  |  |  |  |
| Wetlands  | No wetlands                 | No wetlands present within sale boundary.                              |  |                |             |  |  |  |  |  |
| Soil Types  | Andrusia loai               | Andrusia loamy sand  |  |                |             |  |  |  |  |  |
| Environmental Harvest will occur under firm or frozen conditions to minimize impact.  |                             |  |  |                |             | impact.  |  |  |  |  |
| Visual Sensitivity  | There are no                | There are no visual concerns for this harvest area.                    |  |                |             |  |  |  |  |  |
| Natural Heritage  | Database wa                 | Database was checked and no resources found.                           |  |                |             |  |  |  |  |  |
| Cultural Resource   | s Database wa               | Database was checked and no resources found.                           |  |                |             |  |  |  |  |  |
| Block:  | 4                           |  |  |                |             |  |  |  |  |  |
| Stand Details   |                             |  |  |                |             |  |  |  |  |  |
| Section Towns   | hip Range                   | Timber Type  | Acres  | Stand Age      | NPC         | Harv Meth Desc   |  |  |  |  |
| 6 146   | 34                          | 12   | 13   | 55             | FDc23       | Clear Cut w/Reserves   |  |  |  |  |
| *NPC  | FDc23 - Cen                 | tral Dry Pine Wo   | odland   |                |             |  |  |  |  |  |
| No Basal Data   |                             |  |  |                |             |  |  |  |  |  |
| Current Site Conditions   | of bur oak ar               | nd jack pine.  |  |                |             | q.ft./ac. Aspen stand with components                                |  |  |  |  |
| Timber Objectives Stand is a 55 year-old aspen. Silvicultural objective is a clearcut with reserves to harvest aspand regenerate the site through root suckering.   |                             |  |  |                |             | cut with reserves to harvest aspen                                   |  |  |  |  |
| Regeneration  |                             | Aspen root suckering will regenerate the stand.                        |  |                |             |  |  |  |  |  |
| 141-41  | Madand adia                 | amout to posith ad   | Wetland adjacent to south edge of stand, topography is low lying in this block, should be harvested during frozen or very dry, firm conditions. Blue paint line is along filter strip, minimize scarification. |                |             |  |  |  |  |  |
| Wetlands  | during frozer               | or very dry, firm  | condition  | ns. Blue paint | line is ald | ong filter strip, minimize scarification.                            |  |  |  |  |

<sup>\*</sup> Cited from: MNDNR (2003). Field Guide to the Native Plant Communities of Minnesota: the Laurentian Mixed Forest Province. Ecological Land Classification asdfasdf

| OTAND HARVEOT FILESCHII FICHS  |         |  |                 |            |           |       |                      |  |  |
|--|---------|--|-----------------|------------|-----------|-------|----------------------|--|--|
| Environment<br>Impact  | tal     | Harvest will occur under firm or frozen conditions to minimize impact.   |                 |            |           |       |                      |  |  |
| Visual Sensitivity There are no visual concerns for this harvest area. |         |  |                 |            |           |       |                      |  |  |
| Natural Heritage Database was checked and no resources found.          |         |  |                 |            |           |       |                      |  |  |
| Cultural Res   | ources  | Database was   | checked and n   | o resource | es found. |       |                      |  |  |
| Block:   |         | 5  |                 |            |           |       |                      |  |  |
| Stand Detail   | s       |  |                 |            |           |       |                      |  |  |
| Section 7  | Townshi | p Range  | Timber Type     | Acres      | Stand Age | NPC   | Harv Meth Desc       |  |  |
| 6  | 146     | 34   | 12              | 6          | 66        | FDc23 | Clear Cut w/Reserves |  |  |
| *NPC   |         | FDc23 - Centr  | al Dry Pine Woo | odland     |           |       |                      |  |  |
| No Basal Data  | а       |  |                 |            |           |       |                      |  |  |
| Current Site<br>Conditions   |         | Current CTYPE is jack pine, with SI 61, and overall BA of 100 sq.ft./ac. Aspen stand with components of aspen, bur oak, and birch. Old jack pine stand, could be considered an aspen stand. Appears to have deteriorated over time and converted itself to aspen and hard woods; a few clumps of jack pine and some larger older red pine are present. |                 |            |           |       |                      |  |  |
| Timber Obje  | ctives  | Stand is a 66 year-old jack pine and aspen. Silvicultural objective is a clearcut with reserves to harvest aspen and regenerate the site through root suckering.   |                 |            |           |       |                      |  |  |
| Regeneratio  | n       | Aspen root suckering will regenerate the stand.  |                 |            |           |       |                      |  |  |
| Riparian   |         | RMZ is present along the west edge and northwest corner of the stand. RMZ is flagged in pink ribbon, harvest all aspen and jack pine within flagged area, reserve all other species. Total flagged RMZ is approximately 1 acre.  |                 |            |           |       |                      |  |  |
| Soil Types   |         | Andrusia loamy sand  |                 |            |           |       |                      |  |  |
| Environmen<br>Impact   | tal     | Harvest will occur under firm or frozen conditions to minimize impact.   |                 |            |           |       |                      |  |  |
| Visual Sensi   | itivity | There are no visual concerns for this harvest area.  |                 |            |           |       |                      |  |  |
| Natural Heri   | tage    | Database was checked and no resources found.   |                 |            |           |       |                      |  |  |
| Cultural Res   | ources  | Database was checked and no resources found. Wetland polygon directly west of the sale has an archaeological feature at the Enbridge pipeline right of way, in the marsh. No operations outside of blue paint boundary, access and hauling will likely be from the east and opposite this area.  |                 |            |           |       |                      |  |  |

### **Harvest Methods**

Clear Cut w/Reserves

retain marked or designated trees or clumps (Clear Cut)

**Intermediate Thin** 

Thin as designated (Thinning)

# **Prevention Techniques for Bark Beetles**

Applies to thinning, road building, or construction operations and blow-down in pine stands and plantations during any time of year:

- · Avoid wounding the living, residual pines.
- Slash smaller than 2-3 inches in diameter can be left in the stand if scattered and not piled.
   Do not lop off the green branches.

| Safest and easiest                                       | If cutting occurs from September 1 to November 30:  May leave slash on site  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Risky for bark beetles and blue staining of cut products | If cutting occurs from December 1 to May 31  All cut pine material > 3 inches and pine logs must be removed or destroyed before <i>June 1</i> .          |  |  |  |  |  |
| Very risky   | If cutting occurs from June 1 to August 31  All cut pine material > 3 inches and pine logs must be removed or destroyed within 3 weeks of being created. |  |  |  |  |  |