



# Compartment Review Presentation

## Shingleton Forest Management Unit

Compartment 41187

Entry Year 2022

Acreage: 1,380

County Alger

Management Area: Cusino Complex

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**Revision Date:** 2020-05-08

**Stand Examiner:** Steve Touvila

### Legal Description:

T46N-R17W, Sections 10, 11, 14, 15 and 23

### Identified Planning Goals:

This compartment falls within the Cusino Complex Management Area. Manage the compartment in accordance with the principles of sustainable forest management for multiple resource values

### Soil and topography:

### Ownership Patterns, Development, and Land Use in and Around the Compartment:

### Unique Natural Features:

Wood turtle (*Clemmys insculpta*, state special concern) could occur in and along Star Creek. See the Species Abstract on the web access for more detailed information on wood turtles. The prescribed treatments in this compartment are unlikely to adversely impact this species if best management practices are followed along these riparian corridors.

There is also potential for nesting red-shouldered hawk (*Buteo lineatus*, state threatened) and Northern goshawks (*Accipiter gentilis*, state special concern) to occur throughout this compartment in stands of northern hardwoods, mixed swamp conifer, and swamp hardwoods. For more specific information on these species' habitat and ecology and for management recommendations please refer to the General Comments section of this document. Please also see the Species Abstract section of this document in which we have provided the web access for more detailed information on these rare raptors. Please refer to the Species Abstract section for the web access for more detailed information on the mesic northern forest community.

### Archeological, Historical, and Cultural Features:

### Special Management Designations or Considerations:

### Watershed and Fisheries Considerations:

Fisheries Values

Good. Both the Star Creek system and Metser Creek are classified SQCW, capable of supporting native brook trout.

### Wildlife Habitat Considerations:

Compartment 187 lies within south eastern Alger county in the Grand Marais Sandy End Moraine and Outwash sub-subsection and is a part of the Cusino Complex Management area with American marten, moose, black bear, gray jay, northern goshawk, and white-tailed deer as featured species. The growing season is approximately 130 days. Extreme low winter temperatures near -35 degrees F and average annual snowfalls of 180 inches or more are common.

Pre-settlement vegetation was dominated by sugar maple, hemlock, yellow birch, white pine, balsam fir, ironwood and beech in the uplands. Lowlands were dominated by cedar, tamarack, black spruce, elm, and black ash. Windthrow and beaver ponding were most likely the dominant forms of natural disturbance. Current vegetation appears to be similar to what was noted in the land survey work done in the 1850's. Uplands are dominated by sugar maple, hemlock, beech, and yellow birch, with white pine mixed in. Lowlands contain primarily cedar.

Wildlife habitat management objectives include maintaining high biodiversity values within harvested stands. In northern hardwood stands, management will focus on the maintenance of mature trees, coarse woody debris, forest structure, hard and soft mast producers and mesic conifer retention. The Petrel deer wintering complex lies within portions of this compartment so management for closed canopy lowland conifers and regenerating these species when possible will continue. Management of young successional forest types for browse and in stand retention of boreal forest types is also a

priority. Maintaining herbaceous open lands within this compartment is also a priority. Other wildlife species of interest include gray wolf, bobcat, fisher, spruce grouse, red-breasted nuthatch, pileated woodpecker, and saw-whet owls.

### **Mineral Resource and Development Concerns and/or Restrictions**

Surface sediments consist of medium-textured glacial till and peat and muck. There is insufficient data to determine the glacial drift thickness. The Ordovician Prairie du Chien (PdC) subgroups below the glacial drift. The PdC could be used for stone. The nearest gravel pit (quarry?) is in the SW of Section 14. There appears to be gravel potential on State lands along the west and south compartment boundaries.

### **Vehicle Access:**

Vehicle access is limited in this compartment. The entire western edge of the compartment is accessible by a two track road. The eastern edge is accessible from the south for approximately 1.2 miles.

### **Survey Needs:**

None at this time.

### **Recreational Facilities and Opportunities:**

Star creek provides the opportunity for brook trout fishing.

### **Fire Protection:**

Fire equipment access is limited in this compartment. The majority of the compartment is cedar and other lowland types with scattered hardwood stands. Fire activity is low with a low chance of significant spread.

### **Additional Compartment Information:**

The following reports from the Inventory are attached:

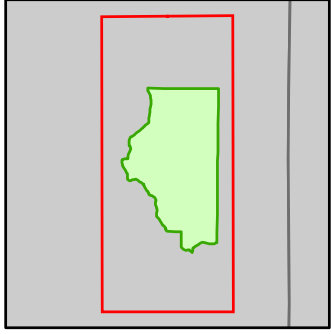
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

The following information is displayed, where pertinent, on the attached compartment maps:

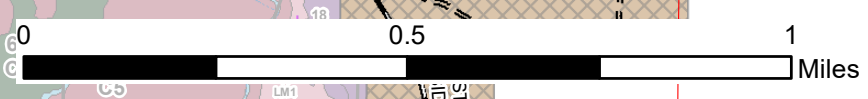
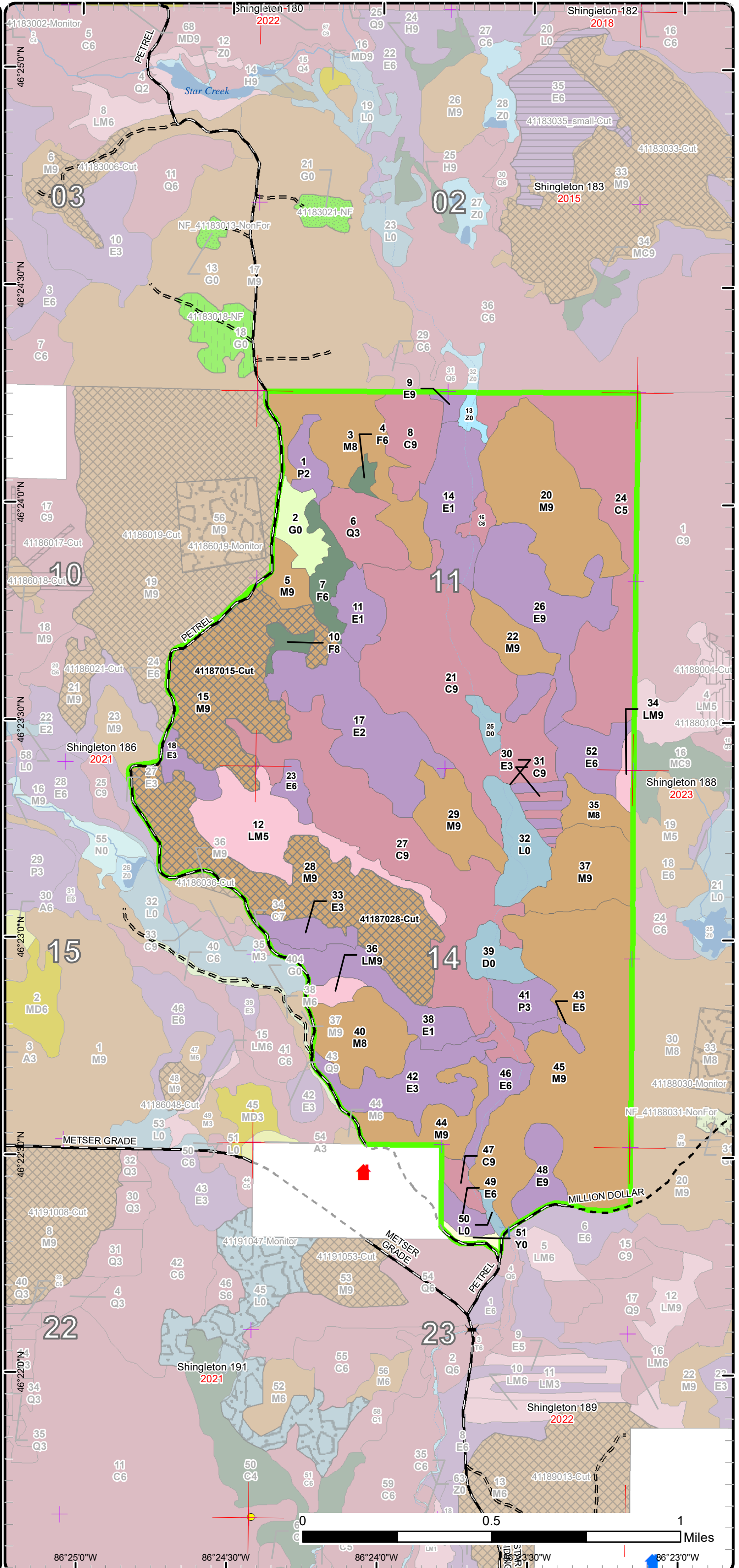
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments Map

Compartment: 187  
 T46N,R17W, Sec: 10, 11, 14, 15, 23  
 County: Alger  
 Unit: Shingleton  
 Mgmt Area: Cusino Complex  
 YOE: 2022  
 Acres: 1,380 GIS Calculated  
 Examiner: Steve Touvila  
 Map Revised: 8/25/2020  
 Map Phase: Web Post



- Miris Corners
- + Remonumented Section Corners
- Survey Grade Corners
- Counties
- DNR - Primary Forest Road
- DNR - Forest Access Route
- Federal / State - Dirt / Gravel Road
- Private - Dirt / Gravel Road
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- ▲ Cabin
- House
- Bridges
- Culvert
- Compartment Boundary
- Selection (Group, Single Tree)
- 411 - Northern Hardwood
- 423 - Other Upland Conifers
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- 613 - Lowland Mixed Forest
- 310 - Herbaceous Openland
- 500 - Water
- 622 - Lowland Shrub
- 710 - Sand/Soil

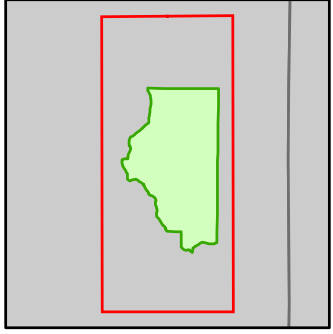


86°25'0"W 86°24'30"W 86°24'0"W 86°23'30"W 86°23'0"W

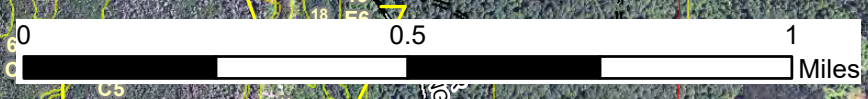
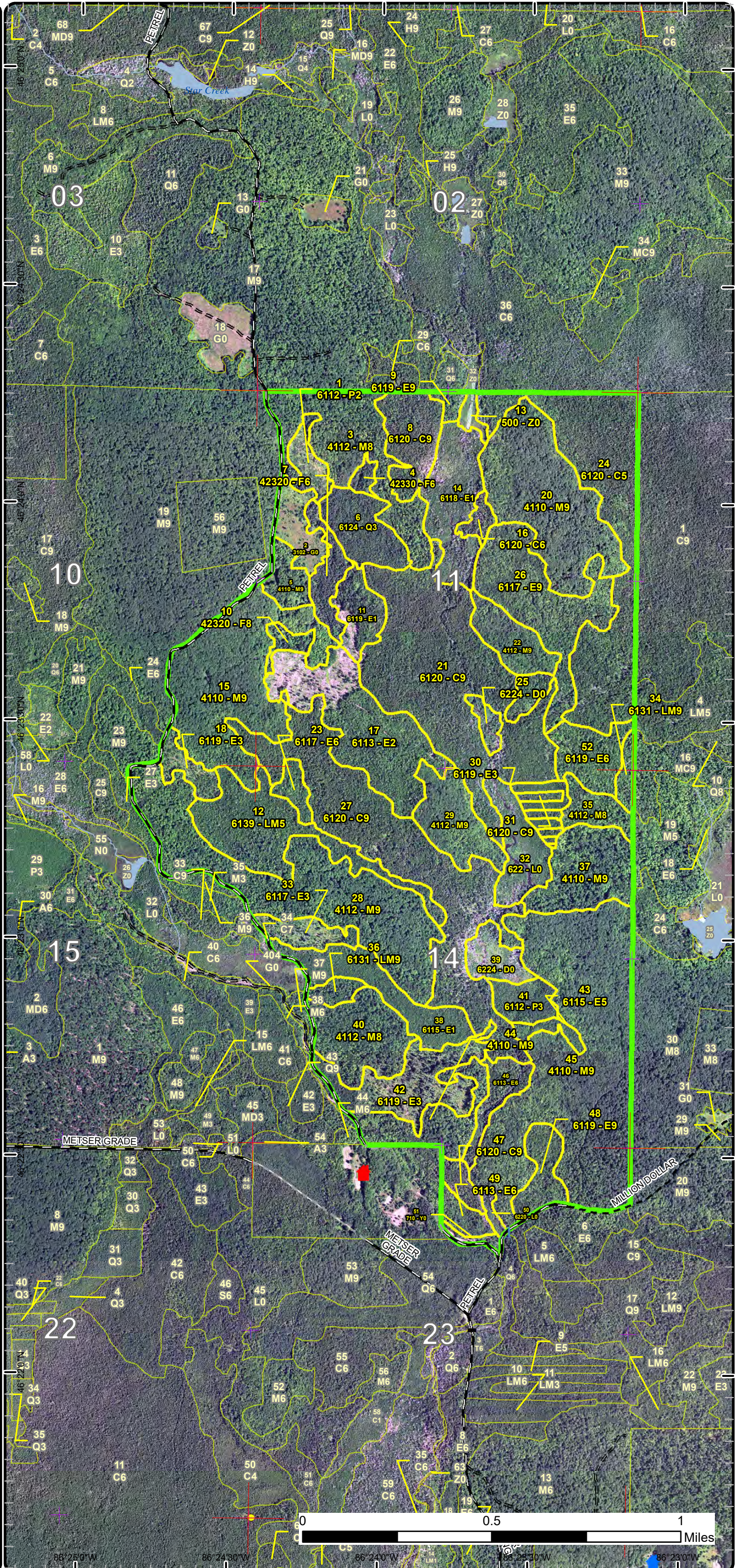


# Stand Boundary Map

Compartment: 187  
 T46N,R17W, Sec: 10, 11, 14, 15, 23  
 County: Alger  
 Unit: Shingleton  
 Mgmt Area: Cusino Complex  
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- Miris Corners
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- Counties
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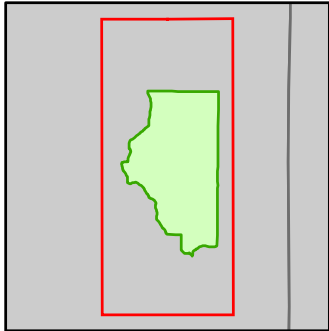


86°25'0"W 86°24'30"W 86°24'0"W 86°23'30"W 86°23'0"W

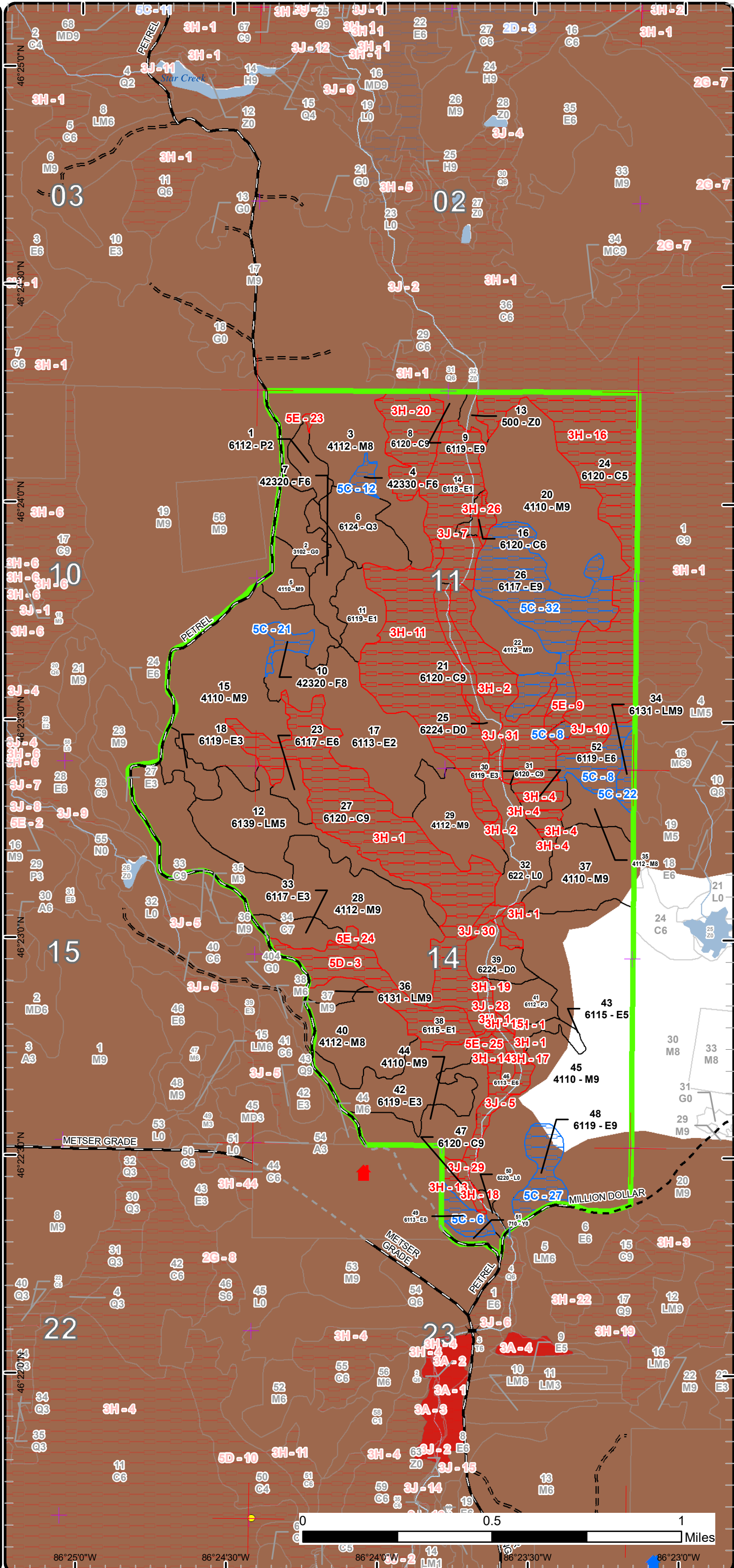


# Special Conservation Areas

Compartment: 187  
 T46N,R17W, Sec: 10, 11, 14, 15, 23  
 County: Alger  
 Unit: Shingleton  
 Mgmt Area: Cusino Complex  
 YOE: 2022  
 Acres: 1,380 GIS Calculated  
 Examiner: Steve Touvila  
 Map Revised: 8/25/2020  
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- Miris Corners
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- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Cabin
- House
- Bridges
- Culvert
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 3J: Water quality / BMPs (stream, river, or lake)
- 5D: Unproductive Forest Land
- 5E: Long-Term Retention
- Stand Boundaries
- Ecological Reference Areas
- Cold Water Streams
- Cold Water Lakes
- Deer Winter Range



Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Cedar	0	0	0	0	0	0	0	0	0	0	83	0	6	235	9	0	0	0	332
Herbaceous Openland	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Lowland Aspen/Balsam Poplar	0	9	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Conifers	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Lowland Deciduous	0	123	0	32	0	6	28	5	17	93	0	0	0	0	0	0	0	3	307
Lowland Mixed Forest	0	0	0	0	0	0	0	0	43	5	0	0	0	0	0	0	0	5	53
Lowland Shrub	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Northern Hardwood	0	0	0	0	0	0	0	0	0	407	23	0	0	0	0	0	0	140	569
Sand, Soil	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Treed Bog	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Upland Spruce/Fir	0	0	0	0	0	0	13	8	0	0	0	0	0	0	0	0	0	0	20
Water	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>Total</b>	<b>58</b>	<b>132</b>	<b>0</b>	<b>32</b>	<b>32</b>	<b>6</b>	<b>41</b>	<b>13</b>	<b>60</b>	<b>505</b>	<b>106</b>	<b>0</b>	<b>6</b>	<b>235</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>148</b>	<b>1379</b>



## Report 2 – Treatment Summary

Shingleton Mgt. Unit

Year of Entry: 2022

Acres of Harvest

Compartment 187

Total Compartment Acres: 1,380

Commercial Harvest - 166  
 Harvests with Site Condition - 0  
 Next Step Harvest - 0  
 Habitat Cut - 0

### Cover Type by Harvest Method

		Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Northern Hardwood		0	166	0	0	0	0	0	0	0	166
	<b>Total</b>	<b>0</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>166</b>

### Proposed and Next Step Treatments by Method

		Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current		166	0	0	0	0	0	0	0	0	166
Next Step		0	0	0	0	0	166	0	0	0	166
	<b>Total</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>333</b>



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
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**Proposed Treatments:**

<b>15</b>	<b>41187015-Cut</b>	73.9	4110 - Sugar Maple Association	Sawtimber Well	87	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	No
<p><u>Prescription</u> Thin to average 80 BA and create regeneration canopy gaps following the complete marker. Don't cut hemlock. Open up around the drip line of hemlock if possible.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> sugar maple, red maple, yellow birch, paper birch, hemlock, balsam fir, white spruce, white pine.</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2021</p>											
<b>28</b>	<b>41187028-Cut</b>	92.5	4112 - Maple, Beech, Cherry Association	Sawtimber Well	90	111-140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	No
<p><u>Prescription</u> Single tree selection to an average 80 BA creating canopy openings for the advanced regeneration following the complete marker. Open up around the drip lines of some of the hemlock if possible. Don't cut hemlock.</p> <p><u>Specs:</u></p> <p><u>Next Step</u> Monitoring, Natural Regen (Re-Inventory)</p> <p><u>Treatments:</u></p> <p><u>Acceptable Regen:</u> sugar maple, red maple, yellow birch, paper birch, white spruce, hemlock, balsam fir, white pine</p> <p><u>Other Comment:</u></p> <p><u>Site Condition</u></p> <p><u>Proposed Start Date:</u> 10/1 /2021</p>											

**Total Treatment Acreage Proposed: 166.4**



## Report 4 – Site Conditions

Shingleton Mgt. Unit  
Steve Touvila : Examiner

Compartment: 187  
Year of Entry: 2022

### Availability for Management

Total Acres	Acres Available	Acres Avail		Acres Not Available		Dominant Site Conditions				
		With Condition				5C	3H	3J	5D	5E
333	0	0		333	Cedar		311	21		
13	13	0		0	Herbaceous Openland					
20	19	0		1	Lowland Aspen/Balsam Poplar			0		1
20	20	0		0	Lowland Conifers					
306	142	87		78	Lowland Deciduous	87	0	45	28	5
53	48	5		0	Lowland Mixed Forest	5				
23	23	0		0	Lowland Shrub		0			
569	569	0		0	Northern Hardwood		0	0		
3	3	0		0	Sand, Soil					
16	16	0		0	Treed Bog		0	0		
20	13	8		0	Upland Spruce/Fir	8				
3	3	0		0	Water			0		
1,380	869	100		411	Total Forested Acres	100	312	67	28	5
	63%	7%		30%	Relative Percent					

*\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	91	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Part of Petrel deeryard.							
2	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	33	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



## Report 4 – Site Conditions

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Year of Entry: 2022

3	<b>Unavailable</b>	<b>5D: Unproductive Forest Land</b>	28	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	<b>Unavailable</b>	<b>3H: Deer Wintering Area - habitat is incompatible with harvest at this time</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
5	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	9	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Star Creek and tributary that runs into it.							
6	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	7	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
7	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	41	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
8	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	14	2D: Portable Bridge Needed (Dept. bridge will be adequate)	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



## Report 4 – Site Conditions

Shingleton Mgt. Unit  
Steve Touvila : Examiner

Compartment: 187  
Year of Entry: 2022

9	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	2	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Long term retention for proposed harvest and 100' buffer for a shallow 3' wide stream.							
10	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	4	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> 100' buffer for 2 streams that flow out of the cedar stand and merge into 1 stream just east of the road. They are shallow and 4-6' wide.							
11	<b>Unavailable</b>	<b>3H: Deer Wintering Area - habitat is incompatible with harvest at this time</b>	69	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
12	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
13	<b>Unavailable</b>	<b>3H: Deer Wintering Area - habitat is incompatible with harvest at this time</b>	3	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
14	<b>Unavailable</b>	<b>3H: Deer Wintering Area - habitat is incompatible with harvest at this time</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



## Report 4 – Site Conditions

Shingleton Mgt. Unit  
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Compartment: 187  
Year of Entry: 2022

15	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
16	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	83	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
17	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
18	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
19	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	0	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 4 – Site Conditions

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Year of Entry: 2022

20	<b>Unavailable</b>	<b>3H: Deer Wintering Area - habitat is incompatible with harvest at this time</b>	22	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
21	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
22	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
23	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Long term retention from 2014 sale Petrel 187 Mix 410361201.							
24	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	1	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Retention from 2014 Petrel 187 mix 410361201.							
25	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> Long term retention from Petrel 187 Mix 410361201.							



## Report 4 – Site Conditions

Shingleton Mgt. Unit  
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Year of Entry: 2022

26	<b>Unavailable</b>	<b>3H: Deer Wintering Area - habitat is incompatible with harvest at this time</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
27	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	14	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
28	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	6	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
29	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
30	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
31	<b>Unavailable</b>	<b>3J: Water quality / BMPs (stream, river, or lake)</b>	2	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

**Report 4 – Site Conditions**

**Shingleton Mgt. Unit**  
**Steve Touvila : Examiner**

**Compartment: 187**  
**Year of Entry: 2022**

32	<b>Available</b>	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	52	2D: Portable Bridge Needed (Dept. bridge will be adequate)	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							



Mgt. Unit

Compartment: #Type!

Year of Entry:



### Report 5 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments
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**Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area  
HCVA = High Conservation Value Area  
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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1	6112 - Lowland Aspen	Sapling Medium	8.9	6	Immature	N/A	Regeneration filling in and growing. Cut in 2014 as part of Petrel 187 Mix 410361201.
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Canopy Species	% Cover	Size Class	DBH	Age
Quaking Aspen	50	Sapling	1	6
Balsam Poplar	35	Sapling	1	
Black Spruce	1	Sapling	1	
Balsam Fir	5	Sapling	1	
Black Ash	2	Sapling	1	
Yellow Birch	7	Sapling	1	

2	3102 - Grass	Nonstocked	12.9		Unspecified	Managed Opening	Previously classified as grassland; 5' tall scattered white spruce is in the south end of the stand. A small 10' tall aspen clone is at the south edge of the stand, and 5' tall black cherry is widely scattered throughout the opening. Opening was cleared of brush using a hydro axe in 2012. Perimeter was planted with red oak and apple seedlings in 2016.
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3	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	47.8	86	81-110	N/A	Black cherry is rapidly dying and looks like 10% will be left by next entry. BA averages 105.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	58	Log/Pole	12	86	Beech	Trace	5 - 10 feet	Sapling
Red Maple	24	Log/Pole	12		Balsam Fir	Medium	Variable	Sapling
Yellow Birch	1	Log	16		White Spruce	Low	5 - 10 feet	Sapling
Basswood	1	Pole/Log	9		Ironwood	Low	10 - 20 feet	Sapling
White Spruce	1	Log	16		Black Cherry	Medium	5 - 10 feet	Sapling
White Pine	1	Log	14		Yellow Birch	Medium	5 - 10 feet	Sapling
Black Cherry	12	Pole/Log	9		Red Maple	Medium	10 - 20 feet	Sapling
Balsam Fir	1	Pole	8		Sugar Maple	Medium	10 - 20 feet	Sapling
Ironwood	1	Pole	8					

4	42330 - Upland Fir	Poletimber Well	3.0	64	81-110	N/A	Some of the larger balsam fir are starting to break up.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	25	Pole/Log	8		Balsam Fir	Medium	>20 feet	Sapling
Quaking Aspen	1	Log	10		Red Maple	Medium	>20 feet	Sapling
Balsam Fir	70	Pole/Log	9	64	Sugar Maple	Medium	>20 feet	Sapling
Black Cherry	2	Pole	7					
Paper Birch	1	Pole	7					
Basswood	1	Pole/Log	9					

5	4110 - Sugar Maple Association	Sawtimber Well	9.8	87	81-110	N/A	Two aged stand with full sapling regeneration. Not ready for another thinning yet.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	100	Log/Pole	11	87	Sugar Maple	High	10 - 20 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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**6**      6124 - Lowland Spruce-Fir      Sapling Well      20.5      32      Immature      N/A      Regeneration is thick and looks good.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	20	Sapling	3		Balsam Fir	Medium	< 5 feet	Sapling
Quaking Aspen	20	Sapling	4		White Spruce	Medium	< 5 feet	Sapling
Balsam Fir	33	Sapling	3	32				
White Spruce	21	Sapling	3					
Black Spruce	2	Sapling	3					
Red Maple	2	Sapling	2					
Black Cherry	2	Sapling	3					

**7**      42320 - Upland Spruce      Poletimber Well      12.5      50      81-110      N/A      White spruce looks healthy.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	1	Pole	6		Balsam Fir	Low	5 - 10 feet	Sapling
White Spruce	91	Pole	8	50	White Spruce	Medium	>20 feet	Sapling
Black Cherry	2	Pole	8		Red Maple	Low	5 - 10 feet	Sapling
Paper Birch	2	Log/Pole	10					
Quaking Aspen	2	Log/Pole	10					
Red Maple	2	Pole	9					

**8**      6120 - Lowland Cedar      Sawtimber Well      22.3      128      201+      N/A      Larger cedar that is straight and average height for it's diameter.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Yellow Birch	2	Log	12		Yellow Birch	Low	5 - 10 feet	Sapling
Paper Birch	2	Log/Pole	11		Balsam Fir	Low	5 - 10 feet	Sapling
White Pine	1	Log/XLog	16		Red Maple	Trace	5 - 10 feet	Sapling
Black Spruce	10	Log/Pole	10		Tag Alder	Low	5 - 10 feet	Tall Shrub
Northern White Cedar	83	Log/Pole	13	128				
Black Ash	2	Pole	6					

**9**      6119 - Mixed Lowland Deciduous Forest      Sawtimber Well      3.0      86      111-140      N/A      Nice looking remote stand.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	40	Log/Pole	11	86	Balsam Fir	Medium	Variable	Sapling
Yellow Birch	15	Log/Pole/XLog	12		Black Ash	Low	10 - 20 feet	Sapling
Paper Birch	25	Log/Pole	10		Yellow Birch	Medium	>20 feet	Sapling
Northern White Cedar	5	Log	12		Black Spruce	Low	5 - 10 feet	Sapling
Black Ash	5	Pole	6		Red Maple	Low	>20 feet	Sapling
White Spruce	5	Log	14		Sugar Maple	Low	>20 feet	Sapling
Hemlock	5	Log	16		Hemlock	Trace	5 - 10 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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**10** 42320 - Upland Spruce Sawtimber Medium 4.7 63 51-80 N/A Semi open stand with log and pole sized white spruce.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
White Spruce	93	Log/Pole	11	63	White Spruce	Low	5 - 10 feet	Sapling
Black Cherry	5	Pole	8		Black Cherry	Low	Variable	Sapling
Red Maple	2	Log	12		Sugar Maple	Medium	5 - 10 feet	Sapling
					Red Maple	Medium	5 - 10 feet	Sapling

**11** 6119 - Mixed Lowland Deciduous Forest Sapling Poor 14.1 3 Immature N/A Western star 41-005-12 unit 1. TCR: 4/26/17

Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	25	Sapling	1	3
Quaking Aspen	25	Sapling	1	
Black Cherry	10	Sapling	1	
Paper Birch	20	Sapling	1	
Balsam Fir	10	Sapling	1	
Black Spruce	8	Sapling	1	
Black Ash	2	Sapling	1	

**12** 6139 - Mixed Lowland Forest Poletimber Medium 43.4 75 81-110 N/A Growing stand with some areas of descent ground. The wettest ground is as you enter the stand from the western edge. This area contains the most black ash.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	10	Pole	9		Yellow Birch	Medium	>20 feet	Sapling
Yellow Birch	10	Pole/Sap/Log	8		Balsam Fir	Medium	Variable	Sapling
Paper Birch	5	Pole	7		Black Spruce	Low	Variable	Sapling
Balsam Fir	2	Pole/Sapling	7		Black Ash	High	>20 feet	Sapling
Black Spruce	5	Pole	7		Hemlock	Trace	5 - 10 feet	Sapling
Northern White Cedar	5	Pole	8					
Hemlock	3	Log	14					
Black Ash	25	Pole/Sapling	6	75				
White Spruce	33	Pole	9	75				
White Pine	2	Log/Pole	14					

**13** 500 - Water Nonstocked 3.2 Unspecified No Part of Star Creek.

**14** 6118 - Lowland Deciduous with Cedar Sapling Poor 31.6 24 Immature N/A Very wet site with young black ash and cedar.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar	40	Sapling	2		Tag Alder	Full	5 - 10 feet	Tall Shrub
Black Ash	60	Sapling	2	24				





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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<b>15</b>	4110 - Sugar Maple Association	Sawtimber Well	73.9	87	141-170	N/A	Last cut in mid 80's. Basal area is as high as 160 in areas. Ready for a single tree selection thinning to promote regeneration.
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Canopy Species	% Cover	Size Class	DBH	Age
Sugar Maple	96	Log/Pole/XLog	12	87
Red Maple	2	Log/Pole	11	
Yellow Birch	1	Pole	8	
Hemlock	1	Log	16	

Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	Low	>20 feet	Sapling
Red Maple	Low	>20 feet	Sapling
Yellow Birch	Trace	>20 feet	Sapling
Balsam Fir	Trace	Variable	Sapling

<b>16</b>	6120 - Lowland Cedar	Poletimber Well	4.4	133	141-170	N/A	Cedar stand near Star Creek.
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Canopy Species	% Cover	Size Class	DBH	Age
Yellow Birch	5	Pole/Log	8	
Red Maple	5	Pole	8	
Black Spruce	5	Pole	8	
Northern White Cedar	80	Pole	8	133
White Spruce	5	Log/Pole	14	

Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	Low	5 - 10 feet	Sapling
White Spruce	Low	5 - 10 feet	Sapling

<b>17</b>	6113 - Lowland Maple	Sapling Medium	55.7	3	Immature	N/A	Western Star 41-005-17-01 unit 1 TCR: 4/26/17. The majority of residual trees are hemlock with some cedar. Regeneration is doing good.
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Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	70	Sapling	1	3
Black Ash	5	Sapling	1	
Black Spruce	3	Sapling	1	
Balsam Fir	10	Sapling	1	
Beech	1	Sapling	1	
Yellow Birch	5	Sapling	1	
Hemlock	5	Log	16	
Northern White Cedar	1	Log/Pole	10	

<b>18</b>	6119 - Mixed Lowland Deciduous Forest	Sapling Well	8.8	6	Immature	N/A	Cut in 2014 as part of Petrel 187 Mix 410361201. Regeneration is looking very good.
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Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	20	Sapling	1	
Yellow Birch	10	Sapling	1	
Balsam Fir	10	Sapling	1	
White Spruce	3	Sapling	1	
Northern White Cedar	1	Sapling	1	
Black Ash	56	Sapling	1	6



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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<b>20</b>	4110 - Sugar Maple Association	Sawtimber Well	65.6	87	81-110	N/A	Units 1 and 2 of Star 187 Contract. TS: 41-015-12-01			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Sugar Maple		95	Log/Pole	13	87	Sugar Maple		High	Variable	Sapling
Black Cherry		2	Log	13		Yellow Birch		Low	Variable	Sapling
Hemlock		3	Log	14		Beech		Low	Variable	Sapling
						Ironwood		Low	Variable	Sapling

<b>21</b>	6120 - Lowland Cedar	Sawtimber Well	111.6	126	171-200	N/A	Cedar stand - part of Petrel Deeryard.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Paper Birch		5	Pole/Log	9		Balsam Fir		Low	Variable	Sapling
Black Spruce		5	Pole	8		Black Ash		Low	Variable	Sapling
Northern White Cedar		77	Log/Pole	12	126	Red Maple		Low	Variable	Sapling
Black Ash		5	Pole/Sapling	6						
Red Maple		5	Pole/Log	9						
White Pine		3	Log/XLog	16						

<b>22</b>	4112 - Maple, Beech, Cherry Association	Sawtimber Well	16.3	87	81-110	N/A	Unit 3 of 187 Contract. TS: 41-015-12-01. Cut in 2017. Good mix diameter distribution.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Sugar Maple		68	Log/Pole	11	87	Balsam Fir		Low	5 - 10 feet	Sapling
Red Maple		23	Log/Pole	11		Red Maple		Medium	Variable	Sapling
Yellow Birch		5	Pole	7		Sugar Maple		Medium	Variable	Sapling
Hemlock		2	Log	14		White Spruce		Low	5 - 10 feet	Sapling
White Spruce		2	Pole	9		Beech		Low	5 - 10 feet	Sapling

<b>23</b>	6117 - Lowland Deciduous, Mixed Coniferous	Poletimber Well	6.0	75	81-110	N/A	Two aged healthy stand. Good amount of birch regeneration.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		35	Pole/Log/Sap	9	75	Yellow Birch		Medium	>20 feet	Sapling
Yellow Birch		15	Pole/Log/Sap	9		Balsam Fir		Low	Variable	Sapling
Balsam Fir		5	Pole	8		Red Maple		Medium	>20 feet	Sapling
Paper Birch		25	Pole/Sapling	7		Paper Birch		Medium	>20 feet	Sapling
White Spruce		10	Pole	9						
Northern White Cedar		5	Pole/Log	9						
Hemlock		5	Log	16						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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<b>24</b>	6120 - Lowland Cedar	Poletimber Medium	83.3	95	51-80	N/A	Wet stand with blowdown areas that has created a 2 aged stand with cedar regeneration.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	7	Log/Pole	10		Balsam Fir	Low	Variable	Sapling
Paper Birch	3	Pole/Sapling	7		Black Spruce	Low	>20 feet	Sapling
Balsam Fir	3	Pole/Sapling	6		Black Ash	Medium	10 - 20 feet	Sapling
Black Spruce	5	Pole/Sapling	7		Tag Alder	Medium	Variable	Tall Shrub
Northern White Cedar	70	Log/Pole	12	95	Northern White Cedar	Medium	>20 feet	Sapling
Tamarack	2	Pole	9		Paper Birch	Low	>20 feet	Sapling
Black Ash	10	Pole/Sapling	5		Red Maple	Low	>20 feet	Sapling

<b>25</b>	6224 - Treed Bog	Nonstocked	4.8		Unspecified	No	
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Sub-Canopy Species	Density	Avg. Height	Size
Black Spruce	Low		Pole
Black Ash	Low		Sapling
Northern White Cedar	Low		Pole

<b>26</b>	6117 - Lowland Deciduous, Mixed Coniferous	Sawtimber Well	54.2	86	81-110	N/A	There's a few veins of wet ground and small diameter black ash on the west side of the road. White spruce is big and tall. Yellow birch saplings are in the low to medium range. More of the hemlock is in the northern part of the stand.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	8	Pole	9		Balsam Fir	Low	5 - 10 feet	Sapling
Red Maple	40	Log/Pole	10	86	Black Ash	Low	>20 feet	Sapling
Yellow Birch	5	Pole/Log	8		Yellow Birch	Low	>20 feet	Sapling
Paper Birch	1	Pole	8		Red Maple	Low	Variable	Sapling
Balsam Fir	3	Pole	7		Sugar Maple	Low	Variable	Sapling
White Spruce	20	Log/Pole	16		Hemlock	Trace	5 - 10 feet	Sapling
Northern White Cedar	5	Pole/Log	9					
Hemlock	5	Log/Pole	16					
Black Ash	10	Pole	6					
White Pine	1	XLog/Log	18					
Beech	1	Pole	7					

<b>27</b>	6120 - Lowland Cedar	Sawtimber Well	101.4	128	171-200	N/A	Part of the Petrel Deeryard.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Paper Birch	15	Pole/Log	9		Balsam Fir	Low	5 - 10 feet	Sapling
Black Spruce	15	Pole	9		Black Ash	Low	Variable	Sapling
Northern White Cedar	60	Log/Pole	11	128	Red Maple	Trace	5 - 10 feet	Sapling
Hemlock	3	Log	14					
Tamarack	2	Pole	8					
Red Maple	5	Pole/Log	9					





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																												
28	4112 - Maple, Beech, Cherry Association	Sawtimber Well	92.5	90	111-140	N/A	Good looking stand with a lot of advanced sapling regeneration that's ready to be released. Yellow birch saplings are evenly distributed throughout the stand.																																																												
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30	6119 - Mixed Lowland Deciduous Forest	Sapling Well	6.4	43	1-50	N/A	Strip cuts - dense regeneration. Cut in winter of 76/77.																																																												
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31	6120 - Lowland Cedar	Sawtimber Well	4.1	133	201+	N/A	Adjacent stands were strip cut 43 years ago. Regeneration is doing good there but not much cedar regeneration.																																																												
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32	622 - Lowland Shrub	Nonstocked	20.4		Unspecified	No																																																													



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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**33** 6117 - Lowland Deciduous, Mixed Coniferous Sapling Well 10.5 6 Immature N/A Cut in 2014 as part of Petrel 187 mix 410361201. Good regeneration. Scattered mature cedar and hemlock left.

Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	45	Sapling	1	6
Yellow Birch	15	Sapling	1	
Paper Birch	10	Sapling	1	
Balsam Fir	12	Sapling	1	
White Spruce	5	Sapling	1	
Northern White Cedar	1	Sapling	1	
Black Ash	8	Sapling	1	
Hemlock	2	Log	14	
Northern White Cedar	2	Log	11	

**34** 6131 - Hemlock, White Pine, Maple, Birch Sawtimber Well 4.8 86 111-140 N/A Stand dominated by red maple and hemlock.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	42	Pole/Log	9	86	Balsam Fir	High	Variable	Sapling
Yellow Birch	8	Log/XLog/Pole	16		White Spruce	Low	>20 feet	Sapling
Balsam Fir	5	Pole	6		Hemlock	Medium	5 - 10 feet	Sapling
White Spruce	5	Pole	8		Red Maple	Low	Variable	Sapling
Hemlock	35	Log/XLog/Pole	16	128	Black Ash	Low	10 - 20 feet	Sapling
Paper Birch	2	Pole	9		Black Spruce	Trace	>20 feet	Sapling
Northern White Cedar	1	Pole	9		White Pine	Trace	5 - 10 feet	Sapling
White Pine	1	Log/XLog	16		Yellow Birch	Trace	>20 feet	Sapling
Black Ash	1	Pole	5					

**35** 4112 - Maple, Beech, Cherry Association Sawtimber Medium 10.9 85 51-80 N/A Thinned and sale closed in 2007. BA varies some and averages 76. Regeneration looks good and there is a good amount of yellow birch regen. There's a thin strip of black ash and yellow birch pole/saplings that runs northeast through the middle of the stand. This is the lowest part of the stand.

Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	32	Pole/Log	9		Beech	Medium	5 - 10 feet	Sapling
Red Maple	49	Log/Pole/XLog	10	85	Balsam Fir	Medium	Variable	Sapling
Yellow Birch	5	Pole/Sap/Log	6		Red Maple	Medium	10 - 20 feet	Sapling
Black Ash	8	Pole/Sapling	6		Yellow Birch	Medium	Variable	Sapling
Ironwood	1	Pole	8		Black Ash	Low	10 - 20 feet	Sapling
Hemlock	1	Log	14		Sugar Maple	Medium	10 - 20 feet	Sapling
Balsam Fir	2	Pole	7					



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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36	6131 - Hemlock, White Pine, Maple, Birch	Sawtimber Well	5.0	128	81-110	N/A	Cut in 2014 as part of Petrel 187 Mix 410361201. Regeneration looks good.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Hemlock	45	Log/XLog	16	128	Red Maple	Medium	5 - 10 feet	Sapling
Yellow Birch	25	Pole/Log	9		Yellow Birch	Medium	5 - 10 feet	Sapling
Red Maple	25	Pole	8		Balsam Fir	Medium	Variable	Sapling
Northern White Cedar	5	Pole/Log	9					

37	4110 - Sugar Maple Association	Sawtimber Well	31.5	85	81-110	N/A	Select cut in 2007. Basal area currently averages 98. Full sugar maple sapling regeneration.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	96	Log/Pole	14	85	Sugar Maple	Full	10 - 20 feet	Sapling
Yellow Birch	2	Log	14		Ironwood	Low	10 - 20 feet	Sapling
Basswood	2	Log	14		White Spruce	Trace	5 - 10 feet	Sapling
					Balsam Fir	Trace	5 - 10 feet	Sapling

38	6115 - Lowland Ash	Sapling Poor	27.6	53	1-50	N/A	Low site indices and low overall productivity - no commercial potential.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Red Maple	5	Sapling	3		Tag Alder	Full	5 - 10 feet	Tall Shrub
Balsam Fir	5	Sapling	2					
Black Spruce	5	Pole/Sapling	5					
Northern White Cedar	10	Pole/Sapling	5					
Black Ash	70	Sapling/Pole	3	53				
Yellow Birch	5	Sapling	3					

39	6224 - Treed Bog	Nonstocked	11.6		Unspecified	No	
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Sub-Canopy Species	Density	Avg. Height	Size
Northern White Cedar	Low		Pole
Black Spruce	Low		Pole
Black Ash	Low		Sapling

40	4112 - Maple, Beech, Cherry Association	Sawtimber Medium	31.0	90	51-80	N/A	Select cut in 2014 as part of Petrel 187 Mix 410361201. Good mixed thick regeneration.
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Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	65	Log/Pole	13	90	Balsam Fir	Low	Variable	Sapling
Red Maple	20	Log/Pole	10		Sugar Maple	High	10 - 20 feet	Sapling
Yellow Birch	3	Log	14		Red Maple	Medium	10 - 20 feet	Sapling
Hemlock	10	Log	12		Black Cherry	Low	5 - 10 feet	Sapling
Black Cherry	2	Log	14		Ironwood	Low	10 - 20 feet	Sapling





Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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<b>41</b>	6112 - Lowland Aspen	Sapling Well	11.0	38	1-50	N/A	Southeastern 1/3 of stand has better ground and the aspen is pole sized of 5-8" DBH. The rest of the stand is wet ground and growing slower and still mostly sapling sized.				
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size	
Paper Birch		30	Sapling	3		Balsam Fir		Medium	5 - 10 feet	Sapling	
Quaking Aspen		65	Sapling/Pole	4	38	White Spruce		Medium	5 - 10 feet	Sapling	
Balsam Fir		2	Sapling/Pole	3		Black Ash		Medium	5 - 10 feet	Sapling	
White Spruce		3	Sapling	3		Tag Alder		Medium	5 - 10 feet	Tall Shrub	

<b>42</b>	6119 - Mixed Lowland Deciduous Forest	Sapling Well	33.9	6	Immature	N/A	Cut in 2014 as part of Petrel 187 Mix 410361201. Hemlock and cedar were left uncut, less than 10 BA.			
Canopy Species		% Cover	Size Class	DBH	Age					
Red Maple		55	Sapling	1	6					
Balsam Fir		10	Sapling	1						
Yellow Birch		10	Sapling	1						
Black Cherry		10	Sapling	1						
White Pine		2	Sapling	1						
Black Ash		5	Sapling	1						
Beech		3	Sapling	1						
Hemlock		3	Log	14						
Northern White Cedar		2	Log	10						

<b>43</b>	6115 - Lowland Ash	Poletimber Medium	4.7	61	51-80	N/A	Black ash stand with some red maple in the far west end.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Red Maple		15	Pole	8		Yellow Birch		Low	Variable	Sapling
Yellow Birch		5	Pole	8		Balsam Fir		Medium	Variable	Sapling
White Spruce		3	Pole/Log	9		White Spruce		Low	Variable	Sapling
Northern White Cedar		3	Pole	9		Hemlock		Trace	5 - 10 feet	Sapling
Hemlock		1	Log	14		Black Ash		Medium	>20 feet	Sapling
Black Ash		70	Pole/Sapling	7	61					
Balsam Fir		3	Pole	6						

<b>44</b>	4110 - Sugar Maple Association	Sawtimber Well	22.5	90	81-110	N/A	Last thinned in 2000 as part of Petrel Star Hardwood 410259601. Was thinned heavy and not ready for another thinning yet but thick maple sapling regeneration.			
Canopy Species		% Cover	Size Class	DBH	Age	Sub-Canopy Species		Density	Avg. Height	Size
Sugar Maple		90	Log/Pole/XLog	14	90	Sugar Maple		Full	10 - 20 feet	Sapling
Black Cherry		2	Log	13		Yellow Birch		Medium	10 - 20 feet	Sapling
Hemlock		3	Log/XLog	14		Black Cherry		Low	10 - 20 feet	Sapling
White Pine		2	Log/XLog	16		White Pine		Trace	5 - 10 feet	Sapling
Yellow Birch		3	Log	14						



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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<b>45</b>	4110 - Sugar Maple Association	Sawtimber Well	143.2	85	81-110	N/A	Star 187 Contract units 4-8. TS: 41-015-12-01. Thinned in 2017. Southwestern part of stand contains some red maple and hemlock.
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Canopy Species	% Cover	Size Class	DBH	Age
Sugar Maple	84	Log/Pole/XLog	14	85
Basswood	3	Log/XLog	16	
Yellow Birch	1	Log	14	
White Spruce	1	Log	12	
Red Maple	10	Log/Pole	13	
Hemlock	1	Log	16	

Sub-Canopy Species	Density	Avg. Height	Size
Sugar Maple	High	Variable	Sapling
Ironwood	Low	Variable	Sapling
Balsam Fir	Trace	5 - 10 feet	Sapling

<b>46</b>	6113 - Lowland Maple	Poletimber Well	11.0	76	81-110	N/A	Small tributary stream runs through the stand to Star Creek.
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Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	55	Pole/Log	8	76
Northern White Cedar	3	Pole/Log	9	
Black Ash	7	Pole	6	
Yellow Birch	10	Pole/Log	8	
Hemlock	5	Log/XLog	16	
Balsam Fir	5	Pole	7	
Sugar Maple	10	Pole	8	
White Spruce	5	Pole/Log	9	

Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	Medium	5 - 10 feet	Sapling
Hemlock	Trace	5 - 10 feet	Sapling
Sugar Maple	Low	Variable	Sapling
Red Maple	Low	Variable	Sapling

<b>47</b>	6120 - Lowland Cedar	Sawtimber Well	5.6	117	201+	N/A	Very dense cedar.
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Canopy Species	% Cover	Size Class	DBH	Age
Black Spruce	5	Log/Pole	10	
Northern White Cedar	95	Log/Pole	11	117

Sub-Canopy Species	Density	Avg. Height	Size
Balsam Fir	Trace	5 - 10 feet	Sapling
Hemlock	Trace	5 - 10 feet	Sapling

<b>48</b>	6119 - Mixed Lowland Deciduous Forest	Sawtimber Well	13.8	88	111-140	N/A	E type stand with a lot of smaller black ash. Healthy stand.
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Canopy Species	% Cover	Size Class	DBH	Age
Red Maple	32	Log/Pole	11	88
Yellow Birch	20	Pole/Log	9	
Balsam Fir	2	Pole	8	
White Spruce	8	Pole/Log	9	
Northern White Cedar	3	Log	11	
Hemlock	5	Log/XLog	14	
Black Ash	23	Pole/Sapling	7	
Sugar Maple	5	Log/Pole	12	
Ironwood	1	Pole	6	
Beech	1	Log/Pole	10	

Sub-Canopy Species	Density	Avg. Height	Size
Yellow Birch	Medium	>20 feet	Sapling
Balsam Fir	Medium	Variable	Sapling
White Spruce	Trace	5 - 10 feet	Sapling
Black Ash	Medium	>20 feet	Pole
Hemlock	Trace	5 - 10 feet	Sapling
Red Maple	Low	10 - 20 feet	Sapling
Ironwood	Trace	>20 feet	Sapling



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments
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<b>49</b>	6113 - Lowland Maple	Poletimber Well	6.6	86	81-110	N/A	Mostly pole sized maple. The hemlock, yellow birch, and white pine are mainly log sized. Healthy stand with some hemlock regeneration.
<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	
Red Maple		60	Pole/Log	8	86	Balsam Fir	
Yellow Birch		5	Log	14		Medium	
Balsam Fir		1	Pole	6		Variable	
Northern White Cedar		8	Pole/Log	9	133	Trace	
White Pine		5	Log/XLog	16		5 - 10 feet	
Hemlock		15	Log/XLog	16		Sapling	
Black Ash		3	Pole	5		Low	
White Spruce		3	Log	14		5 - 10 feet	
						Sapling	

<b>50</b>	6220 - Alder/willow	Nonstocked	2.3		Unspecified	No	
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<b>51</b>	710 - Sand, Soil	Nonstocked	2.8		Unspecified	No	Borrow pit alongside the Petrel Rd. with scattered (mostly sub-merchantable) trees.
<b>Sub-Canopy Species</b>		<b>Density</b>	<b>Avg. Height</b>	<b>Size</b>			
Balsam Poplar		Trace		Sapling			
Northern White Cedar		Trace		Seeding			
White Spruce		Trace		Seeding			

<b>52</b>	6119 - Mixed Lowland Deciduous Forest	Poletimber Well	18.4	86	81-110	N/A	Similar to stand 26 to the north but there's less white spruce and the white spruce is smaller. There is much more black ash mainly in the east half of the stand where the maple really thins out. There's more maple in the west half of the stand. Two shallow streams flow out of the cedar stand and merge into one stream just east of the road.
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<b>Canopy Species</b>		<b>% Cover</b>	<b>Size Class</b>	<b>DBH</b>	<b>Age</b>	<b>Sub-Canopy Species</b>	
Sugar Maple		4	Pole	8		Balsam Fir	
Red Maple		35	Pole/Log	9	86	Medium	
Yellow Birch		12	Pole/Log	9		Variable	
Paper Birch		3	Pole/Log	9		Trace	
Balsam Fir		2	Pole	7		>20 feet	
White Spruce		5	Pole/Log	9		Sapling	
Northern White Cedar		2	Pole	9		Sapling	
Hemlock		3	Log	16		Sapling	
Black Ash		30	Pole/Sapling	6		Sapling	
White Pine		1	Log	16		Sapling	
Beech		1	Pole	7		Sapling	
Ironwood		1	Pole	6		Sapling	