

## **Compartment Review Presentation**

**Grayling Forest Management Unit** 

Compartment 72027 Entry Year 2025 Acreage: 2,304

County Oscoda

Management Area: Avery Hills

Stand Examiner: Garret Price

**Legal Description:** 

28N R03E Sections 3, 4, 5, 8, 9, 10, and 18

## **Identified Planning Goals:**

Many red pine stands were treated as a result of the Red Pine Project, during the past 10 years. The emphasis of management shall be on retaining and enhancing the natural beauty and biological diversity of the area. Management will also improve wildlife habitat for both hunting and observation purposes while maintaining forest health, productivity, sustainability, species and structural diversity while accounting for visual management and multiple uses. During the last inventory cycle a land exchange was completed where a parcel of landlocked state property was exchanged for private land that is adjacent to existing state land. The state land within compartment is readily accessible to the public.

## Soil and topography:

Soil types within this compartment consist mostly of Emmet loamy sand, Emmet sandy loam, Rubicon sand, Roselawn sand and Houghton muck. Topography is gently rolling terrain containing ridge tops and valleys with individual kettle holes and steep hills.

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

State ownership is solid in Section 5, scattered in Sections 3, 4, 8, 9, 10 and 18. There are a few private parcels in Sections 5 and 8. The state land is heavily used for dispersed recreation, including hunting, snowmobile riding, and mushroom picking.

## **Unique Natural Features:**

Potts Lake.

## Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

## **Special Management Designations or Considerations:**

No occurrence at this time.

#### **Watershed and Fisheries Considerations:**

This compartment contains Potts Lake and Gilchrist Creek which is a cold-water designated trout stream.

## Wildlife Habitat Considerations:

Fairly good wildlife habitat still exists, but it is increasingly being fragmented by new trail roads and pipelines related to oil and gas development and establishment of non-designated recreational trails through heavy use.

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

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium, coarse-textured glacial till and an end moraine of medium-textured till. Glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Coldwater Shale. There is not an economic use for the Coldwater Shale. Gravel pits are located one mile to the north and potential appears to be good. This compartment is leased for oil and gas development and most of it has been developed for the Antrim Shale gas production.

## Vehicle Access:

Access is obtained to most of the compartment from county roads (Hill, Mount Tom, and Boiling Springs) along with a series of forest trail roads. Most of these trail roads are drivable by a two-wheel drive vehicle and many of them are plowed in the winter to access Antrim well sites year around. No existing roads need to be closed at this time. All new roads created through management activities are to be closed upon completion.

#### **Survey Needs:**

A survey is needed for the NE corner of Section 18.

## **Recreational Facilities and Opportunities:**

This compartment receives dispersed heavy recreational use, particularly from snowmobilers and hunters. Part of a designated cycle trail runs in Sections 5, 8, and 18.

#### **Fire Protection:**

Current road system is adequate, and no timber conversion is needed.

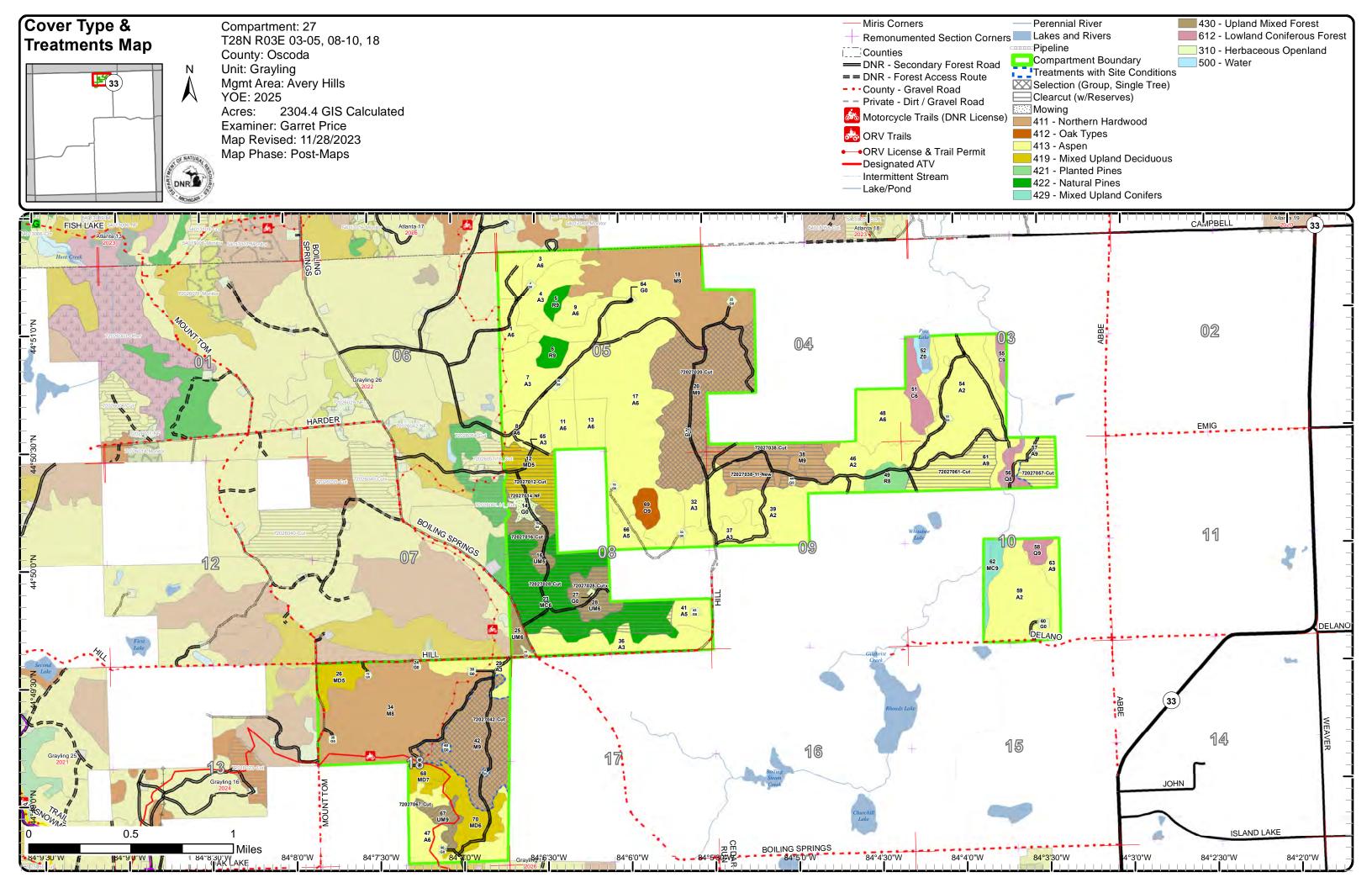
## **Additional Compartment Information:**

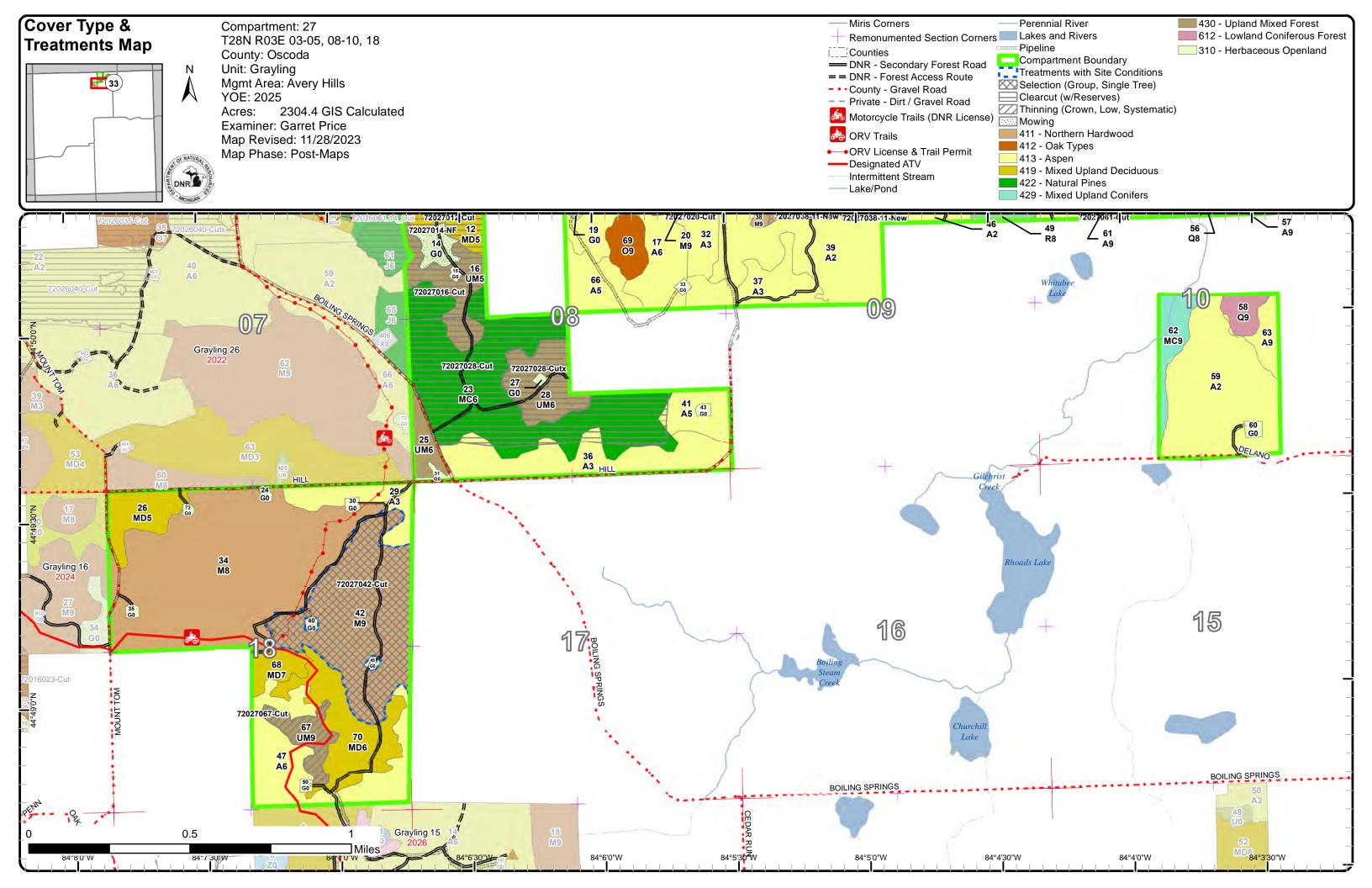
The following reports from the Inventory are attached:

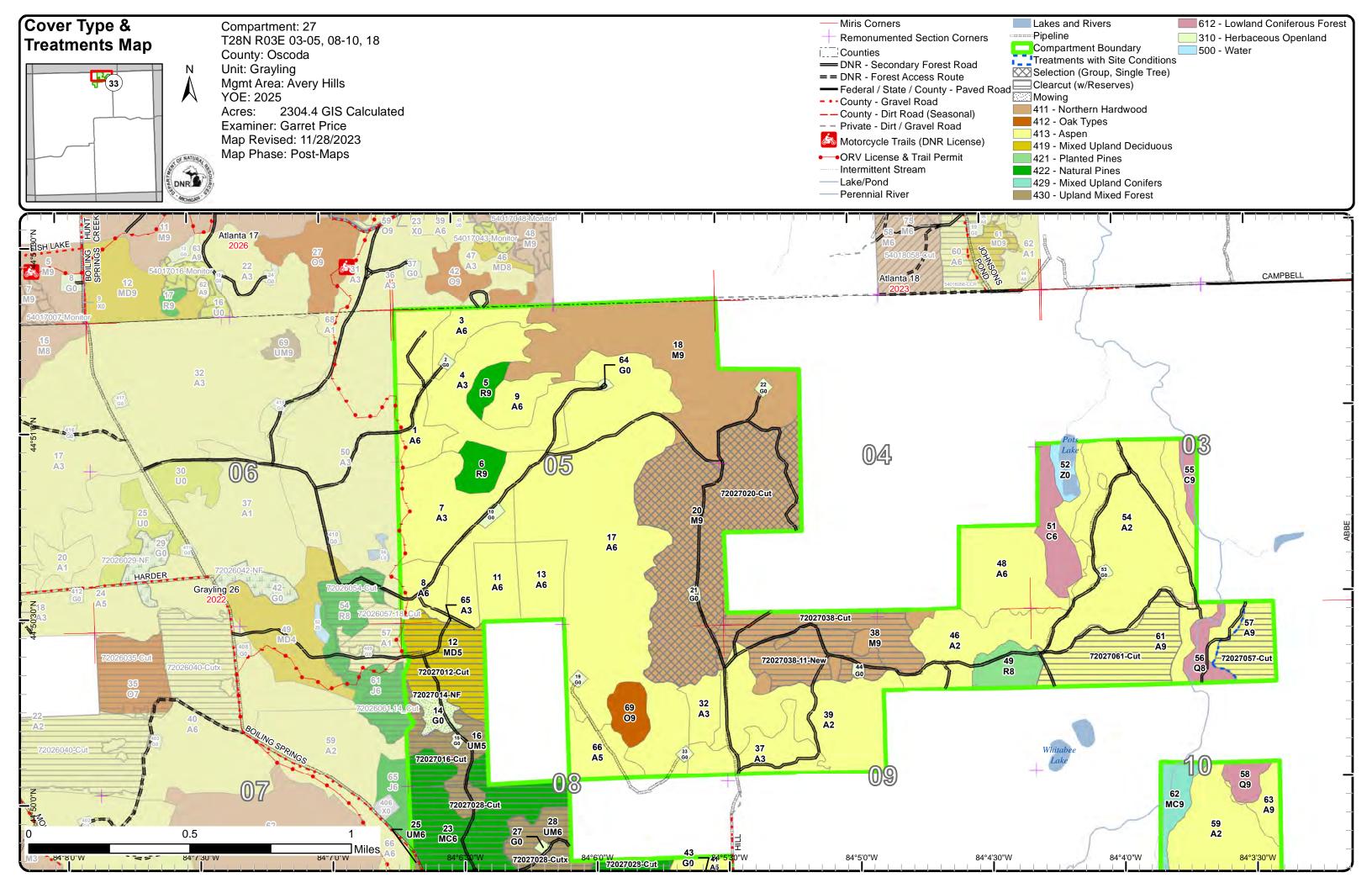
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

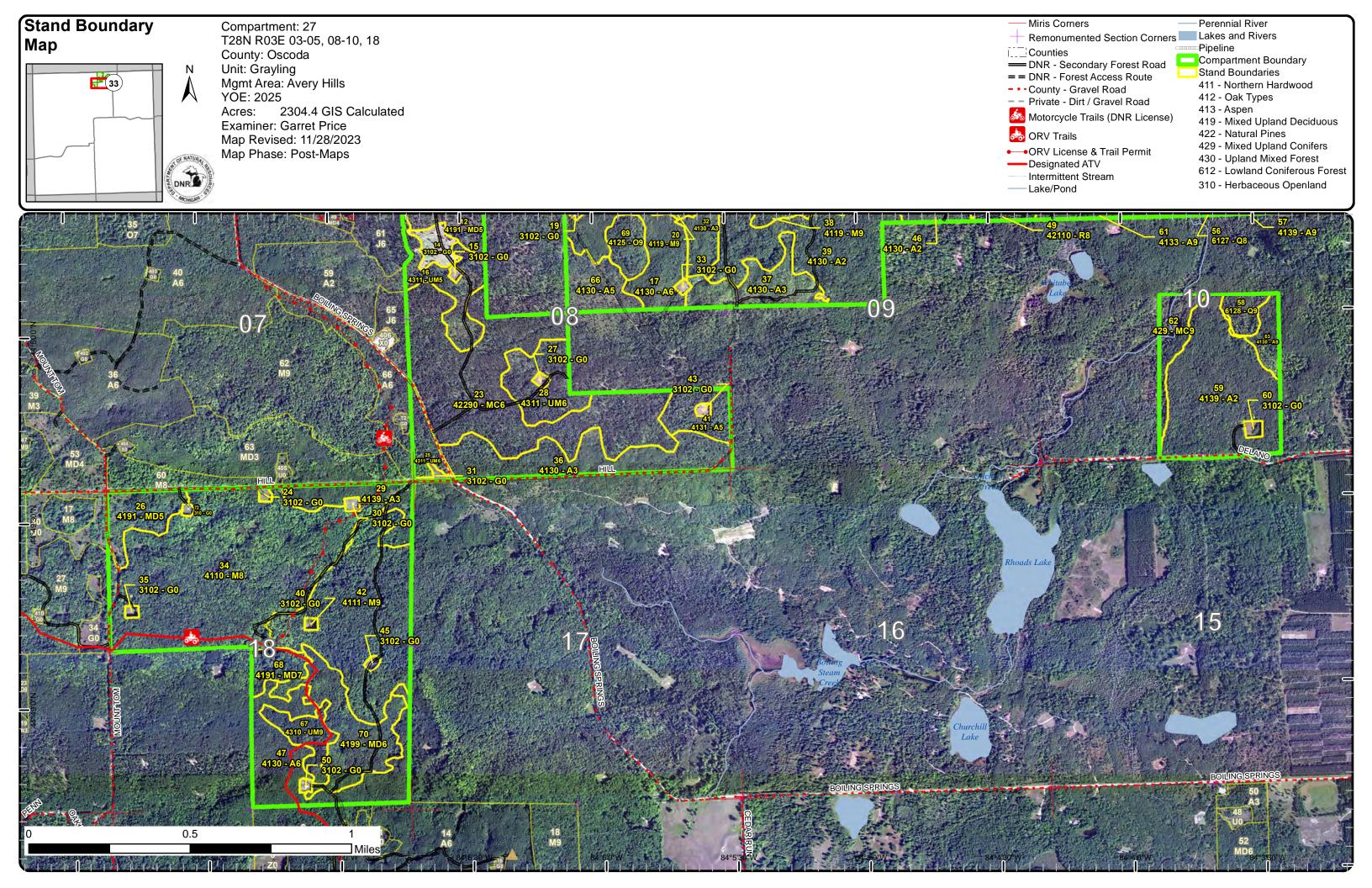
The following information is displayed, where pertinent, on the attached compartment maps:

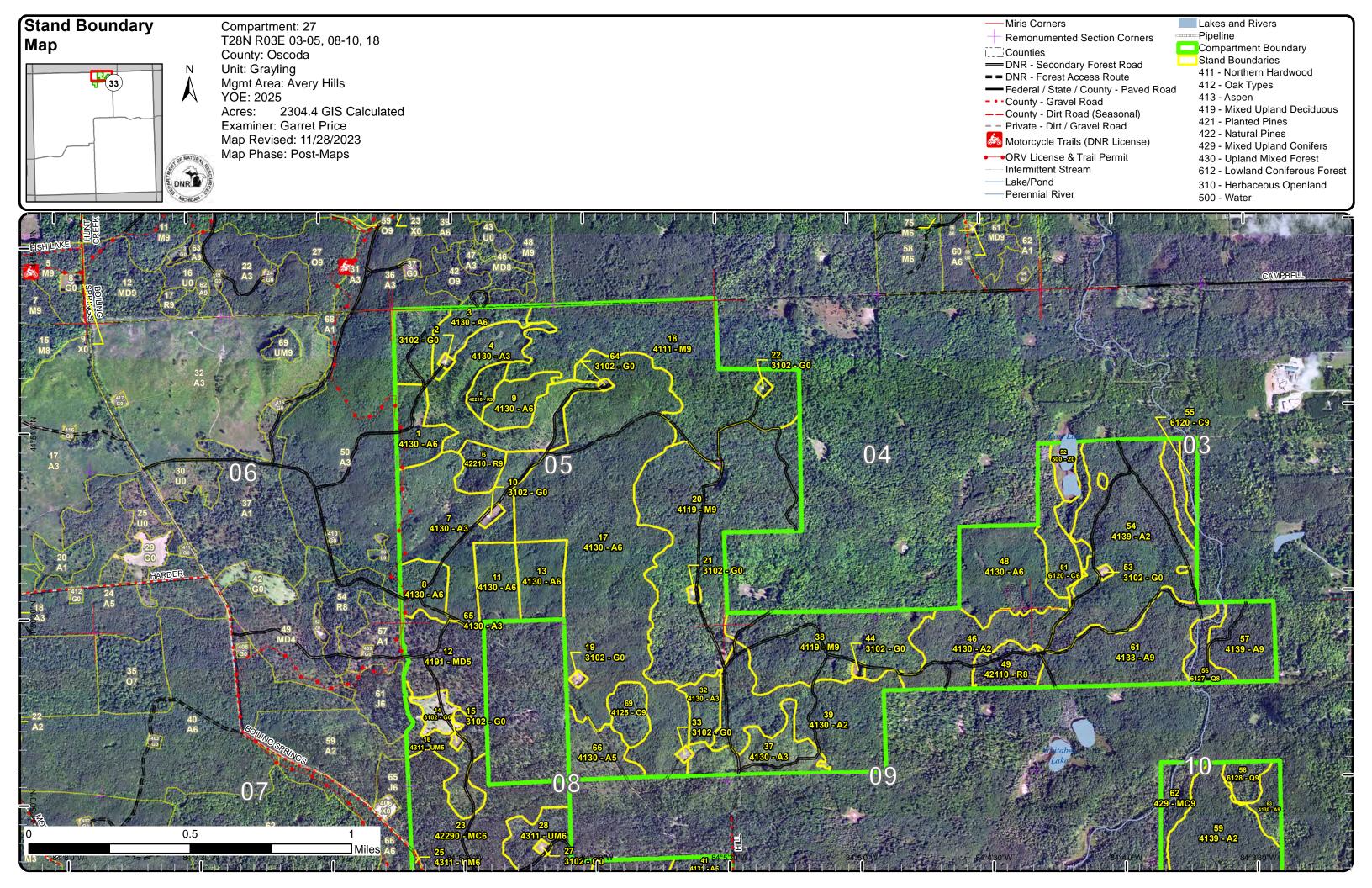
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

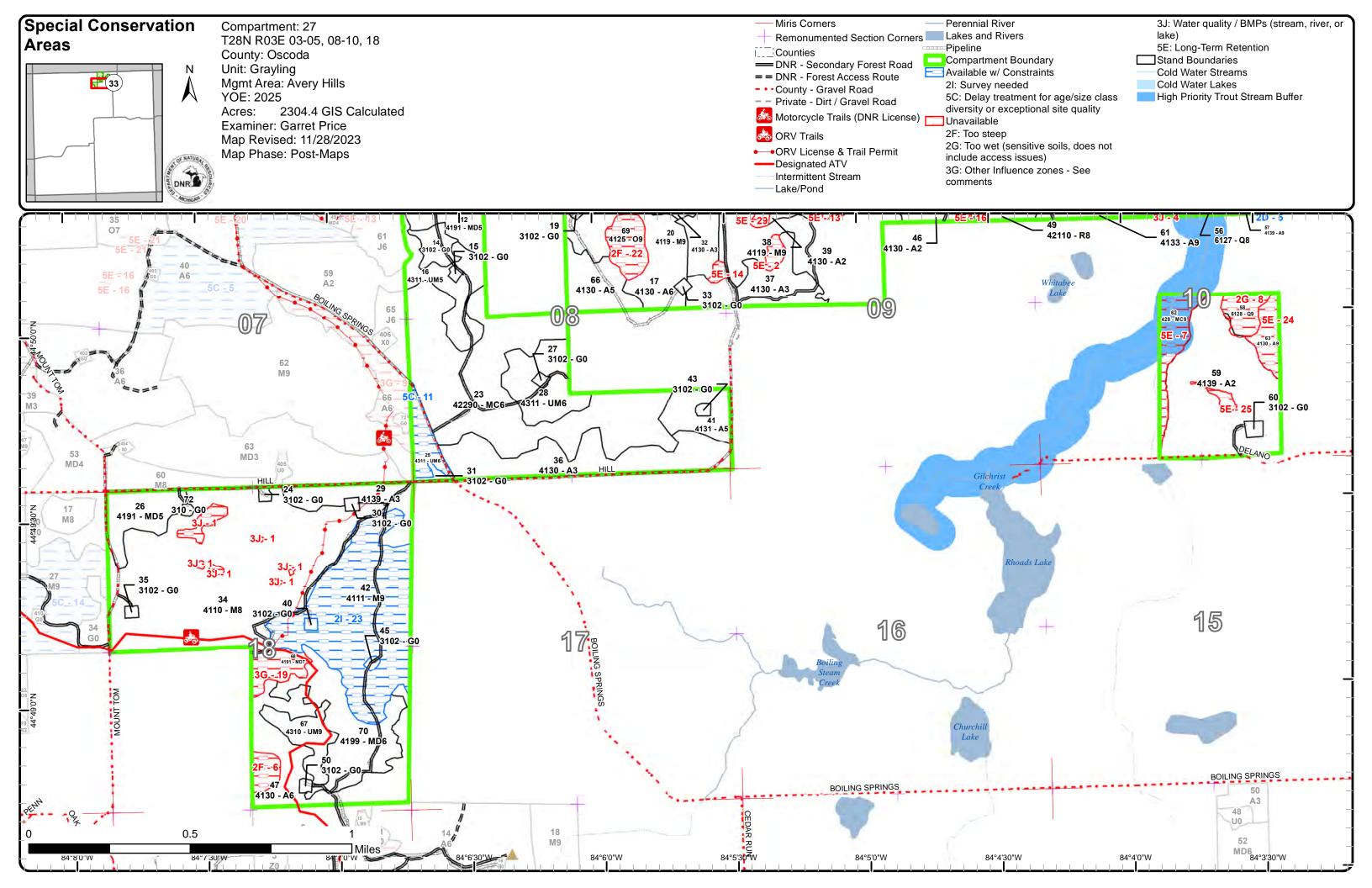


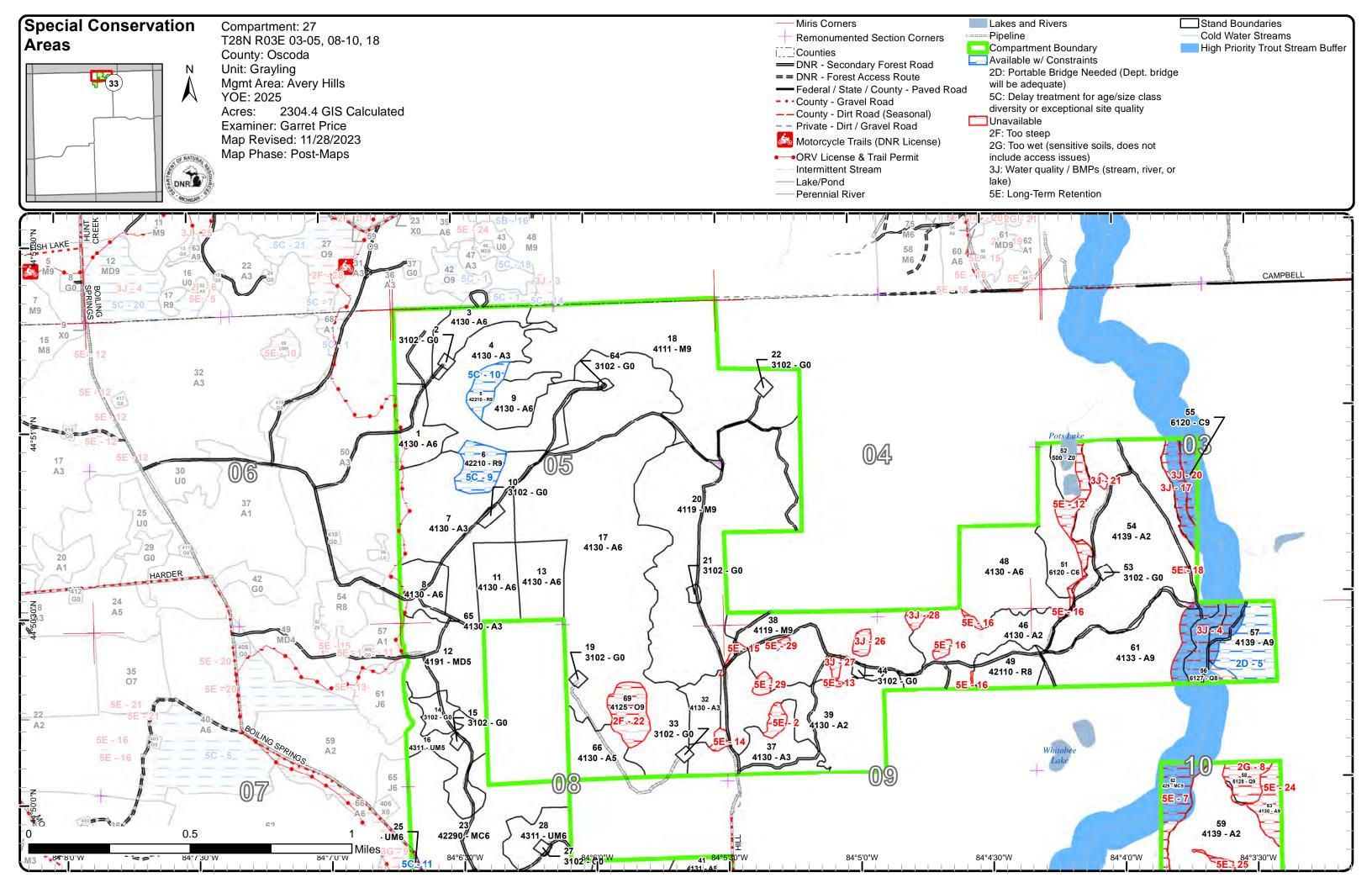












**Grayling Mgt. Unit Garret Price : Examiner** 



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## Age Class

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Aspen	0	316	106	184	394	54	17	117	0	0	0	0	0	0	0	0	0	0	1188
Cedar	0	0	0	0	0	0	0	0	0	0	7	22	0	0	0	0	0	0	29
Herbaceous Openland	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Lowland Conifers	0	0	0	0	0	0	0	0	0	12	9	0	0	0	0	0	0	0	21
Mixed Upland Deciduous	0	0	0	0	0	84	21	0	0	0	11	0	0	0	0	0	0	0	116
Natural Mixed Pines	0	0	0	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	130
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	0	637	0	0	0	0	0	0	636
Oak	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13
Red Pine	0	0	0	0	0	0	0	0	0	16	12	7	0	0	0	0	0	0	35
Upland Conifers	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	16
Upland Mixed Forest	0	0	0	0	0	25	28	11	0	0	15	0	0	0	0	0	0	0	79
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	40	316	106	184	394	163	66	274	0	28	54	679	0	0	0	0	0	0	2303



## Report 2 - Treatment Summary

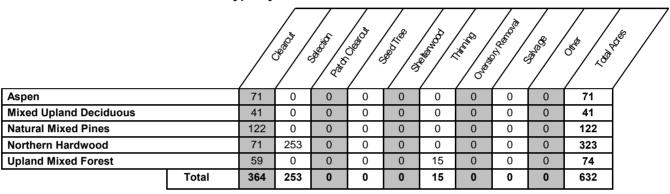
# Grayling Mgt. Unit Year of Entry: 2025

#### **Acres of Harvest**

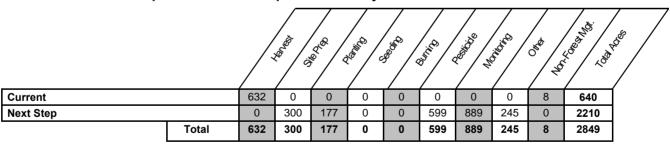
Compartment 27
Total Compartment Acres: 2,304

Commercial Harvest - 510 Harvests with Site Condition - 122 Next Step Harvest - 0 Habitat Cut - 0

## **Cover Type by Harvest Method**



## **Proposed and Next Step Treatments by Method**



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**Treatment** Name

Acres

Stand CoverType

Size Density

Stand Age

BA Range

**Treatment Type** 

**Treatment** Method

**Cover Type** Objective

Compartment: 27

Year of Entry: 2025

Age Structure Habitat Cut

## **Approved Treatments:**

72027012-Cut 4191 - Mixed 41.2 **Upland Deciduous**  Poletimber Medium

51-80

Harvest

Clearcut with Retention

4319 - Mixed **Upland Forest**  Even-Aged No

Prescription CC 1 inch and up. focus retention around pockets of large conifer.

with Conifer

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Accept low stocking of aspen, cherry, red maple, oak, and mixed conifer.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

72027014-NF 8.0 3102 - Grass Nonstocked Unspec NonForestMgt Mowing 3102 - Grass No

ified

drumming log spec, protect legacy, protect wildlife opening. wildlife shrub spec, trail specs, oil and natural gas pipeline.

Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, liming, food plot seeding, mowing, brushing, burning, tree and

shrub planting, herbicide application, and removal of invasive species. Specs:

Next Step Treatments:

Acceptable Maintained Wildlife Opening

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

1-50 72027016-Cut 31.2 4311 - Pine, Aspen Poletimber 46 Harvest Clearcut with 4319 - Mixed No Even-Aged Mix Medium Retention **Upland Forest** 

Prescription cc 2 inch and up. focus retention around legacy trees. protect wildlife opening. treatment expanded into northern parts of stand 23.

Specs:

Next Step ; Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Accept low stocking of aspen, cherry, oak, red maple and mixed conifers

Regen:

<u>Other</u> drumming log spec, legacy protected, protect wildlife opening, well heads and natural gas.

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Compartment: 27

Hardwood

Year of Entry: 2025

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a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
20	72027020-Cut	152.9	4119 - Mixed	Sawtimbe	er 100	111-	Harvest	Single Tree	411 - Northern	Two-Aged	No

Prescription Harvest all Beech and aspen. Cut-tree mark stand down to 80 BA. When marking, remove all red maple and favor basswood and poor Specs: quality oak where present for removal. Cull all trees with visible rot, poor form, and poor crown position. Implement 20 regen gaps up to 1

140

acre in size, place gaps near yellow birch where possible. In addition use gaps on steepest slopes to make operability easier. Do not cut any

Selection

hemlock, pine, or yellow birch. Place retention around hemlock and VP's (one in stands east)

Well

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

<u>Acceptable</u> Northern Hardwoods. Beech and Ironwood proliferation in the understory is expected. Regen gaps will hopefully result in Sugar Maple and

Regen: Basswood Recruitment.

Damage to residual. well heads and nat gas pipelines. No chipping. Do not break down tops when processing. Loosely pile 6 to 8 tops to Other Comment:

deter deer browse. Restrictive rutting due to slopes.

Northern Hardwoods

Site Condition

Proposed Start Date: 10/1 /2024

72027028-Cut 42110 - Planted Even-Aged 122.4 42290 - Natural Poletimber 63 81-110 Harvest Clearcut with Nο Mixed Pine Well Retention Red Pine

Prescription CC 1 inch and up. Use edge retention or focus retention around legacy red pine or roads. plant to RP. Discuss at pre review if pockets of

aspen are desireable. Southern Tx Boundary is drawn into stand 36 to square up Tx. Specs:

Next Step SitePrep, Trenching; SitePrep, Roller Chopping; Pesticide, Skidder - Site Prep; Pesticide, Skidder - Release; Pesticide, Aerial - Site

Prep; Pesticide, Aerial - Release; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitorin Treatments:

Acceptable fully stocked red pine plantation at least 80% free to grow.

Regen:

Other 1 inch and up, chipping required, legacy spec, low stumps

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

72027028-27.4 4311 - Pine, Aspen Poletimber 81-110 Clearcut with 4211 - Planted 55 Harvest Even-Aged No Red Pine Cutx Mix Well Retention

Prescription CC 2 inch and up. Use edge retention or focus retention around legacy red pine or roads, plant to RP. Discuss at pre review if pockets of Specs: aspen are desirable. Southern Tx Boundary is drawn into stand 36 And Northern TX boundary is drawn into stand 16 to square up Tx.

Monitoring, Artificial Regen(3yr); SitePrep, Trenching; SitePrep, Roller Chopping; Monitoring, Artificial Regen(3yr); Pesticide, Skidder -Treatments: Site Prep; Pesticide, Skidder - Release; Pesticide, Aerial - Site Prep; Pesticide, Aerial - Release;

Acceptable fully stocked red pine plantation at least 80% free to grow.

Regen:

1 inch and up, chipping required, legacy trees protected, low stumps <u>Other</u>

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Regen:

Acceptable An aspen stand with 30% of canopy comprised of a combination of red oak, hard maple, basswood, yellow birch, and paper birch.

If greater than 60% of regeneration is Beech and Ironwood contingent is to trench and plant to RP.

Damage to residual. well heads and nat gas pipelines. No chipping. Do not break down tops when processing. Loosely pile 6 to 8 tops to Other Comment: deter deer browse. Restrictive rutting due to slopes. Dormant season to promote desireables. Drumming Log spec

Site Condition

Proposed Start Date: 10/1 /2030

4119 - Mixed 72027038-Cut 38.2 Sawtimber 101 141-Harvest Clearcut with 4139 - Aspen, Even-Aged Nο Northern Hardwoods Well 170 Retention Mixed Deciduous

Prescription Split stand 38 into 2 treatments.CC 2 inch and up, exc do not cut conifer, and yellow birch. Include some of the large oak in retention or through individual tree making. Retention will be over 10% and is already drawn in around VPs, known hemlock patches and steep areas. Specs: Additional small retention pockets may be needed around hemlock where found in the stand.

Next Step Monitoring, Natural Regen (Intermediate) **Treatments:** 

Acceptable An aspen stand with 30% of canopy comprised of a combination of red oak, hard maple, basswood, yellow birch, and paper birch. If greater than 60% of regeneration is Beech and Ironwood contingent is to trench and plant to RP. Regen:

Damage to residual. well heads and nat gas pipelines. No chipping. Do not break down tops when processing. Loosely pile 6 to 8 tops to Other deter deer browse. Restrictive rutting due to slopes. Dormant season to promote desireables. Drumming Log spec Comment:

Site Condition

Proposed Start Date: 10/1 /2024

Two-Aged 72027042-Cut 99.6 4111 - S.Maple, Sawtimber 102 111-Harvest Single Tree 411 - Northern No Hard Mast Well 140 Selection Hardwood Association

Prescription Harvest all Beech and aspen. Cut-tree mark stand down to 80 BA. When marking favor basswood for removal. Cull all trees with visible rot, poor form, and poor crown position. Implement 20 regen gaps up to 1 acre in size. place gaps near yellow birch where possible. Do not cut Specs: any hemlock, pine, yellow birch or oak. Place retention around hemlock and VP's

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Northern Hardwoods. Beech and Ironwood proliferation in the understory is expected. Regen gaps will hopefully result in Sugar Maple and <u>Acceptable</u> Regen: Basswood Recruitment.

Other Trail protection spec. Damage to residual, well heads and nat gas pipelines. No chipping. Do not break down tops when processing. Loosely pile 6 to 8 tops to deter deer browse. Comment:

Notes for sale prep:

removals should be some cull logs and suppressed hm but the majority of BA removed should focus on Basswood and Beech. Leave all RO unless summer field visit shows any additional signs of decline. Implement 1 regen gap per 5 acres. Focus regen gaps adjacent to YB OR Hemlock where present, or focus regen gaps on steepest slopes to improve operability. Stand 68 to the west has a potential Arch Site.

Site Condition Survey Needed Proposed Start Date: 10/1 /2024 Habitat

Cut

No

Grayling Mgt. Unit Report 3 -- Treatments Compartment: 27 S Year of Entry: 2025 t а **Treatment** BA **Treatment Treatment Cover Type** Acres Stand Size Stand Age Habitat n Name CoverType Density Age Range Type Method Objective Structure Cut d 57 72027057-Cut 21.9 4139 - Aspen. Sawtimber 81-110 Harvest Clearcut with 413 - Aspen Even-Aged No Mixed Deciduous Well Retention Prescription Final harvest leave Red pine, cedar and white pine. No retention due to size and to maximize regen. Use RMZ where needed to buffer Specs: Gilchrist Creek. Use drumming log spec. Chipping acceptable follow standard woody biomass guidelines. Drumming Log spec. restrictive rutting and dry or frozen recommended. Utilize retention to keep equipment out of drainages, seeps, and the wettest ground found in the

Monitoring, Natural Regen (Re-Inventory) Next Step

eastern and southern portions of the stand.

Treatments:

Acceptable Stand should regenerate to a moderate to well stocked stand of aspen and mixed hardwoods.

Regen:

Either a portable bridge will be needed to access this stand or the purchaser will need to acquire permission from pvt landowner to access Other

Comment: this sale.

Site Condition Portable Bridge Needed

Proposed Start Date: 10/1 /2024

72027061-Cut 4133 - Aspen, 49.5 Sawtimber 68 81-110 Harvest Clearcut with 413 - Aspen Even-Aged Nο Mixed Pine Well Retention

Prescription CC 2 inch and up. Focus retention around quality oak or pine. do not cut red or white pine over 20 inches.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

**Treatments:** 

Acceptable Fully stocked aspen stand

Regen:

Require more restrictive rutting due to slopes and adjacency to gilchrist creek, legacy trees, drumming log. Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

72027067-Cut 14.9 4310 - Pine, Oak Sawtimber 91 111-Harvest Low Thinning 4191 - Mixed Two-Aged No Upland Mix Well 140 Deciduous with

Conifer

Prescription Large Pine MNGT. Harvest all aspen, and red maple. In addition mark to cut suppressed and codominant rp, wp, and red or hybrid oak. Stand should average 70 to 90 BA residual. Do not mark below 60 BA. While doing field work adjust boundary into adjacent stands for Specs: operability accordingly. Retain up to 20 BA of oak and hard maple in good condition with good crown position. Consider access and landing

locations during set up.

Next Step Treatments:

Acceptable A stand of large diameter red and white pine over mixed deciduous understory with at least 30% of regeneration comprised of mixed Oak, Regen:

white pine, and Hard maple. No contingency if ironwood and beech dominate understory.

<u>Other</u> Legacy trees, damage to residual, restrictive rutting due to steep terrain, ORV trail spec, access from south, protect well head.

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

**Total Treatment** 639.5 Acreage Proposed:

**Grayling Mgt. Unit** 

Compartment: 27 Year of Entry: 2025 **Garret Price: Examiner** 

Availa	ability for	Managemer	nt									
Total	Acres	Acres Avail	Acres	]	Domina	nt Site	Con	dition	S			
Acres	Available	With Condition	Not Available		2D	21	5C	2F	2G	3G	3J	5E
1188	1103	22	63	Aspen	22		0	6	0		24	32
29	22	0	7	Cedar							7	
32	32	0	0	Herbaceous Openland								
20	0	0	20	Lowland Conifers					9		11	
117	105	0	11	Mixed Upland Deciduous						11		
130	130	0	0	Natural Mixed Pines								
637	522	100	15	Northern Hardwood		100					12	3
13	0	0	13	Oak				13				
36	16	19	0	Red Pine			19					
16	0	0	16	Upland Conifers								16
80	69	11	0	Upland Mixed Forest			11			0		
8	8	0	0	Water								
2,304	2,008	152	145	Total Forested Acres	22	100	30	19	9	11	55	50
	87%	7%	6%	Relative Percent								

<sup>\*</sup>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	3J: Water quality / BMPs (stream, river, or lake)	6	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: /ernal/forested pond	ds found within the sale area.					
2	Unavailable	5E: Long-Term Retention	3	2F: Too steep	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified
C	Comments:						

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4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	26	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Land within RMZ, a	as per Fisheries requirement of	300' no	cut buffer along Gilchrist C	Creek, Blue Ribbon Trout St	ream.	
5	Available	2D: Portable Bridge Needed (Dept. bridge will be adequate)	22	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
	Comments: Private property bo	rders this stand only access fro	m state	e land will require the crossi	ng of Gilchrist Creek.		
6	Unavailable	2F: Too steep	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: very steep kettle de	epression with PVT at bottom					
7	Unavailable	5E: Long-Term Retention	16	3J: Water quality / BMPs (stream, river, or lake)	2D: Portable Bridge Needed (Dept. bridge will be adequate)	Unspecified	Unspecified
	Comments: Riparian/Retention will also provide a r Stream.	area along Gilchrist Creek and nice wildlife corridor as well. La	tributa nd with	ry flowing into creek. Would in RMZ, as per Fisheries re	d need portable bridge to ac quirement of 300' no cut bu	ccess the other side of cre offer along Gilchrist Creek	ek in NW corner. This , Blue Ribbon Trout
8	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	9	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	3L: Other wildlife concerns	Unspecified	Unspecified
	Comments: Lowland conifer site	e with saturated soils, operating	in here	e would be difficult and only	nine acres. Better suited f	or wildlife useage.	
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Stand is isolated po	ocket of retention from prior trea	atment	in 1987, no good access to	this stand. Surrounded by	aspen should be left for si	ze and species diversity.

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10	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: No management caspen stands.	onsideration since this stand wa	s left a	s retention from the most re	cent treatment in 1968.	Small in size and is surround	ded by regenerating
11	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	5E: Long-Term Retention	10	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments:						
13	Unavailable	5E: Long-Term Retention	1	2G: Too wet (sensitive soils, does not include access issues)	2F: Too steep	Unspecified	Unspecified
	Comments: Tail end of forest p	ond/vernal pond, area is also ve	ry stee	p.			
14	Unavailable	5E: Long-Term Retention	2	2F: Too steep	Unspecified	Unspecified	Unspecified
	Comments:						
15	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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16	Unavailable	5E: Long-Term Retention	3	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: Long term retention	n for Stand 46					
17	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments: part of rmz for Gilcl	hrist Creek					
18	Unavailable	5E: Long-Term Retention	0	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
19	Unavailable	3G: Other Influence zones - See comments	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
20	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	2D: Portable Bridge Needed (Dept. bridge will be adequate)	Unspecified	Unspecified	Unspecified
ı		d fall within the RMZ requireme per the requirement for Blue Rib			access portion of stand	d across Gilchrist Creek. 30	00' no cut buffer for
21	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: Vernal pool.						

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22	Unavailable	2F: Too steep	13	Unspecified	Unspecified	Unspecified	Unspecified
A		difficult but possible from NE or I processes to carry out here to			lue to the very dry sandy soils	s (esp in the south and w	estern portions of the
23	Available	2I: Survey needed	100	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: could not find corn	ner in the NE of stand. I should t	try agai	n in snow off. Nat gas line:	s make it difficult to find mucl	n with the metal detector.	
24	Unavailable	5E: Long-Term Retention	10	2G: Too wet (sensitive soils, does not include access issues)	2C: Engineered Bridge Needed (Dept. portable bridge not available or inadequate)	Unspecified	Unspecified
5		ng from private land approximat at not worth the effort or potentia				ered per BMP standards	only 5 acres of land
25	Unavailable	5E: Long-Term Retention	2	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: Area to wet, appear	rs to be an ephemeral area.					
26	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: Forested pond/vern	al pond with steep hillsides.					
27	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments: Forested pond/vern	al pond with steep hillsides.					

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28	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	comments: Forested pond/verr	nal pond with steep hillsides.					
29	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
_	comments: Pre drawn retention	n for Stand 38 to protect hemloc	k and	steep slopes. Adjust boundari	es when completing fiel	d work.	

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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
Comments				

Grayling Mgt. Unit Compartment: 27
Year of Entry 2025



## 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.

Conservation Area	n Туре	Description	HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen stocked trout populations and those of other coldwater fish year to year. Coldwater streams in Michigan typically provide contributions of groundwater to their stream flows. Such stream designated as trout resources by Fisheries Order 210.	species (e.g., slimy sculpin) to persist from de these conditions due to substantial
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosyste influences the aquatic ecosystem and vice-versa. Because streams and open water wetlands, riparian areas harbor a communities are ecologically and socially significant in thei as aesthetics, habitat, bank stability, timber production, and	of the unique conditions adjacent to lakes, high diversity of plants and wildlife. Riparian ir effects on water quality and quantity, as well

rt 7 – Stands

OF NATURAL
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Compartment: 27

Year of Entry: 2025

Stand	l Level 4 Co	ver Type	s	ize De	nsity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
1	4130 -	Aspen	Po		er Well	19.3	35	81-110	N/A		Some small open pockets with cherry brush development.old commentsStand was final harvested in 1987. Stand is on the edge
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	between sapling and pole errored on the side of caution and left in the
	Bigtooth Aspen	80	Pole/Sapling	6	35	Che	rry (spp.)	Low	< 5 feet	Sapling	sapling stage. Stand is entirely PArVHa/PArVVb.
	Red Pine	10	Pole	8		Oa	k (spp.)	Low	< 5 feet	Sapling	
Bla	ck/Red (Hybrid) Oak	2	Pole/Sapling	5		Re	d Maple	Low	< 5 feet	Sapling	
	Red Maple	6	Pole/Sapling	5		E	Beech	Low	< 5 feet	Sapling	
	Paper Birch	2	Pole	5				·			
2	3102 -	· Grass	1	Nonsto	ocked	0.9			No		well siteold comments 2015 yoeMerit Energy Well Site Permit #50590 Clinton A1-5
3	4130 -	Aspen	Po	letimb	er Well	16.8	35	81-110	N/A		Stand is doing well. very high density aspen, with understory oak cherry
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	and rm development. so e stems codominant.old comments 2015 YOEStand was final harvested in 1987. Young aspen stand with good
	Red Pine	6	Pole	5		Re	ed Pine	Low	5 - 10 feet	Sapling	stem density and mixture of other hardwood species. Stand is primarily
	Red Maple	5	Sapling/Pole	4		Che	rry (spp.)	Medium	< 5 feet	Pole	PArVHa/PArVVb with one small patch of AFO in the NE corner of stand.
	Bigtooth Aspen	75	Pole/Sapling	6	35	Oa	k (spp.)	Low	5 - 10 feet	Sapling	
Bla	ck/Red (Hybrid) Oak	4	Sapling/Pole	4		Re	d Maple	Medium	5 - 10 feet	Sapling	
	Quaking Aspen	10	Pole/Sapling	5							
4	4130 -	Aspen	S	Sapling	Well	77.2	14 lı	mmature	N/A		Small openings in stands SE AND SW scattered supercanopy rp and wp. more in centerOld Comments 2015 YOEStand harvested in 2008
	Canopy Species	% Cover	Size Class	DBH	Age						#72-073-05-01. Stand is regenerating nicely to aspen and red maple
	Red Oak	3	Sapling	1	14						mix. There is a small oak commponent. Stand passes regen check for
	Bigtooth Aspen	60	Sapling	1	14						aspen. Regen average was 2050/acre for aspen and 1060 for red maple. Hilly terrain with exposed rock in places. There is overstory
	White Pine	2	Pole/Log	8							component of pole to xlog size red pine. Residual pine is less than
	Red Maple	22	Sapling	1	14						10sqft/acre. Stand is primarily PArVHa/PArVVb with patches of AFO in
	Red Pine	13	Log/Pole/XLog	12	72						the easter portions of the stand.
5	42210 - Natu	ural Red P	ine Sa	wtimb	er Well	7.4	101	141-170	N/A		site condition carried forward.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	old comments 2015 YOE
	Bigtooth Aspen	6	Log	12		Oa	k (spp.)	Medium	Variable	Sapling	
	Red Pine	80	Log/Pole/XLog	15	101	Re	d Maple	Medium	Variable	Sapling	Mature red pine stand with a mixture of hardwood species. Rolling terrain. According to previous inventory comments stand was last treated
Bla	ck/Red (Hybrid) Oak	4	Log	12		Servicebe	rry (Juneberry)	Medium	Variable	Pole	in 1968 and small pockets of red pine were left as retention, this is one of
	Red Maple	10	Log	12		E	Beech	Low	Variable	Sapling	those stands. Stand is entirely PArVHa/PArVVb.
6	42210 - Natu	ural Red P	ine Sa	wtimb	er Well	11.9	95	111-140	N/A		site condition carried forwardharvest with surrounding aspen when
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	perscribed. second age from previous inventory carried forward on oak in species listold comments 2015 YOEAccording to previous inventory
	Red Maple	5	Log/Pole/Sap	10		Oa	k (spp.)	Low	< 5 feet	Sapling	comments stand was last treated in1987 and small pockets of red pine
	Bigtooth Aspen	10	Pole/Log	8		Che	rry (spp.)	Medium	< 5 feet	Sapling	were left as retention, this is one of those stands. Stand is entirely
	Red Pine	62	Log/Pole/XLog	16	95	Re	d Maple	Medium	< 5 feet	Sapling	PArVHa/PArVVb.
	Paper Birch	5	Pole	7		E	Beech	Low	< 5 feet	Sapling	
Bla	ck/Red (Hybrid) Oak	18	Log/Pole/Sap	10	116						•



Stand Lev	el 4 Cov	er Type	Si	ze De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
7	4130 - A	Aspen	S		y Well	73.6	25 I	mmature	N/A		Some areas of stand are more open. lots of juneberry in spots. Small pockets of mature supercanopy red or white pine.Old Comments
Canopy Spe	cies 9	% Cover		_	Age		nopy Species	Density	Avg. Height	Size	2015 YOE:Young aspen stand with some pole sized stems scattered
Red Pine		3	Pole/Sap/Log	7		Re	d Maple	Low	< 5 feet	Sapling	throughout. Previous inventory has stand as an A5 with average DBH of
White Pine		2	Pole/Sap/Log	7		Wh	ite Pine	Low	< 5 feet	Sapling	7 inches at 8 years. Stand is entirely PArVHa/PArVVb.
Red Maple		18	Sapling	3		Che	rry (spp.)	Medium	< 5 feet	Sapling	
Bigtooth Aspe	en	75	Sapling/Pole	4	25	Oa	k (spp.)	Low	< 5 feet	Sapling	
Black/Red (Hybrid	d) Oak	2	Sapling	3		Re	ed Pine	Low	< 5 feet	Sapling	
						Servicebe	rry (Juneberry)	High	10 - 20 feet	Sapling	
8	4130 - A	Aspen	Pol	etimb	er Well	15.7	35	1-50	N/A		Wp and few rp seeding into subcanopy. few supercanopy rp in
Canopy Spe	cies	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	east.Old Comments 2015 YOE:Young aspen stand, not much different in stand characteristics then stand 7, only 10 years older. Stand
Quaking Aspe	en	40	Pole/Sapling	5	35	Wh	ite Pine	Low	Variable	Sapling	could be lumped together. Rolling to steep terrain. Stand is entirely
Black/Red (Hybrid	d) Oak	10	Pole/Sapling	5		Re	d Pine	Low	Variable	Sapling	PArVHa/PArVVb.
Black Cherry	у	10	Pole/Sapling	5		Re	d Maple	Medium	< 5 feet	Tall Shrub	
Bigtooth Aspe	en	22	Pole/Sapling	6	35	Oa	k (spp.)	Low	< 5 feet	Seeding	
White Pine		3	Sapling/Pole/Log	4		Che	rry (spp.)	Medium	< 5 feet	Seeding	
Red Maple		10	Sapling/Pole	4							•
Red Pine		5	Sapling/Pole/Log	4							
9	4130 - A	Aspen	Pol	etimb	er Well	15.4	35	51-80	N/A		revisit in snow off
Canopy Spe	cies °	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Old Comments 2015 YOE
Quaking Aspe	en	5	Pole/Sapling	6		Re	d Maple	Medium	Variable	Sapling	Nice stand of Aspen, good stem density on the boarder between sapling
Red Pine		2	Sapling/Pole	4		Wh	ite Ash	Low	Variable	Sapling	and pole. Stand was harvested in 1987Stand is primarily AFO with a
Black Cherry	У	3	Sapling/Pole	4		Che	rry (spp.)	Medium	Variable	Sapling	small patch of PArVHa/PArVVb along the south boundary.
Bigtooth Aspe	en	85	Pole	7	35						-
Red Maple		2	Pole/Sapling	5							
White Ash		3	Sapling/Pole	4							
10	3102 - 0	Grass	N	lonsto	cked	2.0			No		Get owner data when back in the field
											Old Comments 2015 YOE Merit well site, C2-5HDS
11	4130 - <i>A</i>	Aspen	Pol	etimb	er Well	20.1	35 U	nspecified	N/A		Revisit in snow offold comments 2015 YOEStand was harvested in
Canopy Spe	cies 9	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	1987 per old OI notes. Stand is bording on pole size but just not there yet. Good mixture of associated species with rolling to steep terrain.
Black/Red (Hybric	d) Oak	10	Sapling/Pole	4		Che	rry (spp.)	Low	Variable	Sapling	Stand is entirely PArVHa/PArVVb.
Red Pine		3	Sapling/Pole	4		Re	ed Pine	Low	Variable	Sapling	
Black Cherry	у	2	Sapling/Pole	3		Re	d Maple	Medium	Variable	Sapling	
Red Maple		15	Pole/Sapling	5		Oa	k (spp.)	Medium	Variable	Sapling	
Bigtooth Aspe	en	70	Pole/Sapling	6	35						1



Stand	Level 4 Co	over Type	s	ize De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
12	4191 - Mixed Upla Co	and Decidu onifer	ous with Pole	etimbe	r Mediur	n 41.2	44	51-80	N/A		stand is similar to 16 and should be treated as such. BA widely variable center of stand is more upland brush and unmerchantavle wood other
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	than chips. Rp logs and small poles are of poor form and crown position. larger RP is close or beyond product class.Old Comments 2015
	Jack Pine	15	Pole/Sap/Log	8		Ja	ick Pine	Medium	Variable	Sapling	YOE:Ground cover sweet fern and ribes. Open stand in places with
	Black Cherry	25	Pole	6		Che	erry (spp.)	High	Variable	Tall Shrub	mixture of aspen, pine and cherry. Pocket of mature red pine as well as
	Red Pine	22	Log/XLog/Pole	14	93	R	ed Pine	Medium	Variable	Sapling	scattered red pine. Not good quality stand. Previous OI comments - Stand was harvest in 1978 (Red Pine Improvement) all aspen and jack
	White Pine	3	Sapling/Pole	4		Servicebe	erry (Juneberry)	Low	Variable	Sapling	pine was cut. Stand has mature red pine scattered throughout. Also
	Quaking Aspen	35	Pole/Sapling	6	44						aspen pockets throughout. Over-all stand is still an A3 poor site with a lot of abuse .Stand is entirely PArVHa/PArVVb.
13	4130	- Aspen	Po	oletimb	er Well	22.5	25	51-80	N/A		Revisit in snow off
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	old comments 2015 YOE
	Red Maple	20	Sapling/Pole	4		Re	d Maple	Medium	Variable	Seeding	Stand was havested in 1997, previous OI has BA of 60 with ave DBH of
Blac	k/Red (Hybrid) Oak	10	Sapling	3		Wh	nite Pine	Low	Variable	Seeding	7", didn't see those conditions when inventoried. Young aspen stand wit
	Bigtooth Aspen	60	Pole/Sapling	5	25	Che	erry (spp.)	Medium	Variable	Seeding	rolling to steep terrain.Stand is entirely PArVHa/PArVVb.
	White Pine	5	Sapling	3		Oa	ak (spp.)	Low	Variable	Seeding	
	Red Pine	5	Sapling	3							
14	3102	- Grass	1	Nonsto	ocked	8.0	U	nspecified	Managed O	pening	wildlife opening.
						Sub-Ca	nopy Species	Density	Avg. Height	Size	JC update: Buckwheat & clover were planted in 2014, rye in 2015 and
						Blad	ck Cherry	Trace		Pole	buckwheat & clover in 2016 (W72-757).
15	3102	- Grass	I	Nonsto	ocked	1.0			No		Get owner data when back in the field
											Old Comments 2015 YOE Terra Energy Co well site Well # 5-8 Permit #47162
16	4311 - Pine					n 25.4	46	1-50	N/A		low volume, aspen is dropping out quick. should be cut now if aspen is desired. jp will likely hold ten but asen wont. good component of stand is
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size	upland brush. super canopy rp scattered throughout. more rp in north tip.
	Red Pine	15	Log/XLog	16			ick Pine	Low	Variable	Sapling	
	Jack Pine	30	Pole/Sapling	6	46		erry (spp.)	High	Variable	Sapling	Old Comments 2015 YOE:Small pockets of red pine found in stand.
	Quaking Aspen	25	Pole/Sapling	6	46		ed Pine	Low	Variable	Sapling	Majority is aspen of poor quality with a good componenet of jack pine an
	Black Cherry	30	Pole/Sapling	6		\//}	nite Pine	Low	Variable	Sapling	cherry. Stand is entirely PArVVb.



Stand Le	vel 4 Cover T	Гуре	Si	ze De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
17	4130 - Aspe	en	Pol	letimb	er Well	236.7	36	51-80	N/A		CC Merch and up 1985-1987 under contract # 055-85-1 Steep Hill Block
Canopy Spe	ecies % C	over	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Oak. AS, MXD OAk, MXD HRD, RP, JP, and WP removed. 69 and 66 were split out from stand 17. North end of stand has more
Black Cheri	ry 2	2	Pole/Sapling	5		WI	hite Ash	Low	Variable	Sapling	mixed hardwoods, center of the stand picks up more pine.
Red Maple	9 1	0	Log/Pole	11		Strip	ed Maple	Low	Variable	Sapling	014 0
Striped Map	ole 2	2	Pole	6		Servicebe	erry (Juneberry)	Medium	Variable	Sapling	Old Comments 2015 YOE Lower end of pole sized stems primarily of bigtooth, SW corner more
Red Oak	1	0	Log/Pole/XLog	13		Asp	en (spp.)	Medium	Variable	Sapling	quaking and less canopy closure with higher amounts of cherry stems,
Balsam Fi	r ′	1	Pole	8		Hawt	horn (spp.)	Medium	Variable	Tall Shrub	poor quality in the SW. Rolling to steep terrain. Two well sites within
Paper Bircl	h t	5	Pole	6		Oa	ak (spp.)	Low	Variable	Sapling	stand. Access to southern portion of stand would be an issue, north is easily accessable. Oak is of good to excellent stem quality and ground
White Pine	9 5	5	Pole	6		Che	erry (spp.)	Medium	Variable	Sapling	cover included lily of valley, trillium, solomon seal. Stand is primarily
Red Pine	2	2	Log	12		Re	d Maple	Medium	Variable	Sapling	PArVHa/PArVVb with AFO in the northern 1/3 of stand and along the
Quaking Asp	en 1	6	Pole/Sapling	6		E	Beech	Medium	Variable	Sapling	east boundary. In the southern portion of the stand are small patches of both PArVVb/AFO, AFO and PArVVb.
Bigtooth Asp	en 4	15	Pole/Sap/Log	8	36						botti Aivvisiai O, Ai O dila i Aivvis.
Jack Pine	2	2	Pole	6							
10	aple, Hard Ma				er Well	124.5	104	81-110	N/A		Upper end of the BA range. Some understory hm regeneration, but primarily beech ironwood ash. Beech has bbd present but not as bad as
Canopy Spe			Size Class		Age		nopy Species	Density	Avg. Height	Size	stands to the south, less beech here other than the handful of isolated
Beech		5	Log/Pole	12			Beech	High	Variable	Sapling	pockets of higher density. Center of stand has heavy dead ash slash
Red Oak		22	Log/XLog/Pole	17			ak (spp.)	Low	Variable	Sapling	loading. probably could hold 10 especially west 1/2. W 1/2 has limited hard maple crop trees, most are suppressed by the oak or have poor
Paper Bircl		5	Log/Pole	11			gar Maple	High	Variable	Sapling	form for sawlogs. oak here is in good crown position overall and makes
Ironwood		2	Sapling/Pole	4			d Maple	Medium	Variable	Sapling	more sense to hold 10 before treatment and focus on other hardwood
Bigtooth Asp		2	Log/Pole	10		WI	hite Ash	High	Variable	Sapling	stands in compartment.
Sugar Mapl		39	Log/Pole	12	104						old comments 2015 YOE
Basswood	1 2	25	Log/Pole/XLog	15							Stand was thinned in 2007 (County Line Hardwood Thin 72-12-05-01), one unit was not thinned and this portion of stand was merged with Stand 21. Canopy gaps are filling in with maple, ash, beech and some oak and red maple. Ash that were left are all but dead, beech looks good with no sign of BBD. Seven BA swings were taken stand average was 80, individual BA's were approximately Sugar 31, Bass 23, Beech 4, Red Oak 12, Paper Birch 5, Bigtooth 2 Ironwood 1. There are areas of heavy slash from harvest as well as fallen trees. Stand is entirely AFO with two small patches of PArVVb/AFO and PArVVb along the north boundary.
19	3102 - Gras	ss	Ν	Nonsto	cked	1.0			No		Get owner data when back in the field  Old Comments 2015 YOE
											Breit Burn permit 55122

Grayling Mgt. Unit

Report 7 - Stands



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
20	4119 - Mixed No	orthern Har	dwoods	Sawtimb	er Well	156.2	100	111-140	N/A		Pockets of oak (Attached QD sheet has oak coded wrong. Some quality
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	red oak in areas but oak is overall hybrid) mainly on ridge tops around the middle of the stand. OAK is variable from moderate to excellent quality in
	Red Maple	4	Log/Pole	10		Servicebe	rry (Juneberry	) Low	Variable	Sapling	the dominant stems. Sugar maple is fair to good with pockets of excellent
	Beech	10	Pole/Log	9		Red	d Maple	Medium	Variable	Sapling	as well. Parts of the northern and eastern areas in the stand is at the
	Bigtooth Aspen	4	Pole/Log	8		Wh	nite Ash	High	Variable	Sapling	upper end of the BA Range.
	Red Oak	22	Log/XLog	17		Strip	ed Maple	Low	Variable	Sapling	old comments 2015 yoe
	Basswood	18	Log/Pole	12	106	Iro	nwood	Low	Variable	Sapling	Mixed hardwood stand. Area of sugar maple carpeting the forest floor
	Sugar Maple	40	Log/Pole	12	100	Pap	er Birch	Medium	Variable	Sapling	with seedlings also areas of stand with nice advanced oak regeneration.  Mature oak is of good form and crowns are still healthy. Majority of
	Paper Birch	2	Log/Pole	11		Sug	ar Maple	Full	Variable	Sapling	stands understory is heavy to sugar maple and ash with very little ground
						Oa	k (spp.)	Medium	Variable	Sapling	cover. Ground cover present was sweet cicily, trillium, lily of valley.
						Е	Beech	Medium	Variable	Sapling	Mortality of mature white ash is at least 99%, beech looks healthy with no signs of BBD. Thirteen BA plots were taken stand average was 83,
											individual species were Sugar 42, Red Map 1, Bass 8, Ash 1, Beech 2, Red Oak 21, Paper Birch 5, and Bigtooth 4. Stand is entirely AFO with areas of PArVVb.
21	3102	- Grass		Nonsto	ocked	1.2			No		Get owner data when back in the field
											Old Comments 2015 YOE Merit Energy Well Site Permit # 54382 Clinton D4-5
22	3102	- Grass		Nonsto	cked	1.1			No		Get owner data when back in the field
						Sub-Car	nopy Species	Density	Avg. Height	Size	
						Deciduo	ous Saplings	Low		Tall Shrub	Old Comments 2015 YOE  Merit energy well site B1-4.
23	42290 - Natu	ıral Mixed I	Pine F	Poletimb	er Well	130.4	63	81-110	N/A		stand jp with aspen in the middle with natural rp around the w, s and e.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	JP mortality in areas as high as 20 percent, aspen scattered throughout.
	Red Maple	3	Pole	7	3-		ite Pine	Medium	Variable	Sapling	most of rp in stands CENTRAL SW. where rp density is high enough the crop tree dbh is largely out of market size and the smaller stems are
	Quaking Aspen	15	Pole/Log/Sar	p 7		Aspe	en (spp.)	Low	5 - 10 feet	Sapling	mostly poor form and suppressed. scattered legacy rp. pockets of cherry
	Jack Pine	55	Pole/Log/Sar		63		ed Pine	Medium	Variable	Sapling	brush and less canopy closure in N half site grows poor quality
Bla	ck/Red (Hybrid) Oak	3	Log/Pole	10		Oa	k (spp.)	Low	< 5 feet	Sapling	aspen.Pole sized jack pine stand with pockets of aspen, aspen is not of good quality. There is moderate storm damage to the aspen and jack
	Balsam Fir	1	Pole	6			rry (spp.)	Low	Variable	Sapling	pine stems. Stand's northern 2/3 is PArVVb the rest is PArVHa/PArVVb.
	White Pine	5	Log/Pole/XLo	g 13							
	Red Pine	18	Log/Pole/XLo	g 14							
24	3102	- Grass		Nonsto	cked	1.0			No		Old Well Site
											Old Comments 2015 YOE Well plugging completed 3/30/2005 BREITBURN OPERATING LIMITED PARTNERSHIP Well Site Permit #56076 Elmer-Clinton A3-18



Stan	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
25	4311 - Pin	e, Aspen M	1lix I	Poletimb	er Well	11.0	68	51-80	N/A		Hold 10, higher quality than 23 to the east. A nice mix of species and
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	ages.
	White Ash	3	Pole/Log	9		Sug	ar Maple	High	Variable	Sapling	Mixed stand, SW corner was thinned in 2003'ish hardwood stand of log
	Beech	5	Log	13		Re	ed Pine	Low	< 5 feet	Sapling	quality. Stand transitions into mixture of pine aspen with pockets of maple, cherry and aspen regen, results from 1998 tornado that hit this
	Red Oak	5	Log	12		Oa	k (spp.)	Low	5 - 10 feet	Sapling	area. Stand is entirely PArVHa/PArVVb, but there are small patches of
	Paper Birch	2	Pole	6		Wh	ite Pine	Low	5 - 10 feet	Sapling	AFO, PArVVb/AFO, PArVVb and PVCd in the southern portion of stand.
	Red Pine	15	Pole/Log	9		Che	rry (spp.)	Medium	Variable	Sapling	
	White Pine	15	Pole/Log	9		Asp	en (spp.)	High	Variable	Sapling	
	Sugar Maple	15	Log	12		Wh	nite Ash	Low	5 - 10 feet	Sapling	
	Jack Pine	20	Pole/Sap/Log	g 8	68			,			
	Bigtooth Aspen	20	Pole/Sapling	9 6							
26	4191 - Mixed Upla Co	and Decidu onifer	ious with Po	oletimbe	r Mediun	n 20.8	50	1-50	N/A		Stand filling in. Open areas have Sumac, grasses and rubus. pockets of WP in SW, Center, and Belt around SE Perimiter. Mixed hardwood
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	species seeding in in NE and S 1/2. Apple trees in open areas near MT Tom Rd. Walnut along Mt Tom Rd in Stand's W and NW corner. Mixed
	Apple (spp.)	5	Pole/Sapling	5		S	Sumac	Low	5 - 10 feet	Tall Shrub	hardwoods and WP seeding in. some logs but overall stand is pole-
	White Ash	10	Pole/Sapling	9 6		Black	Raspberry	Low	< 5 feet	Tall Shrub	sapling with many openings in the W.
	Red Pine	5	Log/Pole/Sap	p 10							Old Comments 2015 YOE
	Choke Cherry	5	Sapling/Pole	9 4							Open areaStand is entirely PArVVb/AFO.
	Black Walnut	5	Log	13	71						,
	Red Oak	20	Log/Pole/Sap	p 12							
	White Pine	20	Log/Pole/Sap	p 10	21						
	Red Maple	20	Pole/Log/Sap	р 8	50						
27	3102	- Grass		Nonst	ocked	1.0			No		Get owner data when back in the field
											Old Comments 2015 YOE Gas Well Terra Energy LTD Permit #47139 St Clinton 11-8 HDL
28	4311 - Pin	e, Aspen M	1ix I	Poletimb		28.3	55	81-110	N/A		cut with adjacent stands and plant to rp or let it go to natural aspen regen. Aspen is in poor condition, jp and other pine look good still.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	canopy breaks up to the north, lower stem density and size.old
	Jack Pine	30	Pole/Log	8			rry (spp.)	Medium	5 - 10 feet	Sapling	commentsMixed aspen, jack pine stand with a well site in the middle of
	Red Maple	5	Pole	7		Oa	k (spp.)	Low	< 5 feet	Sapling	the stand. Stand 25 is very similar to this stand however, this stand has
	Quaking Aspen	50	Pole/Log	9	55	Re	d Maple	Low	5 - 10 feet	Sapling	a higher aspen density. There is moderate storm damage to this stand from the heavy snows. Stand is half PArVVb and PVCd.
	White Pine	15	Pole/Log	9		Wh	ite Pine	Medium	Variable	Pole	The state of the s
						Ja	ck Pine	Low	< 5 feet	Sapling	
								· · · · · · · · · · · · · · · · · · ·			

Report 7 - Stands



Stand	Level 4 C	over Type	s	ize De	nsity	Acres Sta	nd Age BA	A Range	Managed \$	Site	General Comments
29	4139 - Aspen,	Mixed Dec	iduous S	Sapling	Well	21.7	25 In	nmature	N/A		old comments confirmed. Aspen is outcompeting in most areas of stand with canopy height 5+ feet taller than associates. A couple wet seeps or
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	vernal pools present in stand. Super canopy NRO, RM, and BW. Heavy
	Bigtooth Aspen	45	Sapling/Pole	4	25	Ash (sp	p.)	Medium	Variable	Sapling	CWD esp in east. Added NE portion of stand 42 which also saw the
	Sugar Maple	10	Sapling/Pole	3		Deciduous	Shrubs	Low	Variable	Tall Shrub	majority of canopy taken out by tornado. More beech, ash, and Ironwood here with supercanopy HM, and basswood. Less Aspen regeneration
	Red Oak	5	Log/Pole/Sap	10		Autumn	Olive	Low	5 - 10 feet	Tall Shrub	here as well. 2 vernal pools in this small area.
	Paper Birch	10	Sapling	3		Oak (sp	op.)	Medium	Variable	Sapling	'
	Red Maple	20	Pole/Sap/Log	9		Beec	h	Medium	Variable	Sapling	Old Comments 2015 YOE:
	Basswood	10	Sapling/Pole/Log	g 3		Red Ma	aple	Medium	Variable	Sapling	Stand impacted by tornado in 1998. Heavy course woody debris from storm. Stand is entirely PArVVb/AFO.
						Suma	ac	Low	5 - 10 feet	Tall Shrub	5.5 State is 5.15, 1.77 5.
						Ironwo	od	Medium	Variable	Sapling	
30	3102	- Grass	I	Nonsto	cked	1.2			No		Get owner data when back in the field
											Old Comments 2015 YOE TERRA ENERGY WELL SITE PERMIT# 54779 State Clinton A4-18
31	3102	- Grass		Nonsto	cked	1.8			No		Open area used for deer camps. Apple trees in opening. Some cherry
						Sub-Canopy	/ Species	Density	Avg. Height	Size	and WP seeding in along with a couple RM and poor quality AS.
						Cherry (s	spp.)	Trace		Sapling	
						Suma	ac	Low	5 - 10 feet	Tall Shrub	
						Apple (s	spp.)	Low	10 - 20 feet	Sapling	
						Spotted Kna	apweed	Medium	Unspecified	Non-Wood	
32	4130	- Aspen	(	Sapling	Well	12.8	27 In	nmature	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	old comments 2015 yoe Young aspen stand with both quaking and big tooth aspen. North half of stand is AFO and the Southern Half is
	White Pine	3	Pole/Sapling	7		Oak (sp	op.)	Low	< 5 feet	Pole	PArVbb/AFO.
	Red Maple	10	Sapling	3		Cherry (s	spp.)	Medium	< 5 feet	Sapling	
	Paper Birch	8	Sapling	3		Red Ma	aple	Medium	< 5 feet	Sapling	
	Bigtooth Aspen	40	Sapling/Pole	4	27	Ironwo	od	Medium	Variable	Sapling	
	Red Pine	2	Sapling	3		Beec	h	Low	< 5 feet	Sapling	
	Quaking Aspen	37	Sapling/Pole	4		Serviceberry (	Juneberry)	Low	< 5 feet	Sapling	
						Paper B	Birch	Low	< 5 feet	Sapling	
						Hawthorn	(spp.)	Low	< 5 feet	Tall Shrub	
						White A	Ash	Low	< 5 feet	Sapling	
						Sugar M	laple	Low	10 - 20 feet	Sapling	
33	3102	- Grass		Nonsto	cked	1.0	Un	specified	No		Get owner data when back in the field
											Old Comments 2015 YOE Terra Energy permit 52270

Stand	Level 4 Co	over Type	S	ize Der	nsity	Acres S	Stand Age BA	A Range	Managed S	Site	General Comments
34	4110 - Sugar M	laple Asso	ciation Saw	/timber	Mediu	m 180.3	105	51-80	N/A		Majority of BA in treated portion of stand is HM with Basswood consisten
(	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Cano	opy Species	Density	Avg. Height	Size	throughout. Dense rubus pockets. Understory is primarily beech, ash, and ironwood, With a few HM. PB. BTA and one RO saplings observed.
	Basswood	20	Log	14		Red	d Oak	Trace	5 - 10 feet	Sapling	ORV Trail in South. BBD well along on few remaining beach in stand.
	Beech	2	Pole/Log	8		Serviceberr	ry (Juneberry)	Medium	Variable	Sapling	EAB damage observed on the few live merchantable ash present in
	White Ash	1	Pole	6		Ве	eech	High	Variable	Sapling	stand.
	Red Oak	2	Log/XLog	14		Willo	ow spp.	Low	5 - 10 feet	Sapling	Harvested between Nov 2016 and July 2017 (sale 72-002-15). Final
	Paper Birch	2	Pole/Log	8		Whit	te Ash	Medium	Variable	Sapling	inspection in Jan 2018 after all closure work and hauling completed.
Е	Bigtooth Aspen	3	Pole/Log	9		Iron	nwood	Medium	Variable	Sapling	Steep rocky terrain made operations difficult.
	Red Maple	5	Log/Pole	11		Black R	Raspberry	Medium	5 - 10 feet	Tall Shrub	Old Comments 2015 YOE
	Yellow Birch	1	Log/Pole	10		Sugar	r Maple	Low	Variable	Sapling	Mixed hardwood stand of log size. Both white ash and beech are presen
	Sugar Maple	61	Log/Pole	12	105						in the stand, beech is looking good with no signs of BBD. White ash on the other hand is not doing well and is past salvage stage, majority of
	Ironwood	3	Pole/Sapling	5							trees have excessive bird peck signs. Ground cover is trout lily,
											and on the northern portion of the stand there are various wet areas/ vernal/forest ponds. Stand us very much park like and has hilly to steep terrain. Ten BA swings were taken, stand average was 118. Stand is
											entirely PArVVb/AFO.
35	3102	- Grass		Nonsto	cked	1.0			No		entirely PArVVb/AFO.  Get owner data when back in the field
								4.50			Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.
36	4130	- Aspen	Ş	Sapling	Well	53.4	27	1-50	N/A		Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in
36	4130 Canopy Species	- Aspen <b>% Cover</b>	Size Class	Sapling <b>DBH</b>	Well	53.4 Sub-Cano	opy Species	Density	N/A Avg. Height	Size	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997,
36	4130 Canopy Species Black Cherry	- Aspen <b>% Cover</b> 8	Size Class Sapling	Sapling  DBH  2	Well	53.4  Sub-Cano	opy Species (Hybrid) Oak	<b>Density</b> Low	N/A Avg. Height Variable	Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is
36	4130 Canopy Species Black Cherry Red Maple	- Aspen  **Cover**  8   8   8	Size Class Sapling Sapling	Sapling  DBH  2  3	Well Age	53.4  Sub-Cano Black/Red Cherry	opy Species (Hybrid) Oak ry (spp.)	Low Medium	N/A  Avg. Height  Variable  Variable	Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997,
36	4130 Canopy Species Black Cherry Red Maple Quaking Aspen	- Aspen  **Cover*    8     8     66	Size Class Sapling Sapling Sapling	Sapling  DBH 2 3 4	Well	53.4  Sub-Canc Black/Red Cherry Bals:	opy Species (Hybrid) Oak ry (spp.)	Density Low Medium Low	N/A  Avg. Height  Variable  Variable  5 - 10 feet	Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is
36	4130 Canopy Species Black Cherry Red Maple Quaking Aspen Jack Pine	- Aspen  **Cover**    8	Size Class Sapling Sapling Sapling Sapling Sapling/Pole	Sapling  DBH  2 3 4 4	Well Age	53.4  Sub-Canc Black/Red Cherry Balsa	opy Species (Hybrid) Oak ry (spp.) cam Fir d Pine	Low Low Low Low	N/A  Avg. Height  Variable  Variable  5 - 10 feet  5 - 10 feet	Sapling Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is
36	4130 Canopy Species Black Cherry Red Maple Quaking Aspen Jack Pine k/Red (Hybrid) Oak	- Aspen  **Cover*    8	Size Class Sapling Sapling Sapling Sapling Sapling/Pole Sapling	Sapling  DBH 2 3 4 4 4	Well Age	53.4  Sub-Canc Black/Red Cherry Balss Red Jack	opy Species (Hybrid) Oak ry (spp.) nam Fir d Pine k Pine	Low Low Low Low Low	N/A  Avg. Height  Variable  Variable  5 - 10 feet  5 - 10 feet  5 - 10 feet	Sapling Sapling Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is
36	4130 Canopy Species Black Cherry Red Maple Quaking Aspen Jack Pine	- Aspen  **Cover**    8	Size Class Sapling Sapling Sapling Sapling Sapling/Pole	Sapling  DBH  2 3 4 4	Well Age	53.4  Sub-Cand Black/Red Cherry Balss Red Jack White	opy Species (Hybrid) Oak ry (spp.) sam Fir d Pine k Pine te Pine	Low Low Low Low Low Low Medium	N/A  Avg. Height  Variable  Variable  5 - 10 feet  5 - 10 feet  Variable	Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is
36	4130 Canopy Species Black Cherry Red Maple Quaking Aspen Jack Pine k/Red (Hybrid) Oak	- Aspen  **Cover*    8	Size Class Sapling Sapling Sapling Sapling Sapling/Pole Sapling	Sapling  DBH 2 3 4 4 4	Well Age	53.4  Sub-Cand Black/Red Cherry Balss Red Jack White	opy Species (Hybrid) Oak ry (spp.) nam Fir d Pine k Pine	Low Low Low Low Low	N/A  Avg. Height  Variable  Variable  5 - 10 feet  5 - 10 feet  5 - 10 feet	Sapling Sapling Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is
36 C Black	4130  Canopy Species  Black Cherry  Red Maple  Quaking Aspen  Jack Pine  k/Red (Hybrid) Oak  White Pine	- Aspen  **Recover*    8	Size Class Sapling Sapling Sapling Sapling/Pole Sapling Pole/Sap/Log	Sapling  DBH 2 3 4 4 9  Sapling	Well Age 27 Well	53.4  Sub-Canc Black/Red Cherry Balss Red Jack White  29.0	opy Species (Hybrid) Oak ry (spp.) sam Fir d Pine k Pine te Pine e Spruce	Density Low Medium Low Low Low Trace	N/A  Avg. Height  Variable  Variable  5 - 10 feet  5 - 10 feet  Variable  5 - 10 feet  N/A	Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is
36 C Black	4130 Canopy Species Black Cherry Red Maple Quaking Aspen Jack Pine k/Red (Hybrid) Oak White Pine  4130 Canopy Species	- Aspen  **Recover*    8	Size Class Sapling Sapling Sapling/Pole Sapling Pole/Sap/Log	Sapling  DBH 2 3 4 4 4 9  Sapling	Well Age 27 Well	53.4  Sub-Canc Black/Red Cherry Balsa Red Jack White  29.0  Sub-Canc	opy Species (Hybrid) Oak ry (spp.) sam Fir d Pine k Pine te Pine e Spruce  12 Ir	Density Low Medium Low Low Low Trace  Density	N/A  Avg. Height  Variable  Variable  5 - 10 feet  5 - 10 feet  Variable  5 - 10 feet  Variable  5 - 10 feet  Variable  Avg. Height	Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is small portion being PArVHa/PArVVb  RED PINE AND WHITE PINE SEEDING INTO SUBCANOPYOId Comments 2015 YOE: Stand was final harvested under contract 72-029-08-01 Comp 27 RPP). This treatment was under the Red Pine
36 C	4130 Canopy Species Black Cherry Red Maple Quaking Aspen Jack Pine k/Red (Hybrid) Oak White Pine  4130 Canopy Species Red Maple	- Aspen  **Recover*    8	Size Class Sapling Sapling Sapling/Pole Sapling Pole/Sap/Log	Sapling  DBH 2 3 4 4 4 9  Sapling  DBH 2	Well Age 27 Well	53.4  Sub-Canc Black/Red Cherry Balsa Red Jack White  29.0  Sub-Canc	opy Species (Hybrid) Oak ry (spp.) sam Fir d Pine k Pine te Pine e Spruce  12 Ir opy Species d Pine	Density Low Medium Low Low Low Medium Trace Density Low	N/A  Avg. Height  Variable  Variable  5 - 10 feet  5 - 10 feet  Variable  5 - 10 feet	Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is small portion being PArVHa/PArVVb  RED PINE AND WHITE PINE SEEDING INTO SUBCANOPYOId Comments 2015 YOE: Stand was final harvested under contract 72-029-08-01 Comp 27 RPP). This treatment was under the Red Pine project. Cut in 2009/2010. No FTP Site converted to Aspen. Regen
36  Black  37  Black	4130  Canopy Species  Black Cherry  Red Maple  Quaking Aspen  Jack Pine  k/Red (Hybrid) Oak  White Pine  4130  Canopy Species  Red Maple  k/Red (Hybrid) Oak	- Aspen  **Recover**    8	Size Class Sapling Sapling Sapling Sapling Sapling Pole/Sap/Log  Size Class Sapling Sapling	Sapling  DBH  2 3 4 4 9  Sapling  DBH  2 2 2	Well 27 Well Age	53.4  Sub-Canc Black/Red Cherry Balsa Red Jack White  29.0  Sub-Canc	opy Species (Hybrid) Oak ry (spp.) sam Fir d Pine k Pine te Pine e Spruce  12 Ir	Density Low Medium Low Low Low Trace  Density	N/A  Avg. Height  Variable  Variable  5 - 10 feet  5 - 10 feet  Variable  5 - 10 feet  Variable  5 - 10 feet  Variable  Avg. Height	Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is small portion being PArVHa/PArVVb  RED PINE AND WHITE PINE SEEDING INTO SUBCANOPYOld Comments 2015 YOE: Stand was final harvested under contract 72-029-08-01 Comp 27 RPP). This treatment was under the Red Pine project. Cut in 2009/2010. No FTP Site converted to Aspen. Regen survey showed approximately 1400 aspen/ac, 600 red maple/acre, 100
36  CO  Black  37  Black  Black	4130 Canopy Species Black Cherry Red Maple Quaking Aspen Jack Pine k/Red (Hybrid) Oak White Pine  4130 Canopy Species Red Maple	- Aspen  **Recover*    8	Size Class Sapling Sapling Sapling/Pole Sapling Pole/Sap/Log	Sapling  DBH 2 3 4 4 4 9  Sapling  DBH 2	Well Age 27 Well	53.4  Sub-Canc Black/Red Cherry Balsa Red Jack White  29.0  Sub-Canc	opy Species (Hybrid) Oak ry (spp.) sam Fir d Pine k Pine te Pine e Spruce  12 Ir opy Species d Pine	Density Low Medium Low Low Low Medium Trace Density Low	N/A  Avg. Height  Variable  Variable  5 - 10 feet  5 - 10 feet  Variable  5 - 10 feet	Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Get owner data when back in the field  Old Comments 2015 YOE Breit Burn permit #55768 Elmer-clinton B1-18.  Old comments confirmed. added subcanopy data for species seeding in under dominant aspen canopy cover. see draft treatment notes for details. Old Comments 2015 YOE:Stand was harvested in 1997, Good regeneration and sten density. Stand is primarily PVCd and is small portion being PArVHa/PArVVb  RED PINE AND WHITE PINE SEEDING INTO SUBCANOPYOId Comments 2015 YOE: Stand was final harvested under contract 72-029-08-01 Comp 27 RPP). This treatment was under the Red Pine project. Cut in 2009/2010. No FTP Site converted to Aspen. Regen

Report 7 - Stands



Stand	Level 4 Co	ver Type	Si	ze De	nsity	Acres Stand Age E	BA Range	Managed S	ite	General Comments
38	4119 - Mixed No	rthern Har	dwoods Sa	wtimb	er Well	76.2 101	141-170	N/A		Stand has enough aspen to regenerate throughout. Maple crop trees are widely scattered with most of the hard maple leaning poor quality or
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	suppressed. I am leaning towards clear cutting the stand to take
	Paper Birch	3	Pole/Log	8		Beech	Medium	Variable	Sapling	advantage of the aspen in hopes of regenerating something other than
	White Pine	1	Log	12		Paper Birch	Low	Variable	Sapling	beech ironwood and ash in the understory. (The attached QD data has a coding error the Pin Oak should be Red Oak. Some hybrid oak as well)
	Red Maple	2	Pole	6		Oak (spp.)	Low	Variable	Sapling	Coding endrine Fin Oak Should be Red Oak. Some hybrid oak as well)
	Red Oak	17	XLog/Log	19		Serviceberry (Juneberry)	) Medium	Variable	Sapling	Old Comments 2015 YOE
	Beech	20	Log/Pole/XLog	11		Red Maple	Low	Variable	Sapling	Mixed stand of hardwoods with large red oak of good quality. Sugar
	Sugar Maple	28	Log/Pole	12	101	Sugar Maple	Low	Variable	Sapling	maple fair to good quality same with bigtooth. Small forest pond, rolling to steep terrain. Gas well within stand. Ground cover included lily of
	Red Pine	2	XLog/Log/Pole	18		White Ash	Low	Variable	Sapling	valley, trillium and sweet cicily. Stand is made up of primarily
	Basswood	10	Log/Pole/XLog	13		Ironwood	Medium	Variable	Sapling	PArVVB/AFO with small areas of AFO & PArVHa/PArVVb
	Bigtooth Aspen	17	Log/Pole	11					,	-
39	4130 -	Aspen	Sa	oling <b>I</b>	Medium	76.0 5	Immature	N/A		stand is regenerating well, probably close to 75 to 100 canopy closure
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	range, stand just needs a few more years for stems in open pockets to to get to 6 ft. Lowrer density stems and mostly oak and rm where density is
	Red Pine	10	Log/XLog	20		White Pine	Low	< 5 feet	Sapling	higher of the supercanopy RP over 18" retained throughout as
	Black Cherry	5	Sapling	1		Red Pine	Low	< 5 feet	Sapling	perscribed in last treatment. Scattered rp and trace wp seeding in.
	Bigtooth Aspen	65	Sapling	1	5					Old Comments 2025 YOE:
Blad	ck/Red (Hybrid) Oak	5	Sapling	1						Harvest completed 07/2018. Area based retention pockets and retain red
	Red Maple	15	Sapling	1						pine over 18"DBH.
										regenerating to aspen. Good stem quality as you move towards the NW portion of stand greater red and white pine density. Rolling to steep terrain. Ten BA swings were taken with a stand average of 96, individual BA's were Sugar 9, Red Maple 9, White Ash 1, Beech 9, Paper Birch 3, Bigtooth 41, White Pine 1, and Red Pine 15. Stand is made up of primarily PArVVB/AFO with small area of PArVHa/PArVVb.
40	3102 -	- Grass	١	lonsto	ocked	1.0		No		Get owner data when back in the field
										Old Comments 2015 YOE Breit Burn well site Permit # 55375 ELMER-CLINTON B3-18
41	4131 - As	spen, Oak	Pole	timbe	r Mediur	m 17.2 54	51-80	N/A		old comments confirmed, discuss if more rp acres are needed for 2025.  BA is widely variable, some open/cherry brush areas.old comments
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species	Density	Avg. Height	Size	2015 yoeHodge Podge stand of aspen, maple and oak, northern portion
	White Pine	10	Log/Pole/Sap	12		Oak (spp.)	Low	Variable	Sapling	more hardwood with pine. Stems are not of good quality, gas well in
	Red Pine	5	Pole	8		Red Maple	High	Variable	Sapling	middle of stand. Stand is made up of primarily PArVHa/PArVVb with smal
	Red Maple	22	Log/Pole/Sap	10		White Pine	Low	Variable	Sapling	portions of PVCd and PArVVb.
	Red Oak	20	Log	12		Aspen (spp.)	High	Variable	Sapling	
	Basswood	3	Pole/Log	8		Red Pine	Low	Variable	Sapling	
	Quaking Aspen	40	Pole/Sap/Log	9	54					-



Stand	Level 4 Co	over Type	s	ize De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
42	4111 - S.Maple, Ha	ard Mast A	ssociation Sa	wtimb	er Well	99.6	102	111-140	N/A		More oak in SE. VP's should be buffered during field work, see attached
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	for QD. rolling terrain, ash is dead and mostly dropped out. High quality stand. Thin down to 70 to 90 BA focussing on cull stems.
	Sugar Maple	65	Log/Pole	13	102	Suga	ar Maple	Low	Variable	Sapling	ŭ
	Beech	7	Log/Pole/XLog	12		Bas	sswood	Low	Variable	Sapling	Old comments 2015 YOE
	Red Maple	5	Log/Pole	11		Wh	ite Ash	High	Variable	Sapling	Mixed hardwood stand of log size. Both white ash and beech are present in the stand, beech is looking good with no signs of BBD. White ash on
	Bigtooth Aspen	2	Log/Pole	11		В	seech	High	Variable	Sapling	the other hand is not doing well and is past salvage stage, majority of
	Ironwood	2	Pole	5		Pap	er Birch	Medium	Variable	Sapling	trees have excessive bird peck signs and are dead, if alive ash would
	Red Oak	4	Log	15		Stripe	ed Maple	Low	Variable	Sapling	have added another 10 BA to the stand. Ground cover is trout lily, dutchman breeches, sweet cicily. Stand is very much park like in area,
	Paper Birch	2	Pole/Log	8				,			also areas of thick regen and has hilly to steep terrain. Ten BA swings
	Basswood	13	Log	13							were taken, stand average was 72. Stand is primarily PArVVb/AFO. There are a few small patches of AFO along the perimeter of the stand.
43	3102	- Grass	ŀ	Vonsto	cked	1.0			No		gas well siteold comments Nellis 2020Terra Energy Gas Well Clinton 16-8 Permit # 47140
44	3102	- Grass	1	Vonsto	cked	1.1			No		Get owner data when back in the field
						Sub-Can	opy Species	Density	Avg. Height	Size	
						Deciduo	ous Saplings	Trace		Seeding	Old Comments 2015 YOE Terra Energy well site
45	3102	- Grass	1	Vonsto	cked	1.0			No		Get owner data when back in the field
											Old Comments 2015 YOE Merit energy pumping statiion. State Clinton C4-18.
46	4130 -	- Aspen	Sa	pling N	1edium	45.1	4	Immature	N/A		stand is regenerating well, probably close to 75 to 100 canopy closure range, stand just needs a few more years for stems in open pockets to to
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	get to 6 ft. More rm here than stand to west. Scattered rp and trace wp
	Bigtooth Aspen	60	Sapling	1	4	Whi	ite Pine	Low	Variable	Sapling	seeding in. supercanopy RP over 18" retained throughout as perscribed
	Red Maple	20	Sapling	1							in last treatment.
Blac	ck/Red (Hybrid) Oak	5	Sapling	1							
	Black Cherry	10	Sapling	1							Old Comments 2015 YOE:
	Red Pine	5	Sapling	1							Stand harvested in summer of 2019(72-046-15). Was cut with tops laid
											out to chip, but chipping was never completed due to declining market conditions. Skidder came back in spring 2020 to spread out top piles where feasible without damaging existing regeneration.
											Stand harvested back in early 60's, mixture of bigtooth and other hardwood species of pole to log size. Calling stand pole size but it is right on the edge of log size. Not much for understory as far as density goes. Rolling to steep terrain. Stand is made up of primarily PArVHa/PArVVb with small areas of AFO, PArVVb/AFO.



Stand	Level 4 Co	ver Type	Si	ze De	nsity	Acres	Stand Age B	A Range	Managed S	iite	General Comments
47	4130 -	Aspen	Ро	letimb	er Well	54.0	42	81-110	N/A		12/20/2022Terrain is rolling hills in the north turning to long steep
Canop	py Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	inoperable slopes along much of the south line. Stand 67 and Stand 70 split off of 47. Type change between 70 and 47 is indistinct in areas and
Red	d Pine	2	Log/Pole/XLog	11		Black	Raspberry	Low	< 5 feet	Tall Shrub	will require verification during field work. Stand 70 is MXD-HDW
Whit	te Pine	5	Log/Pole	12		Wh	nite Ash	Low	Variable	Sapling	dominated with pockets of AS, whereas 47 is AS dominated with pockets
Bigtoot	oth Aspen	65	Pole/Log	9	42	Е	Beech	Low	< 5 feet	Sapling	of Oak-HM-IW-BC-RM-Beech-WP. Potential vernal pool in Stands NE. Hemlock pockets may also be wet in spring/summer.Old Comments
Pape	er Birch	2	Pole/Sapling	5		He	emlock	Low	10 - 20 feet	Pole	2015 YOEPole sized stand of aspen and mixed hardwoods, throughout
Red	l Maple	15	Pole/Sapling	6		Servicebe	rry (Juneberry)	Low	< 5 feet	Pole	the stand there are small indiviual pockets of aspen, red maple as well as
Black/Red	(Hybrid) Oak	6	Pole/Sapling	6		Autu	ımn Olive	Low	5 - 10 feet	Tall Shrub	some conifers. Old OI indicates some red and white pine were left from the last treatment in the late 70's early 80's. Understory vary sparse.
Sugai	ar Maple	5	Pole/Sapling	6		Iro	onwood	Low	< 5 feet	Sapling	Rolling to steep terrain with gas wells and ORV trail found in this
	4420	A = = = =	D-	Latinala	\^/ - !!	40.4		54.00	N1/A		stand.Stand is three quarters AFO and the rest is PArVVb/AFO.
48		Aspen			er Well		36	51-80	N/A	0:	Stand still needs walked. Could not access before pre-review.
	py Species White Cedar		Size Class	_	Age		nopy Species	Density	Avg. Height	Size	Old Comments 2015 YOE
		2	Pole/Log	9			d Maple	Low	< 5 feet	Sapling	Pole and sapling bigtooth of good density with an open area at the top of the ridge. Narrow band of log sized species between stand and cedar
	d Oak	5 80	Pole/Sapling	5	36		en (spp.)	Low	< 5 feet	Sapling	stand (57) to the East. Small wet area is also in the stand. Stand is
Diatont	un Aspen		Pole/Sapling	9	30		ed Pine	Low	< 5 feet	Sapling Sapling	made up of primarily PArVHa/PArVVb with small areas of AFO,
Bigtoot	· · · · · · · · · · · · · · · · · · ·	2	Dala/Las			RE	an Pine	LOW	< 5 feet	Sapling	PArVVb/AFO & Unclassified lowlands.
Tam	narack	3	Pole/Log			110	34 1 1110	20		1 0	1 7 11 V V D/7 11 C & CHOIGSSING A TOWNGHAS.
Tam Red	l Maple	5	Pole/Sap/Log	5		110	54 1 1110			1 0	1741 V 5/74 G & GHOLDSHIEG ISWIGHTED.
Tam Red Red	l Maple d Pine	5 5	Pole/Sap/Log Log/Pole/XLog	5 12	Mark					1 0	
Tam Red Red	l Maple d Pine 42110 - Plar	5 5 ated Red P	Pole/Sap/Log Log/Pole/XLog ine Saw	5 12 timber	Mediu	m 16.2	87	81-110	N/A	1	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable density
Tam Red Red Canop	l Maple d Pine 42110 - Plar py Species	5 5 nted Red P	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class	5 12 timber	Mediu	m 16.2 Sub-Car	87 nopy Species	81-110 <b>Density</b>	N/A Avg. Height	Size	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable density throughout ranging from trace to full. adjus5 boundary to aerial where
Tam Red Red Canop	Maple d Pine  42110 - Plar  py Species er Birch	5 5 oted Red P % Cover 2	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole	5 12 timber DBH	Age	m 16.2 <b>Sub-Ca</b> r Re	87 nopy Species ed Pine	81-110  Density  High	N/A Avg. Height < 5 feet	<b>Size</b> Seeding	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable density throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015
Red Red 49 Canop Pape Red	Maple d Pine  42110 - Plar  py Species er Birch d Pine	5 5 5 steed Red P % Cover 2 90	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog	5 12 timber <b>DBH</b> 6 16		m 16.2 <b>Sub-Car</b> Re	87 nopy Species ed Pine lk (spp.)	81-110  Density  High  Low	N/A  Avg. Height  < 5 feet  Variable	Size Seeding Sapling	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable density throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple
Red Red  49  Canop Pape Red Whit	Maple d Pine  42110 - Plar  py Species er Birch d Pine te Pine	5 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog Log	5 12 timber <b>DBH</b> 6 16 12	Age	m 16.2 Sub-Car Re Oa Asp	87 nopy Species ed Pine lk (spp.) en (spp.)	81-110  Density  High  Low  Low	N/A  Avg. Height  < 5 feet  Variable  Variable	Size Seeding Sapling Sapling	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable density throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen
Red Red  49  Canop Pape Red Whit	Maple d Pine  42110 - Plar  py Species er Birch d Pine	5 5 5 steed Red P % Cover 2 90	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog	5 12 timber <b>DBH</b> 6 16	Age	m 16.2  Sub-Car  Re  Oa  Aspr	87 nopy Species ed Pine lk (spp.) en (spp.) nite Pine	81-110  Density  High  Low  Low  High	N/A  Avg. Height  < 5 feet  Variable  Variable  < 5 feet	Size Seeding Sapling Sapling Sapling Seeding	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable density throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen survey showed an average of 615 red pine seedlings per acre and 75
Red Red  49  Canop Pape Red Whit	Maple d Pine  42110 - Plar  py Species er Birch d Pine te Pine	5 5 5 steed Red P % Cover 2 90 5	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog Log	5 12 timber <b>DBH</b> 6 16 12	Age	m 16.2  Sub-Car  Re  Oa  Aspr	87 nopy Species ed Pine lk (spp.) en (spp.)	81-110  Density  High  Low  Low	N/A  Avg. Height  < 5 feet  Variable  Variable	Size Seeding Sapling Sapling	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable density throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen
Red Red  49  Canop Pape Red Whit	Maple d Pine  42110 - Plar  py Species er Birch d Pine te Pine (Hybrid) Oak	5 5 5 steed Red P % Cover 2 90 5	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog Log Log	5 12 timber <b>DBH</b> 6 16 12	<b>Age</b> 87	m 16.2  Sub-Car  Re  Oa  Aspr	87 nopy Species ed Pine lk (spp.) en (spp.) nite Pine	81-110  Density  High  Low  Low  High	N/A  Avg. Height  < 5 feet  Variable  Variable  < 5 feet	Size Seeding Sapling Sapling Sapling Seeding	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable density throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen survey showed an average of 615 red pine seedlings per acre and 75
Tam Red Red  49  Canop Pape Red Whit Black/Red	Maple d Pine  42110 - Plar  py Species er Birch d Pine te Pine (Hybrid) Oak	5 5 sheet Red P % Cover 2 90 5 3	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog Log Log	5 12 timber DBH 6 16 12 13	<b>Age</b> 87	m 16.2  Sub-Car  Re  Oa  Aspo	87 nopy Species ed Pine lk (spp.) en (spp.) nite Pine	81-110  Density  High  Low  Low  High	N/A  Avg. Height  < 5 feet  Variable  Variable  < 5 feet  Variable	Size Seeding Sapling Sapling Sapling Seeding	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable density throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen survey showed an average of 615 red pine seedlings per acre and 75 white pine per acre. Stand is entirely PArVHa/PArVVb.
Tam Red Red  49  Canop Pape Red Whit Black/Red	Maple d Pine  42110 - Plar  py Species er Birch d Pine te Pine (Hybrid) Oak	5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog Log Log	5 12 timber DBH 6 16 12 13	<b>Age</b> 87	m 16.2  Sub-Car  Re  Oa  Aspr  Wh  Re  1.0	87 nopy Species ed Pine ak (spp.) en (spp.) nite Pine d Maple	81-110  Density  High  Low  Low  High	N/A  Avg. Height  < 5 feet  Variable  Variable  < 5 feet  Variable	Size Seeding Sapling Sapling Sapling Seeding	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable densit throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen survey showed an average of 615 red pine seedlings per acre and 75 white pine per acre. Stand is entirely PArVHa/PArVVb.  Get owner data when back in the field  Old Comments 2015 YOE
Red Red 49 Canop Pape Red Whitt Black/Red	Maple d Pine  42110 - Plar py Species er Birch d Pine te Pine (Hybrid) Oak	5 5  nted Red P % Cover 2 90 5 3  - Grass	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog Log Log	5 12 timber  DBH 6 16 12 13	87	m 16.2  Sub-Car  Re Oa  Aspr Wh  Re 1.0	87 nopy Species ed Pine ak (spp.) en (spp.) nite Pine d Maple	81-110  Density High Low Low High Low	N/A  Avg. Height  < 5 feet  Variable  Variable  < 5 feet  Variable  No	Size Seeding Sapling Sapling Sapling Seeding	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable densit throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen survey showed an average of 615 red pine seedlings per acre and 75 white pine per acre. Stand is entirely PArVHa/PArVVb.  Get owner data when back in the field  Old Comments 2015 YOE Merit Energy well site.St ate Clinton D3-18  some wind damage on west edge.
Tam Red Red 49  Canop Pape Red Whit Black/Red  50	Maple d Pine  42110 - Plar  py Species er Birch d Pine te Pine (Hybrid) Oak  3102 -	5 5  nted Red P % Cover 2 90 5 3  - Grass	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog Log Log	5 12 timber  DBH 6 16 12 13	Age 87 ccked	m 16.2  Sub-Car  Re Oa  Aspo Wh  Rec  1.0	87 nopy Species ed Pine lk (spp.) en (spp.) nite Pine d Maple	81-110  Density High Low Low High Low	N/A  Avg. Height  < 5 feet  Variable  Variable  < 5 feet  Variable  No	Size Seeding Sapling Sapling Seeding Sapling	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable densit throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen survey showed an average of 615 red pine seedlings per acre and 75 white pine per acre. Stand is entirely PArVHa/PArVVb.  Get owner data when back in the field  Old Comments 2015 YOE Merit Energy well site.St ate Clinton D3-18  some wind damage on west edge.  old comments 2015 YOE Nice cedar stand with good stem density. Windthrown openings being
Tam Red Red 49  Canop Pape Red Whit Black/Red  50  Canop Bigtoot	Maple d Pine  42110 - Plar py Species er Birch d Pine te Pine (Hybrid) Oak  3102 -	ted Red P Cover 90 5 3 - Grass	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog Log Log Size Class	5 12 timber DBH 6 16 12 13 Nonsto	Age 87 ccked	m 16.2  Sub-Car  Re Oa Aspr Wh Rec 1.0	87 nopy Species ed Pine lk (spp.) en (spp.) nite Pine d Maple	81-110  Density High Low High Low High Low  High Density	N/A  Avg. Height  < 5 feet  Variable  < 5 feet  Variable  No  N/A  Avg. Height	Size Seeding Sapling Sapling Seeding Sapling	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable densit throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen survey showed an average of 615 red pine seedlings per acre and 75 white pine per acre. Stand is entirely PArVHa/PArVVb.  Get owner data when back in the field  Old Comments 2015 YOE  Merit Energy well site.St ate Clinton D3-18  some wind damage on west edge.  old comments 2015 YOE  Nice cedar stand with good stem density. Windthrown openings being regenerated to balsam fir and black spruce. As you move north you star
Tam Red Red 49  Canop Pape Red Whit Black/Red  50  Canop Bigtoot Bals:	Maple d Pine  42110 - Plar py Species er Birch d Pine te Pine (Hybrid) Oak  3102 -  6120 - Low py Species oth Aspen	sted Red P Cover 90 5 3 Grass Vland Ceda Cover 20	Pole/Sap/Log Log/Pole/XLog ine Saw Size Class Pole Log/XLog Log Log Size Class Log Log Log	5 12 timber	Age 87 ccked	m 16.2  Sub-Car Rec Oa Aspr Wh Rec 1.0  21.7  Sub-Car Blac Bal	87 nopy Species ed Pine kk (spp.) en (spp.) nite Pine d Maple  102 nopy Species kk Spruce	81-110  Density High Low High Low High Density  Medium	N/A  Avg. Height  < 5 feet  Variable  Variable  < 5 feet  Variable  No  N/A  Avg. Height  < 5 feet	Size Seeding Sapling Sapling Seeding Sapling Size Sapling	Low end of BA range. Scattered hybrid and white oak recruited. pockets of aspen. Subcanopy beech throughout. wp and rp regen variable densit throughout ranging from trace to full. adjus5 boundary to aerial where past adjac3nttreatment cut into stand.old comments 2015 YOE:Shelterwood cut in fall of 2006 under contract #720270501 Whitabee Lake Red Pine. Understory is heavy to aspen and red maple in a couple of areas, majority of stand has little to no understory. Regen survey showed an average of 615 red pine seedlings per acre and 75 white pine per acre. Stand is entirely PArVHa/PArVVb.  Get owner data when back in the field  Old Comments 2015 YOE  Merit Energy well site.St ate Clinton D3-18  some wind damage on west edge.  old comments 2015 YOE  Nice cedar stand with good stem density. Windthrown openings being

Stand	Level 4 Co	ver Type	S	ize De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments		
52	500 - Water		1	Nonsto	ocked	7.9			No		old comments confirmed old Comments 2015 YOEPotts Lake, two		
						Sub-Car	nopy Species	Density	Avg. Height	Size	water bodies with surrounding vegetation for lowland shrubs and sapling sized trees occupying areas that were once underwater.		
						Bal	sam Fir	Low	Variable	Sapling			
						Та	g Alder	Low	5 - 10 feet	Tall Shrub			
						Quak	ing Aspen	Low	Variable	Sapling			
53	3102 - Grass		1	Nonstocked		1.0	L	Inspecified	No		get well site data when back out in the field.		
											Old Comments: BrietBurn D1-3HD well site.		
54	4139 - Aspen, N	Mixed Deci	duous Sa	pling I	Medium	111.3	5	Immature	N/A		Scattered supercanopy conifer (RP, WP, EH, and a couple BF and WS)		
С	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	and red/hybrid oak. The SW of stand has 50% canopy of oak over parklike understory. Aspen regenerating well throughout most of stand.		
Black/	/Red (Hybrid) Oak	10	Log	14		Hawth	norn (spp.)	Low	5 - 10 feet	Tall Shrub			
	Red Pine	2	Log/XLog	16		Black	Raspberry	Low	5 - 10 feet	Tall Shrub	well. Steep ridge in stand unharvested, primarily log aspen, oak, red		
	White Pine	1	XLog/Log	18							maple, and scattered conifer.		
	Red Maple	17	Sapling	2							Old Comments 2015 YOE:		
Black/	/Red (Hybrid) Oak	10	Sapling	2	5						Post harvest update: Stand harvested in winter 2017/2018, Sale: Potts		
Bi	igtooth Aspen	50	Sapling	2	5						Lake Aspen Mix, #72-015-15-01. All oak and conifers were left, along with Riparian buffer along Gilchrist Creek. Slopes in some areas were		
Е	Black Cherry	10	Sapling	2							too steep for harvest.		
											great, canopy closure at the high end of 50-75. Area is rolling terrain with gas wells intermixed and Gilchrist Creek bordering the South East edge of stand. Stand is primarily PArVHa/PArVVb with areas of AFO, PArVVb and unclassified lowlands.		
55	6120 - Lov				er Well	7.1	96	111-140	N/A		carried forward site condition for RMZ		
	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	old comments 2015 yoe		
	Paper Birch	2	Pole	8	0.4		k Spruce	Medium	< 5 feet	Sapling	Cedar stand with black spurce and some aspen mixed throughout.		
	Black Spruce		Log/XLog/Pole	14	94	Bai	sam Fir	Low	< 5 feet		Gilchriet creek rune through the stand east of the river more aspen. This		
	nern White Cedar		L /\/L /\/D - L-	40						Sapling	Gilchrist creek runs through the stand, east of the river more aspen. This stand has been site conditioned for Riparian management zone. Site		
			Log/XLog/Pole	13	96	Е	Beech	Low	< 5 feet	Sapling	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie		
	luaking Aspen	15	Log/XLog/Pole	13		E				1 0	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie aves were Black Spruce 56, Cedar 63 and aspen 13. Stand is entirely		
	uaking Aspen Balsam Fir					E				1 0	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie		
56	Balsam Fir 6127 - Lo	15 3 wland Pine	Log/XLog/Pole Pole Saw	13 8	96 Medium	n 11.5	Beech 85	1-50	< 5 feet	Pole	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie aves were Black Spruce 56, Cedar 63 and aspen 13. Stand is entirely unclassified lowlands.  road into stand ends with a guard rail blocking it off is this potential		
<b>56</b>	Balsam Fir 6127 - Lo	15 3 wland Pine % Cover	Log/XLog/Pole Pole Saw Size Class	13 8 timber	96	n 11.5 Sub-Car	85 nopy Species	1-50 Density	< 5 feet  N/A  Avg. Height	Pole	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie aves were Black Spruce 56, Cedar 63 and aspen 13. Stand is entirely unclassified lowlands.  road into stand ends with a guard rail blocking it off is this potential access I to stand 57?		
56 C	Balsam Fir 6127 - Lo Canopy Species nern White Cedar	15 3 wland Pine % Cover 20	Log/XLog/Pole Pole Saw Size Class Log	13 8 timber	96 Medium	n 11.5 <b>Sub-Ca</b> Balsa	85 hopy Species am Poplar	1-50  Density  Medium	< 5 feet  N/A  Avg. Height 5 - 10 feet	Pole  Size  Sapling	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie aves were Black Spruce 56, Cedar 63 and aspen 13. Stand is entirely unclassified lowlands.  road into stand ends with a guard rail blocking it off is this potential access I to stand 57?  old comments 2015 YOE		
56 C	Balsam Fir 6127 - Lo Canopy Species nern White Cedar Balsam Fir	15 3 wland Pine % Cover 20 2	Pole Saw Size Class Log Pole/Log	13 8 timber <b>DBH</b> 11 8	96 Medium	n 11.5  Sub-Car  Balsa	85 hopy Species am Poplar rry (spp.)	1-50  Density  Medium  Low	< 5 feet  N/A  Avg. Height 5 - 10 feet  Variable	Size Sapling Sapling	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie aves were Black Spruce 56, Cedar 63 and aspen 13. Stand is entirely unclassified lowlands.  road into stand ends with a guard rail blocking it off is this potential access I to stand 57?  old comments 2015 YOE Stand borders Gilchrist Creek, need portable bridge to access this stand.		
56 C	Balsam Fir  6127 - Lo  Canopy Species nern White Cedar  Balsam Fir  Red Pine	15 3 wland Pine % Cover 20 2 35	Log/XLog/Pole Pole Saw Size Class Log Pole/Log Log/XLog	13 8 ttimber DBH 11 8 14	96 Medium	n 11.5  Sub-Car  Balsa  Che	85 nopy Species am Poplar rry (spp.) sam Fir	1-50  Density  Medium  Low  Medium	< 5 feet  N/A  Avg. Height 5 - 10 feet  Variable  Variable	Size Sapling Sapling Sapling	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie aves were Black Spruce 56, Cedar 63 and aspen 13. Stand is entirely unclassified lowlands.  road into stand ends with a guard rail blocking it off is this potential access I to stand 57?  old comments 2015 YOE Stand borders Gilchrist Creek, need portable bridge to access this stand. All of stand would fall within the RMZ for Gilchrist Creek. Nice wildlife corridor. Stand is almost all unclassified lowlands with a small area of		
56 C North	Balsam Fir 6127 - Lo Canopy Species nern White Cedar Balsam Fir Red Pine White Pine	15 3 wland Pine % Cover 20 2 35 30	Log/XLog/Pole Pole Saw Size Class Log Pole/Log Log/XLog Log/XLog	13 8 ttimbel DBH 11 8 14 13	96 Medium	n 11.5  Sub-Car  Balsa  Che  Bal  Asp	85 nopy Species am Poplar rry (spp.) sam Fir en (spp.)	1-50  Density  Medium  Low  Medium  Medium	< 5 feet  N/A  Avg. Height 5 - 10 feet  Variable  Variable  < 5 feet	Size Sapling Sapling Sapling Sapling	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie aves were Black Spruce 56, Cedar 63 and aspen 13. Stand is entirely unclassified lowlands.  road into stand ends with a guard rail blocking it off is this potential access I to stand 57?  old comments 2015 YOE Stand borders Gilchrist Creek, need portable bridge to access this stand. All of stand would fall within the RMZ for Gilchrist Creek. Nice wildlife		
56 North	Balsam Fir  6127 - Lo  Canopy Species nern White Cedar  Balsam Fir  Red Pine	15 3 wland Pine % Cover 20 2 35	Log/XLog/Pole Pole Saw Size Class Log Pole/Log Log/XLog	13 8 ttimber DBH 11 8 14	96 Medium	Sub-Car Balsa Che Bal Asp	85 nopy Species am Poplar rry (spp.) sam Fir	1-50  Density  Medium  Low  Medium	< 5 feet  N/A  Avg. Height 5 - 10 feet  Variable  Variable	Size Sapling Sapling Sapling	stand has been site conditioned for Riparian management zone. Site index was 60. Three BA swings were taken average BA was 132, specie aves were Black Spruce 56, Cedar 63 and aspen 13. Stand is entirely unclassified lowlands.  road into stand ends with a guard rail blocking it off is this potential access I to stand 57?  old comments 2015 YOE Stand borders Gilchrist Creek, need portable bridge to access this stand. All of stand would fall within the RMZ for Gilchrist Creek. Nice wildlife corridor. Stand is almost all unclassified lowlands with a small area of		



Stand	Level 4 Co	over Type		Size Density		Acres	Stand Age B	BA Range	Managed Site		General Comments  stand was not treated, check about carrying tx forward at compartment		
57	4139 - Aspen, Mixed Deciduous			Sawtimber Well		28.0	64	81-110	N/A				
Can	opy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	review.		
Ва	asswood	5	Log/Pole	12		W	hite Ash	Low	Variable	Sapling	old comments 2015 yoe		
Sug	gar Maple	5	Log/Pole	10		Ва	lsam Fir	Medium	Variable	Sapling	Aspen stand with fair quality stems. Good species diversity, lowland		
Paper Birch		4	Pole	6		Re	ed Maple	Medium	Variable	Sapling	along western edge. Rolling terrain. Access an issue need to cross Gilchrist creek to access. Stand is a mix of AFO, unclassified lowland		
	Beech	5	Log/Pole	10		R	ed Pine	Low	Variable	Sapling	and PArVVb.		
Bigto	ooth Aspen	40	Log/Pole	11	64	Wh	nite Pine	Low	Variable	Sapling			
Black/Re	ed (Hybrid) Oak	6	Log/Pole	12		Pap	per Birch	Low	Variable	Sapling			
Ва	alsam Fir	5	Pole/Log	9							-		
Re	ed Maple	10	Log/Pole	11									
R	ed Pine	3	Log/Pole/XLog	13									
Wh	hite Pine	2	Log/Pole/XLog	13									
Quak	king Aspen	15	Log/Pole	11									
Can	opy Species	duous % Cover	Size Class	DBH	l Age	Sub-Ca	opy Species Der	Density	Density Avg. Height	Size	higher density of deciduous trees. Large amounts of down woody debeated water was present during the inventory. Site index 58. Stand is entirely Unclassified Lawland		
	ooth Aspen	15	Log/XLog/Pole	14			Isam Fir	Medium	Variable	Pole	entirely Unclassified Lowland.		
Bals	am Poplar	5	Pole/Log	9		Bla	ack Ash	Medium	Variable	Sapling			
Ва	alsam Fir	20	Pole/Log	9		Re	d Maple	Medium Variable		Sapling			
Northern	n White Cedar	40	Log/Pole	11	96						_		
Iro	onwood	5	Pole	6									
Bla	ack Ash	5	Pole	8									
Pa	per Birch	5	Pole	6									
	4139 - Aspen, I				Medium	83.2		Immature	N/A		stand regenerated well to aspen. oak retained during harvest in sw. cedaretained in center of stand is experiencing approximately 30% windthrow		
	opy Species		Size Class		l Age		nopy Species		Avg. Height	Size			
	ooth Aspen	40	Sapling	1	5		d (Hybrid) Oak		< 5 feet	Sapling	old comments ehlert (no sale number or name in comments) Harvest completed 08/2017. Final harvest, retain cedar and oak.		
	ed Maple	10	Sapling	1			Isam Fir	Low	< 5 feet	Sapling	Aspen/mixed bardwood is starting to regenerate		
Quaking Aspen 15 Sapling			1	400		Raspberry	Medium	< 5 feet	Tall Shruk				
	ed (Hybrid) Oak	15	Log	14	100		ed Maple	Medium	< 5 feet	Sapling	Diverse stand of log and pole size material. Aspen is the dominate		
Choke Cherry 5		Sapling	1		Wh	nite Pine	Low	5 - 10 feet	Sapling	species with a mixture of associated hardwood species. There are a			

Trace

< 5 feet

Sapling

Northern White Cedar

Log/Pole

15

12

Red Pine

of Unclassified Lowland.

couple of small cedar pockets found in this stand of rolling terrian. There

are two small creeks that flow through this stand one borders along the western edge and teh other is located in the NE corner along the stand line with Stand 63. This creek disappears so it may be more of a ephmeral stream that is not mapped. Majority of stand is upland but there are areas with lowland associated species and as you move north it becomes more lowland. Oak is located in the SW corner of the stand this portion of stand very park like. Stand is primarily AFO with pockets



										rear of Entry: 2025		
Stand Level	4 Cover Type	ver Type		Size Density		Acres Stand Age BA Range			Site	General Comments		
<b>60</b> 3	102 - Grass		Nonst	ocked	1.7			Managed Opening		Evidence of use as old landing.		
					Sub-Can	opy Species	Density	Avg. Height	Size	Old Comments 2015 YOE		
					Bigtoo	th Aspen	Low		Sapling	wildlife opening or former well site. No visual sign of well.		
					Re	d Pine	Trace		Sapling			
<b>61</b> 4133 - A	Aspen, Mixed	Pine	Sawtimb	er Wel	l 78.7	68	81-110	N/A		Update: continue with previous plan of action,		
Canopy Specie	es % Cove	r Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	Stand has lower quality quaking clones with slightly better bigtooth. Poor		
Black/Red (Hybrid) (	Oak 5	Log/Pole	12		Whi	te Pine	Medium	Variable	Sapling	to fair quality hybrid oak in patches. From memory when I was in the area		
Quaking Aspen	20	20 Log/Pole			Red	Maple	Low	Variable	Sapling	stand should be treated. I was unable to access before prereview to get		
Bigtooth Aspen	Aspen 35 Log/Po		12	68						better stand data. Aspen with wp and some rp mixed in. Hilly but good access. Old comments and data agree. try to get out before pre review.		
Red Pine	10	Log	13							access. Our commonic and data agrees by to get out poloto pro ferrom.		
White Pine	20	20 Log										
Red Maple	le 10 Log/Pole		10 Log/Pole 10								old comments 2015 YOE: This area was the part of stand 54 that was excluded from treatment in	
420 Mix	ted Upland Co	niforo	Soutimb	or Mol	16.0	62	444 440	N/A		the 2015 YOE. In areas aspen is developing conks, large stand with mixed sizes of aspen but all with in same age class. Quality is not that great, canopy closure at the high end of 50-75. Area is rolling terrain with gas wells intermixed and Gilchrist Creek bordering the South East edge of stand. Stand is primarily PArVHa/PArVVb with areas of AFO, PArVVb and unclassified lowlands.		
<u> </u>		r Size Class	Sawtimb	l Age		16.0 63 111-140			Size	No access to NW corner. Stand was split out from stand 59 when harvested due to water quality BMPs. stand follows Gilchrist Creek with		
Canopy Specie Bigtooth Aspen	15 % Cove		11	63		opy Species Maple	<b>Density</b> Medium	Avg. Height Variable		widely variable species composition density and size.		
Black/Red (Hybrid) (		Log/Pole				ite Ash	Medium	Variable	Sapling Sapling	Old Comments 2015 YOE		
Northern White Ced		Log/Pole	12 100			eech	Medium	Variable	Sapling	Diverse stand of log and pole size material. Aspen is the dominate		
Quaking Aspen			12	96		sam Fir	Low	Variable	Sapling	species with a mixture of associated hardwood species. There are a		
Balsam Fir					ry (Juneberry)	Medium	Variable	Tall Shrub	couple of small cedar pockets found in this stand of rolling terrian. There are two small creeks that flow through this stand one borders along the			
Beech			12			Cherry	Medium	Variable	Sapling	western edge and teh other is located in the NE corner along the stand		
	2 Log e 21 Log/XLog		16	63				Variable	Sapling	line with Stand 63. This creek disappears so it may be more of a		
White Pine		21 Lug/\(\text{Lug}\) 16 63			Oar	Oak (spp.) Low Variable				ephmeral stream that is not mapped. Majority of stand is upland but		

Red Maple

Red Pine

Paper Birch

Pole/Log

Log/XLog

Pole

6

10

2

9

16

7

of Unclassified Lowland.

there are areas with lowland associated species and as you move north it

becomes more lowland. Oak is located in the SW corner of the stand

this portion of stand very park like. Stand is primarily AFO with pockets



Stand Level 4 Co	evel 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments								
<b>63</b> 4130	4130 - Aspen		Sawtimber Well			10.4 63 8		N/A		Stand was split out from stand 59 when harvested due to water quality		
Canopy Species	% Cover	Size Class	ss DBH A		Sub-Canopy Species		Density	Avg. Height	Size	BMPs for ephemeral stream along stand west edge.		
Quaking Aspen	20	Log/Pole	10		Red Ma	aple	Medium	Variable	Sapling			
Beech	2	Log	12		Beec	h	Medium	Variable	Sapling	Old Comments 2015 YOE		
Paper Birch	2	Pole	7		White A	Ash	Medium	Variable	Sapling	Diverse stand of log and pole size material. Aspen is the dominate species with a mixture of associated hardwood species. There are a		
Bigtooth Aspen	50	Log/Pole	11	63	Balsam	Fir	Low	Variable	Sapling	couple of small cedar pockets found in this stand of rolling terrian. Ther		
White Ash	2	Pole/Log	8		Black Cl	herry	Medium	Variable	Sapling	are two small creeks that flow through this stand one borders along the		
Red Pine	2	Log/XLog	16		Serviceberry (	Juneberry)	Medium	Variable	Tall Shrub	western edge and teh other is located in the NE corner along the stand line with Stand 63. This creek disappears so it may be more of a		
Balsam Fir	2	Pole	6		Oak (sp	pp.)	Low	Variable	Sapling	ephmeral stream that is not mapped. Majority of stand is upland but		
Red Maple	6	Pole/Log	9				'		-	there are areas with lowland associated species and as you move north		
Northern White Cedar	10	Log/Pole	12	96						becomes more lowland. Oak is located in the SW corner of the stand		
Black/Red (Hybrid) Oak	4	Log	12	100						this portion of stand very park like. Stand is primarily AFO with pockets of Unclassified Lowland.		
	- Aspen % Cover Size Class		Sapling Well  Class DBH Age				nspecified	N/A Avg. Height Size		Young aspen stand with some pole sized stems scattered throughout.  Previous inventory has stand as an A5 with average DBH of 7 inches a		
Canopy Species Bigtooth Aspen	75	Sapling	3	25	Sub-Canopy Species Red Maple		<b>Density</b> Low	Avg. Height < 5 feet	Sapling	years. Stand is entirely PArVHa/PArVVb.		
Black/Red (Hybrid) Oak			3	25	White F	<u>'</u>	Low	< 5 feet	Sapling			
Red Pine	3	- 1 3		Red Pine		Low	< 5 feet	Sapling				
Red Maple	18	Sapling	3		Cherry (s		Medium < 5 feet		Sapling			
White Pine	2	Sapling/Pole	4		Oak (sp		Low	< 5 feet	Sapling			
66 4130	- Aspen	Pole	etimbe	r Mediu	m 21.0	36	1-50	N/A		stand split out from stand 17. QA clones with cherry brush mixed in.		
Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Canopy	y Species	Density	Avg. Height	Size	Aspen is of lower density and quality due to the poorer quality soils than here than 17 as a whole. In addition this stand is flat compared to the		
Quaking Aspen	65	Pole/Sapling	6	36	Serviceberry (	Juneberry)	Medium	Variable	Sapling	steep hills and rolling terrain of 17. Handful of white and red pine		
Red Pine	2	Log	12		Aspen (s	spp.)	Medium	Variable	Sapling	observed from ridge top but did not have time to evaluate northern and		
Choke Cherry	18	0		1 (117		Medium	Variable	Tall Shrub	western portions of stand. scattered rm and oak.			
Red Maple	10	Pole/Sapling	5		Oak (sp	рр.)	Low	Variable	Sapling			
Red Oak	5	Sapling	2		Cherry (s	spp.)	Medium	Variable	Sapling			

Medium

Variable

Sapling

Red Maple

Report 7 - Stands

Compartment: 27 Year of Entry: 2025



tand	Level 4 Co	over Type	Si	ze De	ensity	Acres Sta	and Age BA	Range	Managed S	ite	General Comments
67	4310 - Pir	ne, Oak Mi	x Sa	Sawtimber Well		14.9	91 1	11-140	N/A		Stand split from Stand 70. Old sale map in compartment folder indicat
Ca	nopy Species	% Cover	Size Class	DBH	l Age	Sub-Canop	y Species	Density	Avg. Height	Size	area of pine excluded from adjacent harvest. Good area for large tree management. Drawn stand boundary approximates operability
	Red Pine	45	Log/XLog/Pole	16	91	Beed	ch	Low	< 5 feet	Sapling	considerations for sale prep, Adjust accordingly in the field.
S	ugar Maple	10	Log/Pole	12		Ironwo	ood	Low	< 5 feet	Sapling	
Black/F	Red (Hybrid) Oak	20	Log/XLog/Pole	16	46	White	Ash	Low	< 5 feet	Sapling	
F	Red Maple	10	Pole/Log	9		Serviceberry (	(Juneberry)	Low	< 5 feet	Pole	
Р	aper Birch	1	Pole/Sapling	6							-
V	White Pine	10	XLog/Log/Pole	18							
D:-		4		40	40						
	tooth Aspen 4191 - Mixed Upla	and Decidu	Log/Pole lous with Sa	12 wtimb	42 er Poor	11.3	90	51-80	N/A		
68 <sup>4</sup>	4191 - Mixed Upla	and Decidu		wtimb		11.3 Sub-Canop		51-80  Density	N/A Avg. Height	Size	]
68 '	4191 - Mixed Upla Co	and Decidu	ous with Sa	wtimb	er Poor		y Species			Size Tall Shrub	
68 '	4191 - Mixed Upla Co anopy Species	and Decidu nifer % Cover	ous with Sar	wtimb	er Poor	Sub-Canop	y Species Olive	Density	Avg. Height		
68 'Ca	4191 - Mixed Upla Co anopy Species ugar Maple	and Decidu onifer % Cover	ous with Sar Size Class Log/Pole/XLog	wtimb  DBF	er Poor	Sub-Canop	y Species Olive spberry	<b>Density</b> Medium	Avg. Height 5 - 10 feet	Tall Shrub	
68 'Ca	4191 - Mixed Upla Co anopy Species ugar Maple Basswood	mnd Decidu nifer  % Cover  25	size Class Log/Pole/XLog Pole	wtimb  DBH  16	er Poor	Sub-Canop Autumn Black Ras	y Species Olive spberry Maple	Density Medium Medium	Avg. Height 5 - 10 feet 5 - 10 feet	Tall Shrub	
68	4191 - Mixed Upla Co anopy Species ugar Maple Basswood White Ash	and Decidu onifer  **Cover* 25 10 5	Size Class Log/Pole/XLog Pole Pole/Sapling	<b>DBH</b> 16 8 6	er Poor	Sub-Canop Autumn Black Ras Sugar M	y Species Olive spberry Maple Pine	Density  Medium  Medium  Medium	Avg. Height 5 - 10 feet 5 - 10 feet Variable	Tall Shrub Tall Shrub Sapling	
C# S !!	4191 - Mixed Upla Co anopy Species ugar Maple Basswood White Ash Red Oak	and Decidu inifer  % Cover  25  10  5  25	Size Class Log/Pole/XLog Pole Pole/Sapling Log/Pole	<b>DBH</b> 16 8 6 14	er Poor	Sub-Canop Autumn Black Ras Sugar M White I	y Species Olive spberry Maple Pine	Density Medium Medium Medium Medium	Avg. Height 5 - 10 feet 5 - 10 feet Variable Variable	Tall Shrub Tall Shrub Sapling Sapling	
C# S !!	4191 - Mixed Upla Co anopy Species ugar Maple Basswood White Ash Red Oak White Pine	and Decidurifer  % Cover  25  10  5  25  25	Size Class Log/Pole/XLog Pole Pole/Sapling Log/Pole Log/Pole/XLog	<b>DBH</b> 16 8 6 14 12	er Poor	Sub-Canop Autumn Black Ras Sugar M White I Bassw	y Species Olive spberry Maple Pine rood	Density  Medium  Medium  Medium  Medium  Low	Avg. Height 5 - 10 feet 5 - 10 feet Variable Variable Variable	Tall Shrub Tall Shrub Sapling Sapling Sapling	
C# S !!	4191 - Mixed Upla Co anopy Species ugar Maple Basswood White Ash Red Oak White Pine	and Decidurifer  % Cover  25  10  5  25  25	Size Class Log/Pole/XLog Pole Pole/Sapling Log/Pole Log/Pole/XLog	<b>DBH</b> 16 8 6 14 12	er Poor	Sub-Canop Autumn Black Ras Sugar M White I Bassw Beed	y Species Olive spberry Maple Pine wood ch Birch	Density Medium Medium Medium Medium Low Low	Avg. Height 5 - 10 feet 5 - 10 feet Variable Variable Variable Variable	Tall Shrub Tall Shrub Sapling Sapling Sapling Sapling	

69	4125 - Black	ί, Ι	N. Pin (	Dak	Sawtimber Well			
Cano	py Species	%	6 Cove	r Size Class		DBH	Age	
Red	l Maple		10	Log/Pole		11		
Black/Red	(Hybrid) Oak		60	Log/Pole		14	100	
Bigtoo	oth Aspen		10	Log		13		
Black	k Cherry		5	Pole/Saplin	g	5		
Whi	te Pine		5	Log/Pole/XL	og	10		
Re	d Pine		10	Log/XLog		15		

II	12.6	100	51-80	N/A					
	Sub-Car	opy Species	Density	Avg. Height	Size				
	Hawth	orn (spp.)	Medium	Variable	Tall Shrub				
	Oal	k (spp.)	Low	Variable	Sapling				
	Chei	ry (spp.)	Medium	Variable	Sapling				
	Servicebe	ry (Juneberry)	Medium	Variable	Sapling				

Low

Variable

White Ash

Sapling

Classic low quality SW sandy ridgetop black and pin oak 13 inch avg. some decent hybrid stems mixed in 80 to 110 ba. Aspen clumps and somee rm stems 8 to 12 inches. mortality in the aspen. scattered short fat up to 18" rp and a couple younger wp. hawthorn and serviceberry. Poor access and operability. ridge is narrow with steep drops to east and west. best access is from NE or S but is still questionable. do not cut stand do to erosion concerns and only approximately 50 percent of stand is operable.

## Report 7 - Stands



Stand	Level 4 Co	Level 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments						
70	4199 - Other Mixed	1199 - Other Mixed Upland Deciduous		Poletimb	er We	II 43.3	42	81-110	N/A		12/20/22Stand 70 split from stand 47. Boundary is indistinct in transition
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	s Density	Avg. Height	Size	however Stand 70 is hardwood dominated with more white pine than stand 47. Autumn olive along roads and in openings (old landings?).
	White Pine	10	Log/Pole/Sap	12		Irc	onwood	Low	< 5 feet	Sapling	Cherry is poor form. HM has potential to produce some fair quality. RM is
	Red Pine	3	Pole	9		Е	Beech	Low	< 5 feet	Sapling	mostly large clumps of stump sprouts. Oak is vigorous and outcompeting
	Beech	1	Pole	6		Wh	nite Ash	Low	Variable	Sapling	other sp in most locations. Scattered individual RP. Pockets of WP. Rolling terrain. ORV trail, well sites, and pipeline present. Ash is mostly
	Paper Birch	7	Pole/Sapling	5		Servicebe	erry (Juneberry	y) Low	< 5 feet	Pole	dead and down however scattered poles and saplings with evidence of
I	Bigtooth Aspen	19	Pole/Sapling	6	42	Autu	ımn Olive	Low	5 - 10 feet	Tall Shrub	
	Red Maple	18	Pole/Sapling	6							hardwoods, throughout the stand there are small indiviual pockets of aspen, red maple as well as some conifers. Old OI indicates some red
	Sugar Maple	19	Pole/Sapling	7							and white pine were left from the last treatment in the late 70's early
	Black Cherry	3	Pole/Sapling	5							80's. Understory vary sparse. Rolling to steep terrain with gas wells and
Blac	k/Red (Hybrid) Oak	20	Pole/Log	9	42						ORV trail found in this stand. Stand is three quarters AFO and the rest is PArVVb/AFO.
72	310 - Herbace	eous Open	ıland	Nonsto	ocked	0.8	0		No		Natural Gas Well Site