

Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72274 Entry Year 2026 Acreage: 1,194

County: Crawford

Management Area: Camp Grayling

Stand Examiner: Jake Halabut

Legal Description:

T27N R1W Sections 6, 7, & 8

Southeast Lovells Township, Crawford County

Identified Planning Goals:

To maintain species and structural diversity while managing for health, productivity, and sustainability throughout the compartment. To provide multiple use opportunities and incorporate any visual management needed to optimize these uses while facilitating military training needs.

Soil and topography:

The majority of this compartment is comprised of Grayling sands and Graycalm sands, ranging from 0-20% slopes. SE corner of Stand 43 has a unique soil type when compared to the surrounding area, as it is Tawas muck, containing unique ground cover species such as the Pitcher plant and other species tolerant of acidic soil conditions. One significantly steep slope exists along high banks road near the corner of sections 5, 6, 7, & 8. The slope of this hill could limit harvesting operations in the immediate area.

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

This compartment consists of solid state ownership except for privately owned parcels in Sections 6 and 8. This compartment contains 70 acres of military board land in Section 6. The remainder of state land in the compartment is under the 20 year management agreement with the Michigan National Guard, Department of Military Affairs. The management agreement allows for military camping and maneuvers, but does not allow the use of heavy equipment or high intensity live ammunition firing. Tracked vehicles are prohibited and all vehicle use is restricted to existing trail roads.

State land located in Sections 7 and 8 are under a long term lease (L-1479) with the Michigan National Guard, DMA to provide for military usage with no permanent buildings or improvements to be erected (Act 154, P.A. 1935). Wooden military observation towers are located within Sections 7 and 8, but appear to not be in use (their condition is rapidly declining). There is also sound monitoring equipment installed in the NE ¼ SE ¼, Section 6. Informal requests have been made from private landowners in the area for easements across state land to provide legal ingress/egress to the private lands. To date, no such requests have been granted easements.

Unique Natural Features:

Hill's Thistle (cirsium hillii), Kirtland's Warbler (Dendroica kirtlandii), Wood turtle (Glyptemys insculpta). SE corner of stand 43 contains some unique plant species associated with acidic mucky soil conditions, as outlined above.

Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

Special Management Designations or Considerations:

A designated Kirtland's Warbler management area lies along the south boundary of the compartment. No special needs exist within the compartment.

Watershed and Fisheries Considerations:

There is a small portion of an unnamed lake (< 1 acre) in the south east corner of Section 8. The North Branch of the AuSable River is located within ¼ of the compartment. This compartment is in the North Branch Au Sable River watershed, and lies just to the west of that waterbody. Prescribed treatments are appropriate for the protection of that waterbody. Fisheries Division is working with local angler groups on instream habitat improvement projects in the North Branch Au Sable, and habitat work for this reach of the North Branch Au Sable River is tentatively schedule for 2019-2022. We will likely request trees from this compartment at that time.

Wildlife Habitat Considerations:

This compartment has many cover types, with varying age classes, which provide excellent habitat for many species of wildlife.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Coldwater Shale. The Coldwater does not have a current economic use. A clay pit is located in Section 7, referred to as Bald Hill Clay Pit. There is good potential for gravel mining on the upland areas. In regards to oil and gas development, there are no oil and gas leases in the compartment. The Compartment is located two miles to the northwest of Conners Marsh Field. The field has produced over 20 Bcf gas from the Ordovician Prairie du Chien.

Vehicle Access:

The compartment is easily accessed through county roads of Bald Hill Road and High Banks Road. Numerous other trail roads exist in the compartment, many of which are only accessible to a 4WD vehicle. Many of these trails are used for military training purposes. There are several roads used by private landowners to access their property. One trail road is gated where it meets High Banks Road, which is a trespass.

Survey Needs:

There are no survey needs for this compartment at this time.

Recreational Facilities and Opportunities:

No designated recreational trails or facilities exist within the compartment.

Fire Protection:

The compartment falls under the fire protection of the Lovell's Volunteer Fire Department and the Grayling MDNR. If a wildfire was to occur in this compartment, the nearest water source would be a small lake in the NE corner of Section 17, to the south of compartment 240.

Additional Compartment Information:

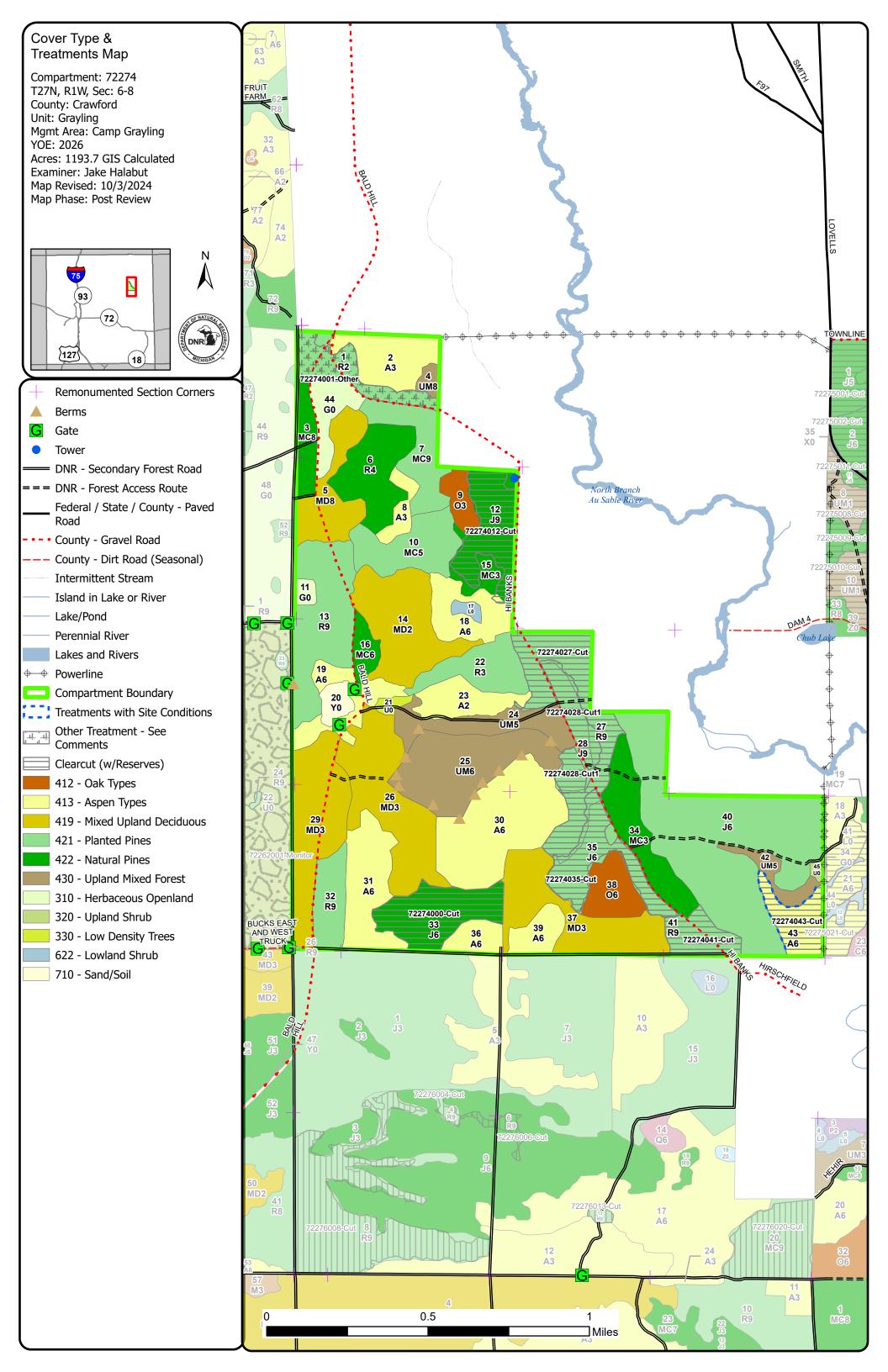
Several harvest were a result of the Red Pine Project, the main goal of the Red Pine Project is to adjust and balancing the red pine cover-type age-class distribution by harvesting red pine timber stands in the 40-79 year age-classes and regenerating areas to red pine.

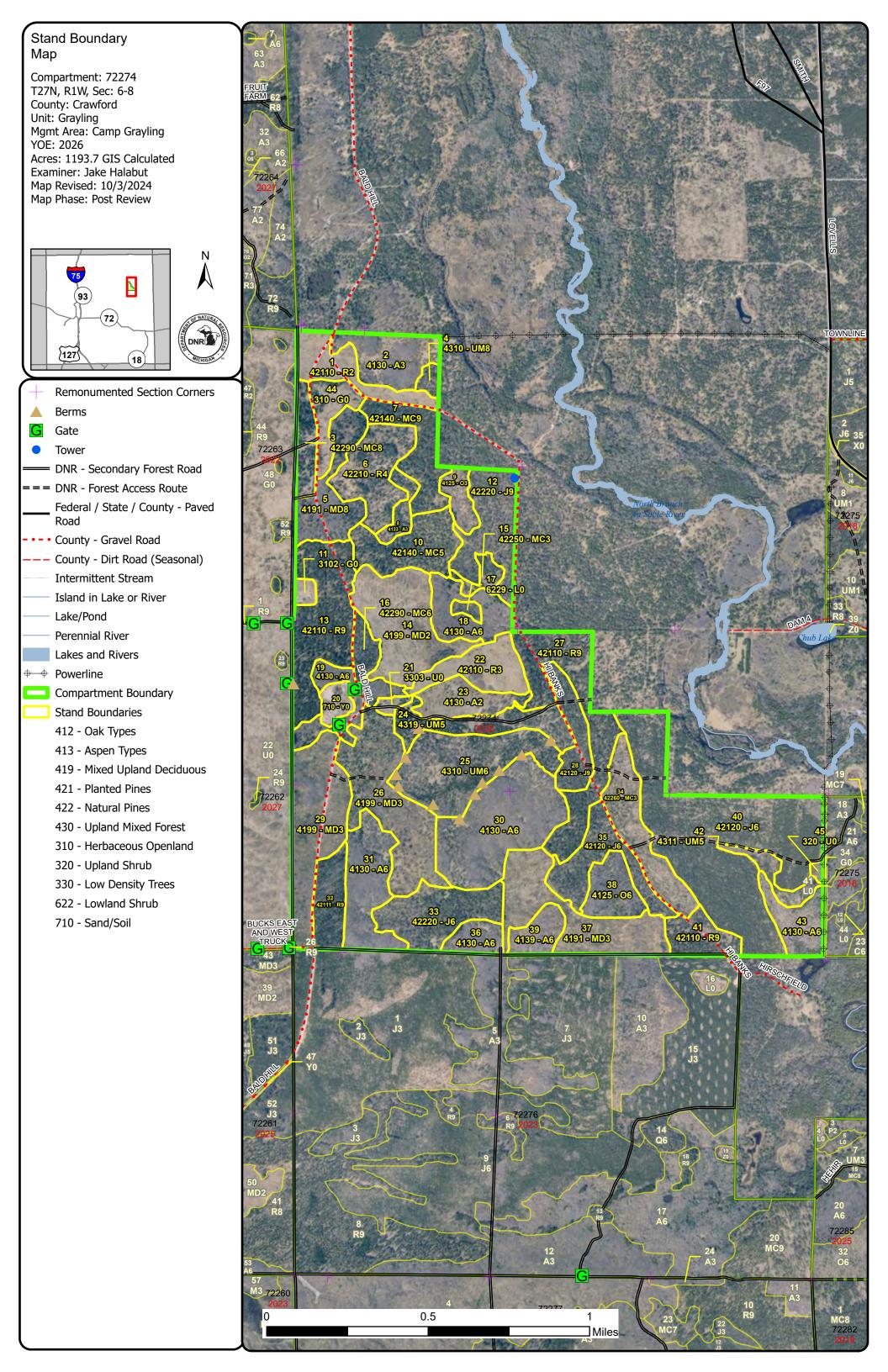
The following reports from the Inventory are attached:

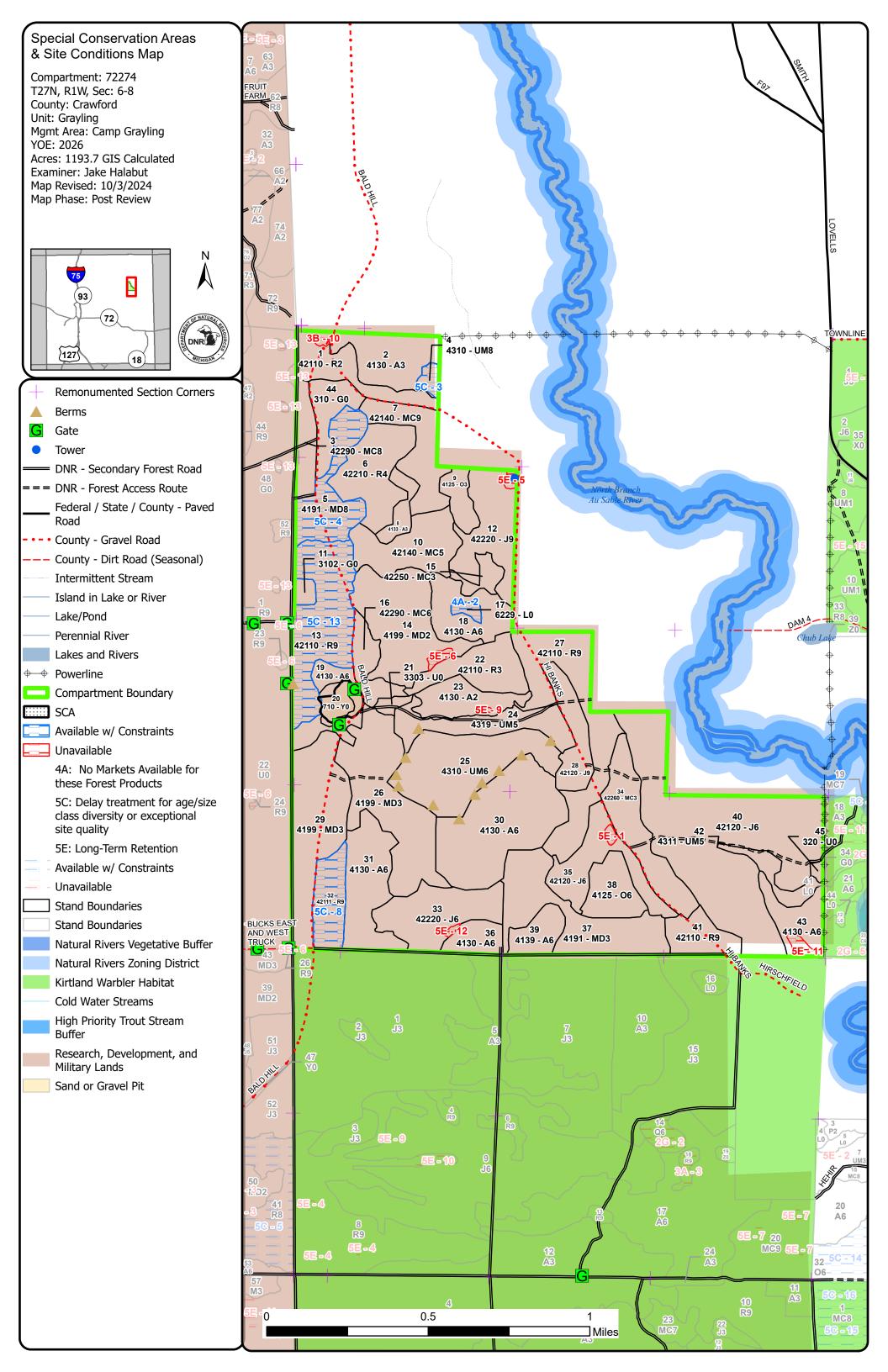
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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

Jake Halabut: Examiner



Age Class

	¥gri		3/2	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	P K	3 / 6		3/8	\$ / R	R / 8	*	3 /4	70,	& / &	R. S.		N. S.	3 300	Lagar Lagar
Aspen	0	19	8	26	144	20	18	0	0	0	0	0	0	0	0	0	0	0	235
Herbaceous Openland	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Jack Pine	0	0	0	0	130	0	0	62	52	0	0	0	0	0	0	0	0	0	244
Low-Density Trees	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lowland Shrub	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Mixed Upland Deciduous	0	49	156	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	234
Natural Mixed Pines	0	0	32	6	0	8	0	0	13	0	0	0	0	0	0	0	0	0	59
Oak	0	0	0	10	0	18	0	0	0	0	0	0	0	0	0	0	0	0	28
Planted Mixed Pines	0	0	0	0	0	30	0	0	26	0	0	0	0	0	0	0	0	0	56
Red Pine	0	47	0	0	0	0	0	33	102	34	0	0	0	0	0	0	0	0	214
Sand, Soil	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Upland Mixed Forest	0	0	0	53	10	0	0	26	0	0	0	0	4	0	0	0	0	0	93
Upland Shrub	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	32	115	196	95	284	76	18	121	193	34	0	29	4	0	0	0	0	0	1195



Report 2 – Treatment Summary

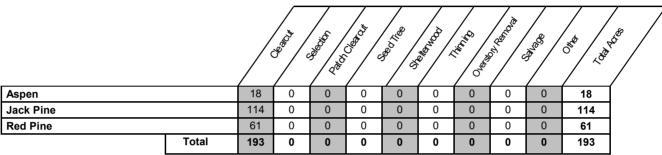
Grayling Mgt. Unit Year of Entry: 2026

Acres of Harvest

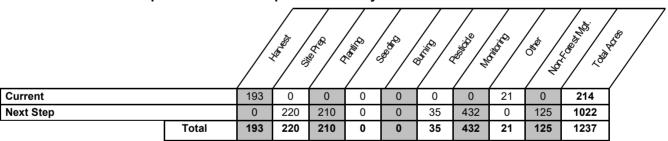
Compartment 274
Total Compartment Acres: 1,194

Commercial Harvest - 175 Harvests with Site Condition - 18 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Compartment: 274

Year of Entry: 2026

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Treatment Stand Stand ВА **Treatment Treatment** Cover Type Acres Size Age Habitat Method Objective Name CoverType Density Age Range Type Structure Cut

Proposed Treatments:

33 72274000-Cut 34.7 42220 - Natural Poletimber 61 51-80 Harvest Clearcut with 4211 - Planted Even-Aged No Retention Red Pine

Prescription Clearcut with retention. Utilize area retention along the slope that borders S36; approximate area of retention can be found in MiFi that

<u>Specs:</u> encapsulates pocket of red pine.

Next Step NonForestMgt, Brush Cutting; SitePrep, Trenching; Planting, Initial Plant; Planting, Replant; Pesticide, Aerial - Site Prep; Monitoring,

Treatments: Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Fully stocked planted red pine.

Regen:

Other Add military specs
Comment: Add chipping specs

Add low stump specs

Site Condition:

Proposed Start Date: 10/1 /2024

1 72274001- 21.2 42110 - Planted Sapling 4 Immatu Other Other 42110 - Planted Even-Aged No Other Red Pine Medium re Red Pine

<u>Prescription</u> Supplemental Brush cutting treatment to reduce encroachment of woody vegetation on planted red pine.

Specs:

Next Step

Treatments:

Acceptable Regen:

Other Previous efforts to spray to encourage FTG red pine were cut short due to MFNI hits in the area. Recommending supplemental brush cutting

Comment: to encourage % of FTG planted Red Pine.

Site Condition:

Proposed Start Date: 10/1 /2025

27 72274027-Cut 45.2 42110 - Planted Sawtimber 77 51-80 Harvest Clearcut 4211 - Planted Even-Aged No Red Pine Well Red Pine

Prescription Final Harvest: clearcut without retention due to the size and windy shape of the stand.

Specs:

Next Step SitePrep, Other - Specify; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr);

Treatments: NonForestMgt, Brush Cutting; NonForestMgt, Brush Cutting

Acceptable Fully stocked red pine

Regen:

Bump up the YOE date to either current YOE or 2025 YOE to coincide harvest with adjacent sale from 2023 YOE.

Other Comment:

Specs should include, low stumps, military restriction, chipping and harvest does not have to follow the woody biomass guidelines.

Site Condition:

Proposed Start Date: 10/1 /2024

42110 - Planted

No

Compartment: 274

Year of Entry: 2026

Even-Aged

4211 - Planted

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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
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Harvest

Clearcut

Red Pine Well Red Pine

Procedure Final harvest without retention due to small size of stand, follow standard retention quidalines. Perpays all species greater than 2" DRH.

51-80

<u>Prescription</u> Final harvest without retention due to small size of stand, follow standard retention guidelines. Remove all species greater than 2" DBH. <u>Specs:</u>

Next Step Monitoring, Herbicide Use; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Treatments:

Acceptable Well stocked red pine

72274041-Cut

Regen:

Other There is good amount of oak regeneration.

15.7

Comment:

Add military spec, low stump spec, chipping spec, and do not follow standard woody biomass guidelines.

82

Sawtimber

Site Condition:

Proposed Start Date: 10/1 /2024

43 72274043-Cut 18.0 4130 - Aspen Poletimber 50 51-80 Harvest Clearcut with 4136 - Aspen, Even-Aged No Well Retention Mixed Conifer

<u>Prescription</u> Clearcut with retention. Focus on using area retention to the south and where any wet areas exist; including a small tag alder site along the powerline. There was also a rare plant species hit near or in this stand per compartment notes.

Next Step Monitoring, Natural Regen (Intermediate)

Treatments:

Acceptable Moderate stocking of any mix of aspen, mixed pine, and any other secondary mixed deciduous will be acceptable.

Regen:

Other There was Barberry spp found in the understory during inventory, would be concerned about it spreading to adjacent stands during harvest.

Comment: Consider decontamination specs.

Add military specs

Add grouse drumming log spec

<u>Site Condition:</u> Long-Term Retention <u>Proposed Start Date:</u> 10/1 /2025

Approved Treatments:

12 72274012-Cut 31.5 42220 - Natural Sawtimber 73 Harvest Clearcut with 4211 - Planted Even-Aged No

<u>Prescription</u> Clearcut with retention, follow standard retention guidelines focusing retention along High Banks Rd. Spec for low stump heights as well as <u>Specs:</u> use the military spec. Do not follow Woody Biomass Guidelines. Old road in stand should be trenched and planted.

Next Step SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(3yr); Monitoring, Artificial Regen(1yr) Treatments:

Acceptable Plant red pine following harvest.

Regen:

Other On how stand responds following harvest, if pocket of oak regeneration then avoid these areas when planting. Old next step comments:

Site prep as needed trench and replant to red pine. Old road in stand should be trenched and planted.

Site Condition:

Proposed Start Date: 10/1 /2022

Grayling Mgt. Unit Report 3 -- Treatments Compartment: 274 s Year of Entry: 2026 t а **Treatment** Stand Size Stand BA **Treatment Treatment** Cover Type Acres Age Habitat n Method Name CoverType Density Age Range Type Objective Structure Cut d 28 72274028-20.4 42120 - Planted Sawtimber Harvest Clearcut 4211 - Planted Even-Aged No Red Pine Cut1 Jack Pine Well Prescription Final harvest with out retention do to the small size of the stand. Harvest all species greater than 2" DBH. Specs should include, low Specs: stumps, military restriction, chipping and harvest does not have to follow the woody biomass guidelines. Monitoring, Herbicide Use; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Next Step Treatments: Acceptable Well stocked red pine. Regen: Other Northen third of stand is PVCd and the remainder is PArVHa/PArVVb. Old next step comments: Site prep as needed including herbicide, trench and replant to red pine. Avoid planting area of heavy oak regeneration. Comment: Site Condition: Proposed Start Date: 10/1 /2022 42120 - Planted 4212 - Planted 72274035-Cut 27.7 Poletimber 67 Clearcut with No Harvest Even-Aged Jack Pine Jack Pine Well Retention Prescription Final harvest with retention, follow standard retention guidelines. Remove all species greater than 2" DBH. Focus retention along High Banks Rd. Specs should include, low stump, military restriction, chipping and do not follow standard woody biomass guideline. Specs: Next Step Monitoring, Herbicide Use; SitePrep, Trenching; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr)

Acceptable Well Stocked jack pine.

Regen:

Treatments:

Other Nice oak regeneration thru out the stand. Stand is a mixture of PVCd, PArVVb and PArVHa/PArVVb. Old next step comments: Site prep as needed and trench and plant to jack pine. If pocket of dense oak regen occur avoid planting in those areas.

Site Condition:

Proposed Start Date: 10/1 /2022

Total Treatment 214.4 Acreage Proposed:

Report 4 - Site Conditions

Grayling Mgt. Unit

Jake Halabut: Examiner

Compartment: 274
Year of Entry: 2026



Availability for Management Total Acres Acres Avail Acres **Dominant Site Conditions** Available With Condition Not Available 5C 3B 5E Acres Aspen Herbaceous Openland Jack Pine Low-Density Trees Lowland Shrub **Mixed Upland Deciduous Natural Mixed Pines** Oak Planted Mixed Pines **Red Pine** Sand, Soil **Upland Mixed Forest Upland Shrub** 1,194 1,081 **Total Forested Acres** 91% 9% 1% Relative Percent

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

No. (Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
С	omments:						
2	Available	4A: No Markets Available for these Forest Products	3	Unspecified	Unspecified	Unspecified	Unspecified
	omments: mall isolated pocke	et of Tag Alder in the middle o	f the asp	en clone, want to protect s	stand when aspen is treate	d in the future.	

Report 4 – Site Conditions

Grayling Mgt. Unit

Jake Halabut: Examiner



3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Small stand of poo	rly formed oak and red pine. Pro	ovides	some age and structure div	versity to the area.		
4	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	29	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This stand provides	s good structure diverisity at this	time.	Stand is still growing well a	nd treatment can be held o	off till the next year of entry.	
5	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	18	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Harvest with S13 a	nd replant next inventory cycle.					
9	Unavailable	5E: Long-Term Retention	0	(Inactive)3I: Historical / archeological (add locked comments)	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Grayling Mgt. Unit

Jake Halabut: Examiner



10	Unavailable	3B: Threatened, endangered, and special concern species	1	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
11	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						
12	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	51	Unspecified	Unspecified	Unspecified	Unspecified
	comments: larvest with adjace	ent stands next inventory cycle					

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: 274
Year of Entry 2026



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.

Conservatio Area	n Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated for include the 5,847 acre Forest Fire Experiment Station, the 12,00 Area, the Beaver Islands Archipelago Wildlife Research Area (the High and Hog Islands, all state owned land on Beaver, South For Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research, and over 144,000 acres of Military Lands.	0 acre Houghton Lake Wildlife Research at includes most of Garden Island, all of x and North Fox Islands), the Cusino
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high communities are ecologically and socially significant in their effer as aesthetics, habitat, bank stability, timber production, and their	e unique conditions adjacent to lakes, diversity of plants and wildlife. Riparian cts on water quality and quantity, as well
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coop U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources and 451, and the Federal Endangered Species Act of 1973. This species plans in various stages of review. As of now only two explover Habitat.	endangered species, as governed by Part and Environmental Protection Act, 1994 is an active program, with proposed
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spapproved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10	s Zoning District is a 400 foot buffer for

OF NATURAL	1
DNR DNR	1

Stand	Level 4 Co	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
1	42110 - Plai	nted Red P	ine S	Sapling	Medium	22.5	4	Immature	N/A		Retaining Joan's notes below from 2021 survey. Looks like the pine is
	Canopy Species	% Cover	Size Class	DBH	l Age						doing fairly well, though the snow cover may impact some of the stems (some are bent over). Oak is also an additional competition worth noting.
	Red Pine	85	Sapling	1	4						as it seems to be filling in a decent amount on the site.
١	lorthern Pin Oak	10	Sapling	1							Old comments: (Was cut in 2010 (#607-06), roller-chopped in 2016 (C72-
	Black Cherry	5	Sapling	1							648) & most of it was trenched & planted to RP in May 2018, excluding an acre along the north line by Bald Hill Rd. Yr 1 regen survey in Oct 2018 found 43.6% mortality, 59.5% FTG, 513 TPA. Re-planted w/ top-pruned 4-0 bareroot RP in April 2019. Yr 1 survey after replant found 20% mortality, 59% FTG, 784 TPA. Yr 2 contract survey Sept 2020 found 33% mortality, 49% FTG, 559 TPA. Re-planted with 253 TPA PRT RP in April 2021, bringing total TPA up to 967. Left the planted RP age set to the 2nd replant stock, but there are also 4- and 1-year old classes. Competition was cut under contract April 2021 to ensure >80% FTG RP. Oct 2021 Yr 1 survey: 851 TPA, 79% FTG, 4% mortality. BC is primary competitor. Rare plants found during cultivation site survey precluded further site prep and exclusion of an acre in the north along Bald Hill Rd. Entered the wrong date in the Implementation Notes when closing the Re-plant Rx: should've been April 28, 2021.)
	4130	- Aspen		Sanline	7 Woll	26.4	26	Immature	N/A		Stand is comprised of dense pockets of Aspen with areas of low stocked
2				Sapling							□ black cherry.Shrub and mixed pine. Aspen is looking pretty good. Not
	Canopy Species		Size Class		l Age		nopy Specie		Avg. Height	Size	quite merchantable yet, but is approaching the pole size class and will
	Quaking Aspen k/Red (Hybrid) Oak	70	Sapling/Pole Sapling/Pole		26		ick Pine	Low	Variable Variable	Sapling Sapling	likely reach it next inventory cycle. Stand is at the low end of the canopy closure, the open areas are being occupied by cherry brush.
Diac	Pin Cherry	15	Sapling/Pole				ck Cherry	Low	Variable	Sapling	Stand is PArVHa/PArVVb. Site index is 50.
	Jack Pine	5	Pole/Sapling		L	Diac	Sk Cherry	LOW	Vallable	Sapility	
3	42290 - Natu	ıral Mixed F	Pine Sa	wtimbe	r Mediun	n 13.2	77	51-80	N/A		Small stand of mixed red and jack pine, with jack pine the more dominate
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size	pine type throughout the stand and exists in varying product classes. The red pine is primarily saw log with smaller Diameter jack pine mixed
Blac	k/Red (Hybrid) Oak	6	Log	12		Ja	ck Pine	Medium	< 5 feet	Sapling	between. Stand is of lower value due to the acreage and the lack of
	Red Pine	44	Log/Pole/Sap	12		Oa	ak (spp.)	Low	< 5 feet	Sapling	merchantability among some stems found. overall BA is closer to the
	Jack Pine	50	Pole/Log/Sap	8 0	77	Re	ed Pine	Medium	Variable	Sapling	lower end of that range. The southern half is pretty dense with pole sized red and jack pine. sawlog sized tree's are mostly found in the northern
		· · · · · · · · · · · · · · · · · · ·				Blad	ck Cherry	Low	Variable	Sapling	half. looks like there were some residual oak trees left from the parent

stand of previous harvest.

old comments: Mixed stand of red and jack pine. Red pine of good quality. Smaller diameter jack pine is mixed throughout the stand. North half heavier to Red pine. Three BA swings were taken jack pine averaged 16 and red pine 40. Kotar is PArVHa/PArVVb. Site index is 45. Report 7 - Stands



Stand	Level 4 Co	over Type	Si	ize De	nsity	Acres	Stand Age B	A Range	Managed Site		General Comments			
4	4310 - Pir	ne, Oak Mi	x Saw	timber	Medium	3.7	113	51-80	N/A		Mixed stand of log sized Red pine and oak, not much for form or quality			
Cano	opy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	but a good stand for diversity. Looks like it may have been left as retention at some point, as it's a small acreage stand surrounded by			
Jac	ck Pine	2	Pole/Log	9		Oa	ak (spp.)	Low	Variable	Sapling	young, immature stands. Basal area is relatively low despite the size			
Re	ed Pine	48	Log/XLog	14		R	ed Pine	Low	Variable	Sapling	class of the stems. 4 plots were recorded for an average of 50 sq ft per			
Black/Red	d (Hybrid) Oak	50	Log	14	113						acre.			
											Previous comments: (Stand is PVCd and site index is 40.)			
5 419	91 - Mixed Upla Co	ınd Decidu nifer	ous with Saw	timber	Medium	28.7	105	1-50	N/A		Aspen regen is beginning to occupy the canopy in some areas, but is still primarily in the understory. Making good progress though as some stems			
Cano	opy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	are just reaching merchantability, mostly in areas where the aspen is free to grow. Oak is still holding on well despite the age.			
Black/Red	d (Hybrid) Oak	50	Log	12	105	Oa	ak (spp.)	Medium	5 - 10 feet	Sapling	to grow. Oak is still floiding off well despite the age.			
Re	ed Pine	33	Log	12		Ja	ck Pine	Low	5 - 10 feet	Sapling	Old comments: (All aspen was removed, enough of a residual overstory			
Quak	ing Aspen	17	Sapling/Pole	3	26	R	ed Pine	Medium	Variable	Sapling	left to be the featured canopy. Stand has mixtures of PArVHa and PArVVb and site index is 45. Stand was harvested in 1997 under			
		,				Asp	en (spp.)	Full	10 - 20 feet	Sapling	contract 72-046-96-01 southern third of stand had a salvage cut for dead			
						Che	erry (spp.)	Low	5 - 10 feet	Sapling	oak in 1998 (72-037-98-02) as per old OI comments.)			
6	42210 - Nati	ural Red P	ine Po	letimb	er Poor	32.5	67	1-50	N/A		Stand is progressing well, continue to monitor.			
Cano	opy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Old comments. Three retention islands were left within this stand. The			
Jac	ck Pine	8	Pole/Sapling	5		R	ed Pine	Medium	5 - 10 feet	Sapling	trees left behind do not seemed to be responding to the harvest. No			
Re	ed Pine	75	Pole/Sap/Log	7	67	Ja	ick Pine	Low	5 - 10 feet	Sapling	understory or ground cover to report due to snow depth. This stand was harvested in 2010/11 under 72-620-08-01 (Military RPP), all trees 6" and			
Quaki	ing Aspen	2	Pole/Sapling	5		Northe	ern Pin Oak	Medium	5 - 10 feet	Sapling	under as well as all white oak were left. Site index was 60 and Kotar is			
Black/Red	d (Hybrid) Oak	5	Pole/Sapling	5		WI	nite Pine	Low	5 - 10 feet	Sapling	PArVHa. Regen survey was conducted on Old OI stand 8, stand had a			
Wh	nite Pine	10	Pole/Sapling	6							MO of red pine, when considering the advanced regeneration the stand does pass its regen survey.			
7	42140 - Plant	ted Mixed I	Pine Sa	wtimb	er Well	26.0	77	51-80	N/A		The stand is a mixture of red and white pine with looks to be more of an			
Cano	opy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	even distribution of white and red pine as you head down the south leg of this stand. Good mix of Pole and saw timber as a whole, with some large			
Black/Red	d (Hybrid) Oak	2	Log/Pole	12		Oa	ak (spp.)	High	< 5 feet	Sapling	diameter pine being present (>18"). In the understory there's a lot of			
Re	ed Pine	48	Log/Pole/XLog	13	77	R	ed Pine	Low	Variable	Sapling	presence of white pine and Oak however the oak is predominately below			
Jac	ck Pine	2	Pole/Log	8		Ja	ck Pine	Low	Variable	Sapling	knee height due to apparent heavy deer browse/activity. Looks like this stand was treated with a thinning in the late 80s (Fence Trespass Block)			
Wh	nite Pine	46	Log/Pole/XLog	13		WI	nite Pine	Medium	Variable	Sapling	before species removal was conducted in 2008 (274 Pine: Red and white			
Wh	nite Oak	2	Log/Pole	10		Ва	lsam Fir	Trace	< 5 feet	Sapling	pine retained ~30 BA). Current average basal area is 70 sq ft based off			
				-		Re	d Maple	Medium	10 - 20 feet	Sapling	17 plots.			
											Old Comments: This stand was treated at the same time as stand 11, however this stand had a higher BA for residual pine species, so it was split out. Site index 55. Stand is a mixture of PVCd, PArVHa/PArVVB and PArVVb.			



Stand	d Level 4 Co	ver Type	;	Size De	nsity	Acres	Stand Age E	BA Range	Managed 9	Site	General Comments			
8	4133 - Asper	n, Mixed P	ine	Sapling	y Well	7.8	14	1-50	N/A		Young stand regenerating to aspen with white pine and red maple. Stand			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	was harvested in 2009 under 72-607-06-01 (274 Pine). This stand includes old OI stands 112 and 108, stand 112 passes it regen survey			
	Quaking Aspen	50	Sapling	2	14	Blad	ck Cherry	Low	Variable	Sapling	while stand 108 didnt not pass with MO of white pine, white pine will be a			
	White Pine	20	Pole/Sapling	5		Re	d Maple	Medium	10 - 20 feet	Sapling	componet but not the dominate species. North half of stand is PArVHA,			
	Red Maple	30	Sapling	2		WI	nite Pine	Medium	Variable	Sapling	south half is PVCd. Site index is roughly 50. Recommend accepting conversion of stand 108 to aspen.			
9	4125 - Black	k, N. Pin O	ak	Sapling	y Well	9.5	26	Immature	N/A		Stand is looking pretty good progressing nicely and is just reaching merchantability in some species, however, the overall size is still sapling.			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Not much for other regen in the understory, but also there's too much			
	Red Maple	10	Sapling/Pole	4		Blad	ck Cherry	Medium	Variable	Sapling	snow to see if there is anything below knee height.			
	Bigtooth Aspen	15	Pole/Sapling	5		Ja	ck Pine	Low	< 5 feet	Sapling	Old water. There is an agree weekst in the NNA agree of this stand to			
	Jack Pine	5	Sapling/Pole	4							Old notes: There is an aspen pocket in the NW corner of this stand to small to be delineated remainder of stand is oak sprouts with some jack			
Bla	ck/Red (Hybrid) Oak	70	Sapling/Pole	4	26						pine. Stand was harvested in 1997. Stand is 1/3 PArVHa/PArVVb			
				_							(north) and 2/3 PVCd. Site index is 50.			
10	42140 - Plant	ed Mixed I	Pine Pol	etimber	Mediu	m 29.6	43	1-50	N/A		Stand is exhibiting quite a bit of natural oak regen among the planted pine, along with some maple and aspen that are primarily found in larger			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	openings. Otherwise the stand itself is looking good and progressing well.			
	Red Pine	30	Pole/Sapling	7	43	Wh	nite Pine	Medium	Variable	Sapling	Overall, the stand is still primarily a pole sized, and this class is progressing nicely			
	Red Pine	10	Log/XLog	14	83	Asp	en (spp.)	Low	Variable	Sapling				
	White Pine	10	Log/XLog	14		Ja	ck Pine	Medium	Variable	Sapling	Old notes: This stand and stand 7 were treated at the same time,			
	White Pine	50	Pole/Sapling	7	43	R	ed Pine	Low	< 5 feet	Sapling	however, stand 7 has a greater density of pine then this stand so they			
						Oa	ık (spp.)	High	Variable	Sapling	were split. The residual red and white pine were not the dominate cover			
						Re	d Maple	Low	< 5 feet	Sapling	type, the pole sized red and white pine were. There was too much snow to see any planted regeneration. Stand is primarily PVCd, with a couple			
											veins of PArVHa. There is a nice diversity of understory species in low densities. Stand was harvested in 2009 under 72-607-06-01 (274 Pine). Harvest removed all Jack pine and oak and left all red pine and white pine of approximately 30 BA as per old OI comments. Regen survey w conducted on the old OI stand 12, Stand 12 had a white pine MO, the regen survey when including the advanced regen passes for the MO of white pine.			
11	3102 -	Grass		Nonsto	cked	3.3			No		Old well pad site. Percent covers for species on site estimated due to			
						Sub-Ca	nopy Species	Density	Avg. Height	Size	snow cover.			
						Spotte	d Knapweed	Low	Unspecified	Non-Wood				
						Mixe	d Grasses	Full	Unspecified	Non-Wood				
12	42220 - Natu	ıral Jack P	ine S	awtimb			73		N/A		Stand currently has a sale set up on it: 72-621-23 Butterfly Lane Jack not yet sold.			
	Canopy Species	% Cover	Size Class		l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	yot soiu.			
	Jack Pine	90	Log/Pole	10	73	Oa	ık (spp.)	Low	< 5 feet	Sapling	Dense stand of log/pole sized stems, stems are just entering the log size			
	Red Pine	5	Log/Pole	10		Ja	ck Pine	Medium	< 5 feet	Sapling	category. A fair amount of coarse woody debris is on the ground and			
Bla	ck/Red (Hybrid) Oak	5	Log/Pole	10							very little understory. Stand is half PArVHa/PArVVb and half PVCd. S index 55.			



Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments			
13	42110 - Pla	nted Red P	ine S	Sawtimb	er Well	50.8	79	51-80	N/A		Thinned stand of Red Pine, understory comprised of oak stump sprouts			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	with minimal recruitment to the actual mid-story. Most of the regene is being suppressed. Nine plots were taken for an average basal ar			
	Red Pine	100	Log/Pole	14	79	Oa	k (spp.)	High	< 5 feet	Sapling	68 sq ft per acre. Basal area is highly variable within the stand, with some			
				'		R	ed Pine	Low	Variable	Sapling	areas having in excess of 100 sq ft, while others are 30 sq ft.			
											Old Comments: This stand is a mixture of PArVHa, PArVHa/PArVVb, PVCd and PArVVb. Stand was treated in winter of 09/10 under 72-605-06-01 (Bald Hill High Banks RP), all Jack Pine and Oak were removed and Red Pine was marked down to 80 BA.			
14	4199 - Other Mixe	ed Upland D	eciduous S	Sapling N	Medium	49.3	5	Immature	N/A		Stand harvested under contract 72-624-16, in fall/winter of 2018. Stand is			
	Canopy Species	% Cover	Size Class	DBH	I Age						doing quite well despite the lack of overall stems per acre over the 6'			
1	Northern Pin Oak	50	Sapling	1	5						threshold. Due to the sheer numbers of total stems per acre, both above and below 6', I believe this stand is on the right trajectory to be successful.			
	Jack Pine	2	Sapling	1	5						and not warrant supplemental planting.			
	White Oak	5	Sapling	1	5						Old comments Mind stand dominated by all with comments of			
	Bigtooth Aspen	30	Sapling	1	5						Old comments: Mixed stand dominated by oak with components of conifer and a few pockets of aspen. Five BA swings were taken with a			
	Red Pine	10	Sapling	1	5						stand average of 75, individual species were mixed oak 40, Aspen 10, R			
	White Pine	3	Sapling	1							Maple 5, J Pine 15, R pine 10. Site index was 45. Kotar for this site is			
15	42250 -	Pine, Oak		Sapling	1 \\/ All	6.3	27	Immature	N/A		PVCd. Stand is progressing well and And achieving good vertical gron the			
15	Canopy Species	% Cover	Size Class		l Age		nopy Species		Avg. Height	Size	canopy stamps and overall. The stand is almost reaching			
	Jack Pine	55	Sapling/Pole		27		ck Pine	Low	Variable	Sapling	merchandability. Some stems are while art portion still are not. There is there is sparse oak Regen in the understory. Otherwise hold stay in and			
	Red Pine	5	Pole/Log/Sar				nite Pine	Low	Variable	Sapling	reassess in ten years. Young regenerating stand of a mixture of jack			
	Northern Pin Oak	35	Sapling/Pole				k Cherry	Low	Variable	Sapling	pine and oak. Northern portion is predominately jack pine while the			
	White Oak	5	Sapling	3		Bia	at onony	2011	Variable	Cupinig	southern half is oak and jack pine. Lower end of the canopy closure. Stand is pretty much PVCd. Stand was final harvested 1996.			
16	42290 - Nati		, 0	Poletimb	er Well	8.2	47	81-110	N/A		Mixed stand of conifer with aspen and oak. Jack pine is scattered			
10			Size Class		l Age				Avg. Height	Sizo	$_{ m 7}$ throughout the stand but has a concentrated patches in the northern and			
Rlad	Canopy Species ck/Red (Hybrid) Oak		Log/Pole	12	Age		hopy Species k (spp.)	Density Low	Variable	Size Sapling	western edges; furthermore, mortality of the jack pine, and aspen, is becoming evident. Quite a bit of red pine pole sized and borderline saw			
	Quaking Aspen	15	Log	11	59		ck Pine	Low	Variable	Sapling	timber found throughout the stand, while there are also some borderline			
	White Oak	2	Pole/Log	9	39		ed Pine	Low	Variable	Sapling	XL sized pine. Seven plots were recorded for an average basal area of 7			
	White Pine	2	Pole/Sap/Log			10	SQ I IIIC	LOW	Variable	Capiling	」sq ft per acre.			
	Jack Pine	36	Pole	7	47						Old Comment: Site index is 45 and stand is PVCd.			
	Red Pine	35	Log/Pole	12	-77									
<u> </u>					-11	0.0			NI.		Noncompanie de la Companie de la Com			
17	6229 - Mixed	i iowiand sr	IIUD	Nonsto	скеа	2.6		Immature	No	<u>.</u>	No management at this time. Wanted to delinate stand to keep quipment out of when treated next.			
							nopy Species	Density Full	Avg. Height	Size				
							g Alder		Variable	Tall Shruk				
							en (spp.) nite Pine	Low	Variable Variable	Sapling				
							ck Pine	Low	Variable	Sapling				
						Ja	CK PIHE	LOW	variable	Sapling				



Stan	d Level 4 C	Level 4 Cover Type S		Size Density		Acres	Stand Age E	BA Range	Managed Site		General Comments		
18		4130 - Aspen Pole				Poletimber Well		22.4	36	1-50	N/A		Stand is progressing well, but not much growing in the understory. This is likely due to the high deer activity and subsequent browsing. Reassess
	Canopy Species		r Size Class	DBH	Age		nopy Species	Density	Avg. Height	Size	stand in 10 years but likely may not yet be ready.		
	Northern Pin Oak	2	Sapling/Pole/Lo	g 4		Oa	k (spp.)	Low	< 5 feet	Sapling			
	Quaking Aspen	90	Pole/Sapling	5	36	Re	d Maple	Low	< 5 feet	Sapling	Young aspen stand with some oak, red maple and red pine scattered throughout. Snow depth to great to record ground species. Stand is		
	Red Pine		Sapling/Pole/Lo	g 4							PArVHa. Site index is 50. Stand was final harvested in 1987 under 72-		
	Red Maple	3	Sapling	4							05-87-01.		
19		- Aspen		oletimb		20.0 46 51-80		N/A		Stand is looking pretty good overall, and small percentage of stems are just transitioning over into sawlog size. Likely could be harvested at this			
	Canopy Species	% Cove	r Size Class	DBH	Age	Sub-Cai	nopy Species	Density	Avg. Height	Size	time if wanted to harvest with adjacent stand that makes sense planning		
	Pin Cherry	3	Pole	6		Re	d Maple	Low	< 5 feet	Sapling	wise. Six plots were recorded for an average basal area of 65 sq ft per		
	Quaking Aspen	90	Pole	8	46	Re	ed Pine	Low	< 5 feet	Sapling	acre.		
	Red Pine	7	Log/Pole	13		Oa	k (spp.)	Low	< 5 feet	Sapling	Old Comments: Portion of stand along north edge of stand was		
											harvested in late fall early winter of 2013 for gravel pit extention. Stand is PArVVb and site index was 65.		
20	710 - \$	Sand, Soil		Nonsto	cked	7.0			No		Crawford County Gravel Pit, surrounding trees were harvested in the		
						Sub-Car	nopy Species	Density	Avg. Height	Size	winter of 2013 for pit expansion.		
						Quak	ing Aspen	Medium	Unspecified	Pole			
21	3303 - Mixed L	y Trees Nonstocked			2.8		Immature	No		Small opening with scattered jack pine and aspen. Stand is PArVHa/PArVVb.			
						Sub-Canopy Species		Density Avg. Height	Size	PARVHA/PARVVD.			
						Ja	ck Pine	Low		Pole			
						Quak	ing Aspen	Low		Pole			
						Northe	ern Pin Oak	Trace	>20 feet	Sapling			
						Spotted	d Knapweed	Medium	Unspecified	Non-Wood			
22	42110 - Pla	inted Red I	Pine	ne Sapling Well		23.5	6	Immature	N/A		Stand is looking really good, with an easily estimation of >80% FTG rate		
	Canopy Species	% Cove	r Size Class	DBH	Age						of the red pine planted, as the initial below quantitative data in the comments below indicates from 2021. There is some encroachment and		
	Red Pine	90	Sapling	1	6						overtopping of pine from oak competition, but overall the pine seems to		
	Northern Pin Oak	7	Sapling	1	6						be doing very well.		
	Black Cherry	3	Sapling	1	6						Old comments: Stand clearcut in 2009 (#607-06). 2010 FTP C72-649		
											was expanded at reinventory to include an adjacent harvest area. Was chopped in 2016 (C72-649, 24 acres), herbicide applied by skidder in August 2017, 18 acres were trenched in October 2017, and RP was planted in May 2018. Year 1 regen survey in October 2018 found 43.3% mortality, 94% FTG, 498 RP TPA. Re-planted w/ top-pruned 4-0 bareroot RP in April 2019. Yr 1 replant regen survey showed 18% mortality, 95% FTG, 769 TPA. Sept 2020 contract Yr 2 regen survey found 27% mortality, 73% FTG, 642 TPA. Re-planted with 267 TPA PRT RP in April 2021, bringing total TPA up to 922. Left the planted RP age set to the first replant, but there are also 4- and 1-year old classes. Oct 2021 Yr 1 survey: 858 TPA, 89% FTG, 7.8% mortality. Oak is primary competitor, BC secondary.		



Stand	Level 4 Co	Level 4 Cover Type S		ize De	nsity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
23	4130	4130 - Aspen		Sapling Medi			5 Ir	mmature	N/A		Stand is regenerating well enough. There are some areas that are denser
	Canopy Species	% Cover	Size Class	DBH	Age						with aspen regen, while others are lagging behind. These more sparse areas have aspen in them but have not yet reached the required height to
	Jack Pine	5	Sapling	1	5						clear browse. Black cherry and jack pine are taking advantage in these
	Bigtooth Aspen	60	Sapling	1	5						more sparse areas. Oak regen is lacking as of now but there is some
	Red Pine	3	Pole/Log	Log 8							stump sprouting present. 12 plots yielded an estimated 563 stems/acre of desirable regen.
	Black Cherry	20	Sapling	1	5						•
1	Northern Pin Oak	12	Log/Pole	10							Old Comments: Stand harvested under contract 72-624-16, in fall/winter of 2018. Mature aspen stand with fairly good quality of log size. Stand is
24	4319 - Mixed	Unland Fo	rest Pole	ıtimbei	Medium	25.9	67	1-50	N/A		PArVHA/PArVVb. Stand still had a ton of variability in terms of diameters, as a percentage
24										0:	of jack pine stems are still lacking merchantability (~15%). however, not
	Canopy Species Northern Pin Oak	% Cover	Size Class	7 7	Age		nopy Species ack Pine	Density Medium	Avg. Height Variable	Size	sure how much quality or merchantability will improve be waiting another
I	Jack Pine	45	Pole/Sap/Log	6	42			Low	Variable	Sapling Sapling	10 years. Majority of the oak is found along the west end. There are at least 2-3 dozen old training fox holes found throughout this stand, as
	Jack Pine Jack Pine	45	Pole/Sapling Log/Pole	10	67		ak (spp.) ck Cherry	Medium	Variable	Sapling	seen in person and confirmed with LIDAR. Some have old residual
	044011 1110	.0	209/1 0.0						7 41.14.15	- upg	barbed wire surrounding them.
											Old Comments: Mixed jack pine stand with sapling, pole and log sized trees. Stand is not densely packed several small open area exist which
											Old Comments: Mixed jack pine stand with sapling, pole and log sized trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48.
25	4310 - Pir	ne, Oak Mix	ς Pα	letimb	er Well	52.8	26	1-50	N/A		trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as
25	4310 - Pir Canopy Species		C Po		er Well		26 nopy Species	1-50 Density	N/A Avg. Height	Size	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was
	Canopy Species Red Pine					Sub-Ca				Size Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as
	Canopy Species	% Cover	Size Class	8 6		Sub-Ca	nopy Species	Density	Avg. Height	Sapling Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time.
	Canopy Species Red Pine	% Cover	Size Class Pole/Log	DBH	l Age	Sub-Ca Ja Che	nopy Species ack Pine	Density Low	Avg. Height < 5 feet	Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time. Old Notes: Mixed stand of oak, red and jack pine in the sapling to pole
	Canopy Species Red Pine ck/Red (Hybrid) Oak	% Cover 10 50	Size Class Pole/Log Pole/Sap/Log	8 6	l Age	Sub-Ca Ja Che	nopy Species ack Pine erry (spp.)	Density Low Low	Avg. Height < 5 feet < 5 feet	Sapling Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time.
	Canopy Species Red Pine ck/Red (Hybrid) Oak	% Cover 10 50 40	Size Class Pole/Log Pole/Sap/Log Pole/Sapling	Bapling	26 26 Well	Sub-Ca Ja Che	nopy Species ack Pine erry (spp.) ak (spp.)	Density Low Low	Avg. Height < 5 feet < 5 feet	Sapling Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time. Old Notes: Mixed stand of oak, red and jack pine in the sapling to pole size class, lower end of the canopy closure. Stand is PArVHa/PArVVb. Old military range impact area- not in use any more, stand has birm all the way around it, found one wood tower. Stand was harvested in 1996. Stand is progressing nicely and the majority of regen is up above browse
Blad	Canopy Species Red Pine ck/Red (Hybrid) Oak Jack Pine	% Cover	Size Class Pole/Log Pole/Sap/Log Pole/Sapling	DBH 8 6 5	26 26 Well	Sub-Ca Ja Che Oa 57.5 Sub-Ca	nopy Species ack Pine erry (spp.) ak (spp.) 14 In nopy Species	Low Low Low	Avg. Height < 5 feet < 5 feet < 5 feet	Sapling Sapling Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time. Old Notes: Mixed stand of oak, red and jack pine in the sapling to pole size class, lower end of the canopy closure. Stand is PArVHa/PArVVb. Old military range impact area- not in use any more, stand has birm all the way around it, found one wood tower. Stand was harvested in 1996.
Blace 26	Canopy Species Red Pine ck/Red (Hybrid) Oak Jack Pine 4199 - Other Mixe	% Cover	Size Class Pole/Log Pole/Sap/Log Pole/Sapling	DBH 8 6 5 Sapling DBH 12	26 26 Well	Sub-Ca Ja Che Oa 57.5 Sub-Ca	nopy Species ack Pine erry (spp.) ak (spp.)	Density Low Low Low mmature	Avg. Height < 5 feet < 5 feet < 5 feet N/A	Sapling Sapling Sapling Sapling Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time. Old Notes: Mixed stand of oak, red and jack pine in the sapling to pole size class, lower end of the canopy closure. Stand is PArVHa/PArVVb. Old military range impact area- not in use any more, stand has birm all the way around it, found one wood tower. Stand was harvested in 1996. Stand is progressing nicely and the majority of regen is up above browse height and would be considered free to grow at this point. Fair amount of jack pine is dispersed throughout as a nice conifer component.
26 Blac	Canopy Species Red Pine ck/Red (Hybrid) Oak Jack Pine 4199 - Other Mixe Canopy Species ck/Red (Hybrid) Oak Northern Pin Oak	% Cover 10 50 40 d Upland D % Cover 2 30	Size Class Pole/Log Pole/Sap/Log Pole/Sapling eciduous Size Class Log Sapling	DBH 8 6 5 5 Sapling DBH 12 2	26 26 Well	Sub-Ca Che Oa 57.5 Sub-Ca Re	nopy Species ack Pine erry (spp.) ak (spp.) 14 Ir nopy Species ed Maple ed Pine	Density Low Low Low Medium Low	Avg. Height < 5 feet < 5 feet < 5 feet N/A Avg. Height < 5 feet < 5 feet	Sapling Sapling Sapling Size Sapling Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time. Old Notes: Mixed stand of oak, red and jack pine in the sapling to pole size class, lower end of the canopy closure. Stand is PArVHa/PArVVb. Old military range impact area- not in use any more, stand has birm all the way around it, found one wood tower. Stand was harvested in 1996. Stand is progressing nicely and the majority of regen is up above browse height and would be considered free to grow at this point. Fair amount of jack pine is dispersed throughout as a nice conifer component. old comments: Stand was harvested in 2008/09 under 72-609-06-01.
26 Blac	Canopy Species Red Pine ck/Red (Hybrid) Oak Jack Pine 4199 - Other Mixe Canopy Species ck/Red (Hybrid) Oak Northern Pin Oak Jack Pine	% Cover 10 50 40 d Upland D % Cover 2 30 10	Size Class Pole/Sap/Log Pole/Sapling Pole/Sapling Pole/Sapling Pole Pole Size Class Log Sapling Pole	Bapling Bapling DBH 12 2 7	26 26 Well	Sub-Ca Ja Che Oa 57.5 Sub-Ca Re Re Oa	nopy Species ack Pine erry (spp.) ak (spp.) 14 In nopy Species ad Maple ed Pine ak (spp.)	Low Low Low Density Medium	Avg. Height < 5 feet < 5 feet < 5 feet N/A Avg. Height < 5 feet < 5 feet < 5 feet < 5 feet	Sapling Sapling Sapling Size Sapling Sapling Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time. Old Notes: Mixed stand of oak, red and jack pine in the sapling to pole size class, lower end of the canopy closure. Stand is PArVHa/PArVVb. Old military range impact area- not in use any more, stand has birm all the way around it, found one wood tower. Stand was harvested in 1996. Stand is progressing nicely and the majority of regen is up above browse height and would be considered free to grow at this point. Fair amount of jack pine is dispersed throughout as a nice conifer component.
26 Blac	Canopy Species Red Pine ck/Red (Hybrid) Oak Jack Pine 4199 - Other Mixe Canopy Species ck/Red (Hybrid) Oak Northern Pin Oak Jack Pine Pin Cherry	% Cover 10 50 40 d Upland D % Cover 2 30 10 10	Size Class Pole/Log Pole/Sap/Log Pole/Sapling eciduous Size Class Log Sapling Pole Sapling	Bapling Bapling DBH 12 2 7 2	26 26 Well	Sub-Ca Ja Che Oa 57.5 Sub-Ca Re Re Oa	nopy Species ack Pine erry (spp.) ak (spp.) 14 Ir nopy Species ed Maple ed Pine	Density Low Low Low Medium Low	Avg. Height < 5 feet < 5 feet < 5 feet N/A Avg. Height < 5 feet < 5 feet	Sapling Sapling Sapling Size Sapling Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time. Old Notes: Mixed stand of oak, red and jack pine in the sapling to pole size class, lower end of the canopy closure. Stand is PArVHa/PArVVb. Old military range impact area- not in use any more, stand has birm all the way around it, found one wood tower. Stand was harvested in 1996. Stand is progressing nicely and the majority of regen is up above browse height and would be considered free to grow at this point. Fair amount of jack pine is dispersed throughout as a nice conifer component. old comments: Stand was harvested in 2008/09 under 72-609-06-01. Roughly 10-20 BA of oak was left from this harvest, if natural regen fails then plant to pine as per old OI. Stand is PArVHa/PArVVb. Regen surveys were conducted in this stand for Old OI 21, 26 and 28 with MO of
26	Canopy Species Red Pine ck/Red (Hybrid) Oak Jack Pine 4199 - Other Mixe Canopy Species ck/Red (Hybrid) Oak Northern Pin Oak Jack Pine	% Cover 10 50 40 d Upland D % Cover 2 30 10	Size Class Pole/Sap/Log Pole/Sapling Pole/Sapling Pole/Sapling Pole Pole Size Class Log Sapling Pole	Bapling Bapling DBH 12 2 7	26 26 Well	Sub-Ca Ja Che Oa 57.5 Sub-Ca Re Re Oa	nopy Species ack Pine erry (spp.) ak (spp.) 14 In nopy Species ad Maple ed Pine ak (spp.)	Density Low Low Low Medium Low Medium	Avg. Height < 5 feet < 5 feet < 5 feet N/A Avg. Height < 5 feet < 5 feet < 5 feet < 5 feet	Sapling Sapling Sapling Size Sapling Sapling Sapling	trees. Stand is not densely packed several small open area exist which has lead to poor form from being open grown. Stand is PArVHa/PArVVb and site index of 48. Stump sprouted oak saplings have recruited to the canopy as intermediate and Co-dominates. It appears as though some oak was retained during the harvest as there still appears to be a clear difference in cohorts. Stand is progressing fine at this time. Old Notes: Mixed stand of oak, red and jack pine in the sapling to pole size class, lower end of the canopy closure. Stand is PArVHa/PArVVb. Old military range impact area- not in use any more, stand has birm all the way around it, found one wood tower. Stand was harvested in 1996. Stand is progressing nicely and the majority of regen is up above browse height and would be considered free to grow at this point. Fair amount of jack pine is dispersed throughout as a nice conifer component. old comments: Stand was harvested in 2008/09 under 72-609-06-01. Roughly 10-20 BA of oak was left from this harvest, if natural regen fails then plant to pine as per old OI. Stand is PArVHa/PArVVb. Regen

TONELLOM1



Stand	Level 4 Co	over Type	;	Size De	nsity	Acres S	Acres Stand Age BA		Managed S	iite	General Comments			
27	42110 - Plar	nted Red F	Pine S	Sawtimb	er Well	51.3	77	51-80	N/A		Stand was thinned in the winter of 2009/10 under 72-605-06-01 (Bald Hill High Banks RP). All Jack Pine were removed and Red Pine was thinned			
C	Canopy Species	% Cover Size Clas		DBH	l Age	Sub-Cand	opy Species	Density	Avg. Height	Size	down to either 80 or 100 BA. No understory to speak of and what is			
No	orthern Pin Oak	2	Log	15		Oak	(spp.)	High	< 5 feet	Sapling	present mostly oak stump sprouts. NE corner of stand BA is roughly 3			
	Red Pine	98	Log	15	77	Jack	k Pine	Medium	Variable	Sapling	50, rest of stand ranged between 80 and 110. Stand looks good stems are healthy and of good quality. Stand is a mixture of PVCd and			
						Red	d Pine	Low	Variable	Sapling	PArVHa/PArVVb. Site index is 65.			
						Red Pine		Low	>20 feet	Pole				
28	28 42120 - Planted Jack Pine Sawtimber \				er Well	18.6	71		N/A		Stand has a sale currently on it: 72-261-23 Butterfly Lane JackMixed			
C	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Canopy Species		Density	Avg. Height	Avg. Height Size	stand with Jack pine, oak and red pine, Stand has enough log material to classify overall size as log. Stand is along High Banks Rd. Northern third			
	Red Pine	10	Pole/Log	9		Red	d Pine	Low	Variable	Sapling	of stand is PVCd and remainder is PArVHa/PArVVb. Site index is 50.			
	Jack Pine	75	Pole/Log	9	71	Jack	k Pine	Medium	Variable	Sapling				
Black	/Red (Hybrid) Oak	15	Pole/Log	9		Oak	(spp.)	Medium	Variable	Sapling				
29	4199 - Other Mixed	d Upland [Deciduous	Sapling	j Well	50.3	14	Immature	N/A		Stand is progressing well, continue to check on it and see how it is progressing in 10 years.			
C	Canopy Species	% Cover	Size Class	DBH	Age						progressing in 10 years.			
No	orthern Pin Oak	20	Sapling	2							Stand was harvested in 2008/09 under 72-609-06-01. Replanted in 2010,			
	Red Pine	2	Log/Pole	10							snow depth to great to visually see any planted stems. Stand has regenerated to a mixed upland deciduous stand with some scattered			
	Pin Cherry	20	Sapling	2							mature red maple and pine trees. Stand is mixture of PArVVb and			
	Red Maple	2	Log	10							PArVHa/PArVVb.			
Q	uaking Aspen	30	Sapling	2	14									
Black	/Red (Hybrid) Oak	2	Log/Pole	10										
	Red Maple	24	Sapling	2										
30	4130 -	- Aspen	P	oletimb	er Well	64.5	36	1-50	N/A		Majority of this stand sits up on a ridge/bench. Stand is progressing			
C	Canopy Species	% Cover Size Class		DBH	l Age	Sub-Cand	opy Species	Density	Avg. Height	Size	merchantability; however, a fair amount of the oak and maple are			
В	igtooth Aspen	80	Pole/Sapling	6	36	Black	Cherry	Low	Variable	/ariable Sapling graduating in the pole timber class. Not much else	graduating in the pole timber class. Not much else is growing in the			
No	orthern Pin Oak	5	Sapling/Pole	ole 5		Oak (spp.)		Low	< 5 feet	Sapling	understory at this time outside of some black cherry. Any oak regen			
	Red Maple	15	Sapling/Pole	5		Red	Maple	Low	< 5 feet	Sapling	present is browsed heavily.			
											Old comments: Mixed regen of aspen red maple, and pin oak, stand was final harvested in 86': Survival Block TS, just entering pole size and enough to warrant pole size. Snow depth to great to view any ground vegetation. Stand is PArVHa/PArVVb.			
31	4130 -	- Aspen	Aspen Polet			34.5	37		N/A		Overall, the stand is slightly small from a diameter standpoint. There are are are are stand that have just reached merchant ability where there			
	Canopy Species		Size Class		Age		opy Species	Density	Avg. Height	Size	are a few saw log sized Aspen. The understory is pretty dominated by			
	Red Maple	10	Pole/Sapling	6			Maple	Low	Variable	Sapling	either red maple or witch hazel, but there is an oak presence in the			
Q	uaking Aspen	40	Pole/Sapling		37		d Pine	Low	Variable	Sapling	understory along the eastern edge bordering stand 33. The stand could benefit from another ten years.			
	Red Pine	7	Pole/Log	9			k Pine	Low	Variable	Sapling	Denont normanounce ten years.			
В	igtooth Aspen	30	Pole/Sap/Log	7	37	Oak	(spp.)	Low	Variable	Sapling				
No	orthern Pin Oak	5	Pole/Sap/Log	7							regenerating very well with a mixture of pole and sapling sized stems.			
	Jack Pine	8	Pole/Sapling	6							Southern portion has larger diameter stems for all species found in this stand. Majority of the stand is just entering the pole size class. Stand is a			
											mixture of PArVHa/PArVVb and PArVVb.			



Stand	d Level 4 Cover Type S		Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments			
32		Red Pine, Mixed duous		awtimb	er Well	18.2	84	81-110	N/A		The stand is mostly comprised of saw log trees with some pole timber mixed in. There is a vein of hardwoods that runs sort of through the		
	Canopy Species		Size Class	DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	center more towards the northern half of the stand or it's more Aspen and oak dominated. Varying levels of either red Maple or pine regen in the		
	White Oak	7	Pole/Log	8		Re	ed Maple	Medium		Sapling	understory. The red maple is more prominent along the eastern edge with		
	Quaking Aspen	5	Log/Pole	12		Servicebe	erry (Juneberry)	Medium	Variable	Sapling	the aspen stand and to the north. 9 Plots were recorded for an average of		
	Red Maple	8	Pole/Log	8		Che	erry (spp.)	Medium	Variable	Sapling	94 sq ft/acre of basal area.		
	Red Pine	60	Log	14	84	O	ak (spp.)	Low	Variable	Sapling	Old comments: Stand has filled in with competition from RM, Aspen, a		
Blad	Black/Red (Hybrid) Oak 20 Po		Pole/Log	9							Oak. Scattered large aspen, primarily in the northern portion of stand. Fairly well developed understory. Three BA swings were taken, stand		
											average was 127 individual average were RP 50, mixed oak 23, R Maple 27 and Aspen 27. Northern 2/3 of stand is PArVVb and the southern third is PArVHa/PArVVb. Site index was 60.		
33	42220 - Nat				er Well		61	51-80	N/A		Stand has jack pine that is exhibiting a decent amount of mortality. The stand sort of falls in a low area, surrounded by ridges. The western edge		
	Canopy Species		Size Class		l Age		nopy Species	Density	Avg. Height	Size	has a higher density of oak. The ridge bordering S36 has a pocket of		
Blad	ck/Red (Hybrid) Oak	15	Log/Pole	10			ak (spp.)	Low	Variable	Sapling	predominately red pine in it.		
	Red Pine Jack Pine	15 70	Log/Pole Pole/Log	11	61	Já	ack Pine	Medium	Variable	Sapling			
34	42260 - Natural Pir	ne, Mixed D	Deciduous	Saplin		31.6	11 I	mmature	N/A		Stand is filling in nicely, though sort of difficult to tell in some area what was planted and what was left as retention. There are some obvious red		
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	pine that are being over grown that were likely planted, but majority of the		
	Red Pine	20	Sapling	3			ck Cherry	Medium	Variable	Sapling	jack pine and oak are ~10' tall and doing well.		
	Jack Pine	45	Sapling/Pole	4	11		led Pine	Medium	< 5 feet	Sapling	Old comments: Stand was harvested in 2008 as the Big Boot Red sale:		
1	Northern Pin Oak	10	Sapling/Pole	4		Ja	ack Pine	Low	< 5 feet	Sapling	72-608-06-01. Scattered Jack pine, red pine and oak were left for visual		
	Red Pine	5	Log	0		11					issues. Stand planted in 2011 to red pine then replanted in 2013. Snow		
	Black Cherry	20	Sapling/Pole	le 4							depth to great to see any seedlings. Northern third of stand is PArVHa/PArVVb and remainder of stand is PVCd.		
											This stand has been updated from a field evaluation for a project on free to grow red pine.		
35	42120 - Plar	nted Jack F	Pine P	oletim	er Well	27.7	67		N/A		Stand currently has a sale on it: 72-261-23 Butterfly Lane Jack.		
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Pole to log sized JP- sparse in some areas, not much sign of mortality.		
1	Northern Pin Oak	10	Pole/Log	9		R	led Pine	Low	Variable	Sapling	Nice oak regeneration thru out the stand. Stand is a mixture of PVCd,		
	Jack Pine	90	Pole/Log	9	67	Já	ack Pine	Low	Variable	Sapling	PArVVb and PArVHa/PArVVb.		
					L	O	ak (spp.)	Medium	Variable	Sapling			
36	4130	- Aspen	Р	oletim	er Well	10.6	36		N/A		Stand is looking good, reassess in another 10 year during next inventory		
	Canopy Species	% Cover	Size Class	DBI	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	cycle but likely not ready till the one after.		
1	Northern Pin Oak	5	Sapling/Pole	5		O	ak (spp.)	Low	< 5 feet	Sapling	Previous comments: Big tooth aspen regen, stand was final harvested in		
	Red Maple	5	Sapling/Pole	5		R	ted Pine	Low	< 5 feet	Sapling	1987. There is some oak and maple scattered throughout the stand. Stand is PArVHA/PArVVb.		
	Bigtooth Aspen	90	Pole/Sapling	6	36						SIGNU IS FALVITAITALIV VII.		

Stand	tand Level 4 Cove		Type Size Density		Acres Stand Age BA Range			Managed S	ite	General Comments		
37	4191 - Mixed Upla Cor	nd Decidu nifer	ous with	Saplin	g Well	48.0	16 Ir	nmature	N/A		Stand is progressing nicely, leaving the notes in below from recent surve in 2019.	
	Canopy Species	% Cover	Size Class	DBI	H Age						Old comments: (Stand is primarily PArVHa/PArVVb. Stand data was	
Blac	ck/Red (Hybrid) Oak	40	Sapling	2	16						updated from a 2018 field evaluation by Machusko for a project on free to	
	Red Maple	10	Sapling	1	16						grow red pine. Monitoring Rx closed out in 2019 based on that data. Mix	
	Bigtooth Aspen	10	Sapling	3	16						of planted pine and oak nat regen acceptable. FTP complete.)	
	White Oak	5	Sapling	2	16							
	Red Pine	25	Sapling	1	13							
	Black Cherry	5	Sapling	1	16							
38	4125 - Black	k, N. Pin O	ak P	oletiml	per Well	18.0	45	1-50	N/A		Stand is variable in terms of diameters and basal area. Looks like it migh	
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	have been a species removal with some red pine retention. As there are some saw log sized red pine. In the other story, most of the Maple and	
	Red Maple	10	Pole/Sapling	6		Oa	k (spp.)	Medium	Variable	Sapling	oak are still sprout. Regeneration which usually is consistent with	
	Red Pine	3	Pole/Sap/Log	7		Re	d Maple	Medium	>20 feet	Sapling	variable diameter. Overall the stand is looking well just hold and reassess	
	Quaking Aspen	5	Pole/Sapling	6							at next inventory.	
	Jack Pine	2	Pole/Sapling	7							Old notes: regeneration is 20-30 feet tall, mostly pin oak, red maple, and	
Blad	ck/Red (Hybrid) Oak	80	Pole/Sapling	6	45						a few aspen, red and jack pine. Dense stand, consisting of mostly poles with still some sapling sizes. To much snow to record ground cover. Sit	
39 4139 - Aspen, Mixed Deciduous Po		oletiml	per Well	12.1	35		N/A		Stand was final harvested in 2008/09 under 72-608-06-01, this harvest removed residual red pine, majority of stand was harvested in 1987.			
	Canopy Species		Size Class		H Age		nopy Species	Density	Avg. Height	Size	Young mixed aspen and red maple stand with some oak. Stand is	
	Quaking Aspen	50	Pole/Sapling	6	35	Re	d Maple	High	>20 feet	Sapling	PArVHa/PArVVb. Regen survey was conducted for this small stand Old	
	Red Maple	40	Pole/Sapling	5	35		k (spp.)	Medium	< 5 feet	Sapling	OI 36, majority of stand was large sapling, regen layer was oak and maple. Stand failed the regen MO of aspen but passes as oak, maple.	
1	Northern Pin Oak	10	Pole/Sapling	5		Blac	k Cherry	Low	Variable	Sapling	Recommending accepting present regen.	
						Asp	en (spp.)	Medium	>20 feet	Sapling		
40	42120 - Planted Jack Pine		k Pine Poletimber Well			129.5	37	1-50	N/A		Stand is progressing really nicely, looking like it has graduated into pole	
				oleumi	Jei weii	120.0	31	1-50	N/A			
	Canopy Species		Size Class	DBI	H Age	123.3	31	1-50	N/A			
١	Northern Pin Oak	2	Sapling/Pole	DBI	H Age	123.3	31	1-50	N/A		size classification. Some sapling sized stems still persist but overall stan is looking good.	
	Northern Pin Oak Jack Pine	94	Sapling/Pole Pole/Sapling	DBI 4 6		123.3	37	1-50	N/A		size classification. Some sapling sized stems still persist but overall stan is looking good. old notes: Young jack pine stand harvested in 1986 and planted in 1987.	
	Northern Pin Oak Jack Pine Quaking Aspen	2 94 2	Sapling/Pole Pole/Sapling Pole	DBI 4 6 6	H Age	123.3	37	1-50	N/A		size classification. Some sapling sized stems still persist but overall stand	
	Northern Pin Oak Jack Pine	94	Sapling/Pole Pole/Sapling	DBI 4 6 6	H Age	123.3	37	1-50	N/A		size classification. Some sapling sized stems still persist but overall stands looking good. old notes: Young jack pine stand harvested in 1986 and planted in 1987. There is an aspen clone of pole sized stems in the NE corner adjacent to	
	Northern Pin Oak Jack Pine Quaking Aspen Red Maple 42110 - Plan	2 94 2 2	Sapling/Pole Pole/Sapling Pole Sapling/Pole	4 6 6 4 Sawtimb	H Age 37 Der Well	15.7	82	51-80	N/A		size classification. Some sapling sized stems still persist but overall stan is looking good. old notes: Young jack pine stand harvested in 1986 and planted in 1987. There is an aspen clone of pole sized stems in the NE corner adjacent to the private land. Not enough to delinate out. Stand is PVCd. Stand seems of fairly low stocking, perhaps it was just were my plots fell	
	Northern Pin Oak Jack Pine Quaking Aspen Red Maple	2 94 2 2 ted Red P	Sapling/Pole Pole/Sapling Pole Sapling/Pole	4 6 6 4 Sawtimb	H Age	15.7				Size	size classification. Some sapling sized stems still persist but overall stan is looking good. old notes: Young jack pine stand harvested in 1986 and planted in 1987. There is an aspen clone of pole sized stems in the NE corner adjacent to the private land. Not enough to delinate out. Stand is PVCd.	
	Northern Pin Oak Jack Pine Quaking Aspen Red Maple 42110 - Plan	2 94 2 2 ted Red P	Sapling/Pole Pole/Sapling Pole Sapling/Pole	4 6 6 4 Sawtimb	37 Deer Well	15.7 Sub-Car	82	51-80	N/A	Sapling	size classification. Some sapling sized stems still persist but overall stan is looking good. old notes: Young jack pine stand harvested in 1986 and planted in 1987. There is an aspen clone of pole sized stems in the NE corner adjacent to the private land. Not enough to delinate out. Stand is PVCd. Stand seems of fairly low stocking, perhaps it was just were my plots fell but overall average of 50 sq ft of basal area based off 7 plots; that said, there is some variability within the stand where the target BA from previous harvest was likely accurate. In particular the stocking on the	
	Northern Pin Oak Jack Pine Quaking Aspen Red Maple 42110 - Plan Canopy Species	2 94 2 2 tted Red P	Sapling/Pole Pole/Sapling Pole Sapling/Pole Vine Size Class	DBI	37 Deer Well	15.7 Sub-Car Blac	82 nopy Species k Cherry k (spp.)	51-80 Density	N/A Avg. Height Variable 5 - 10 feet	Sapling Sapling	size classification. Some sapling sized stems still persist but overall stan is looking good. old notes: Young jack pine stand harvested in 1986 and planted in 1987. There is an aspen clone of pole sized stems in the NE corner adjacent to the private land. Not enough to delinate out. Stand is PVCd. Stand seems of fairly low stocking, perhaps it was just were my plots fell but overall average of 50 sq ft of basal area based off 7 plots; that said, there is some variability within the stand where the target BA from previous harvest was likely accurate. In particular the stocking on the east side of the road is quite low. There is a pocket of jack pine in the	
	Northern Pin Oak Jack Pine Quaking Aspen Red Maple 42110 - Plan Canopy Species	2 94 2 2 tted Red P	Sapling/Pole Pole/Sapling Pole Sapling/Pole Vine Size Class	DBI	37 Deer Well	15.7 Sub-Car Blac	82 nopy Species	51-80 Density Low	N/A Avg. Height Variable	Sapling	size classification. Some sapling sized stems still persist but overall stan is looking good. old notes: Young jack pine stand harvested in 1986 and planted in 1987. There is an aspen clone of pole sized stems in the NE corner adjacent to the private land. Not enough to delinate out. Stand is PVCd. Stand seems of fairly low stocking, perhaps it was just were my plots fell but overall average of 50 sq ft of basal area based off 7 plots; that said, there is some variability within the stand where the target BA from previous harvest was likely accurate. In particular the stocking on the	

PVCd.)

Prvious comments: (Stand was thinned in the winter of 2009/10. Red Pine thinned down to 80BA. Site index was 55 and stand is primarily



Stand	Level 4 Co	Level 4 Cover Type Size Density		Acres Stand Age BA Range			Managed S	Site	General Comments				
42	42 4311 - Pine, Aspen Mi		lix Pol	letimber	Medium	າ 9.5	37	1-50	N/A		Young small clone of aspen between jack pine plantation and mature		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	aspen stand along the two track. Stand appears to have been harvested at the same time as adjacent Stand 40 via High Banks Block in 1986-7,		
	, , ,		4		Oa	ak (spp.)	Low	Variable	Sapling	aerial imagery confirms this. The eastern portion of this stand where it			
			Pole/Sap/Log	6	37	Che		orders S43 is more dominated by sparse jack pine and black cherry.					
	White Pine 2 XLog 20			20		Re	ed Pine	Low	Variable	Sapling	Stand primarily runs along a ridge, where I assume planting was/could not be conducted, or it just exhibited failed planting here. Separated out		
Blac	Black/Red (Hybrid) Oak 2 Sapling/Pole					Re	d Maple	Low	Variable	Sapling	the western portion of the stand where there is a dispersed camp site,		
	Jack Pine 35 Sapling/Pole				Aspen (spp.)		Low Variable		Sapling	likely for deer camp(s).			
	Pin Cherry	15	Sapling/Pole	4					1				
	Red Pine	2	XLog	24	178								
	Red Pine	6	Pole	6									
43	43 4130 - Aspen F		P	Poletimber Well		18.0 50		51-80	N/A		stand is almost meeting requirements to br called sawlog but still a		
	Canopy Species	% Cover	Size Class	ss DBH Age		Sub-Canopy Specie		Density	Avg. Height	Size	decent amount of pole timber exists. stand looks really good and is holding, up well with little mortality. Low stocking overall and where there		
	Balsam Fir	5	Pole/Log	8		Wh	nite Pine	High	Variable	Sapling	is low enough stocking in areas, new aspen is already being recruited into		
	Quaking Aspen 75 Pole/Log Red Maple 5 Pole/Log Black Spruce 5 Pole/Log Jack Pine 5 Pole Northern Pin Oak 5 Pole/Log		Pole/Log	9	50	Japane	ese Barberry	Low	5 - 10 feet	Tall Shrub	mid story. 5 plots averaged 48 sq ft of basal area. Ground is snow		
				8		 Ja	ick Pine	Low	Variable	Sapling	covered but seems upland for the most part, with obviously some lowland influence to the south visible by aerial imagery.Old notes: Calling a		
			Pole/Log	8	82	Oa	ak (spp.)	Low	Variable	Sapling	lowland as kotar for this area is primarily unclassified lowland, western		
			Pole	6		Black Spruce		Low < 5 feet		Sapling	edge is PVCd.		
١			8		Ва	Isam Fir	Low	< 5 feet	Sapling				
			_			Che	erry (spp.)	Medium	Variable		Sapling		
44	310 - Herbac	eous Open	nland	Nonstocked		15.0 I		mmature	No		Stand is slow but surely filling in with some jack pine and oak. still overall very low stocking on the site, as black cherry is also filling in some areas.		
							nopy Species	Density	Avg. Height	Size	Keeping old comments on here as they are relevant to the current status		
						Ja	ck Pine	Medium	5 - 10 feet	Sapling	of the stand.		
						Re	ed Pine	Low	< 5 feet	Seeding	014		
							ck Cherry	Low	5 - 10 feet	Sapling	Old comments: (Stand harvested in 2010 under contract 72-607-06-01 274 Pine. FTP C72-648/649. Could not see any regen because of sno		
						Black/Re	d (Hybrid) Oak	Medium	5 - 10 feet	Sapling	depth, sapling to pole sized Jack pine on site in very low density. Regen		
					_						survey conducted on Old OI 6 with Jack pine MO, regen survey failed on MO and other regen as well. Was roller-chopped in 2016 (C72-648, 37 acres) and 19 acres in the north half were trenched and planted to RP in May 2018.		
											The south half was added to the 2006 YOE FTP C72-648 during 2016 YOE inventory. Rare plants found during cultivation site survey precluded further site prep and necessitated termination of the 2016 YOE Rx for the south half and exclusion of an acre in the north along Bald Hill Rd.)		
45	320 - Up	320 - Upland Shrub		Nonstocked		1.4	0		No		This is a small non-forested opening that just so happens to also encompass a dispersed camping area, likely utilized as a hunting camp.		
							nopy Species	Density	Avg. Height	Size	Primarily some shrubby black cherry are beginning to take over this		
							ed Pine	Low	>20 feet	Log	opening. There are a few XL sized red pine that are found within this		
						Blad			stand. The fact that this area wasn't planted when the adjacent stand 40 was, leads me to believe management in this small opening is being				

avoided.