



**FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 129 ENTRY YEAR: 2010

Compartment Acreage: 2232 County: Arenac

Revision Dates: Draft 8-22-08. Draft 10-30-08.

Stand Examiner: Mark Reichel

Legal Description: T19N R3E Sections 3, 4, 9, 10, 11

Management Goals: There has been minimal change in cover types in the last decade in this compartment. 90 acres of aspen were reclassified as swamp aspen, but aspen acreage remained static. Grass acreage decreased substantially because stand 87 was reclassified as lowland brush. Three new oak stands were delineated, increasing oak cover to 54 acres. Stand 19 was reclassified from swamp hardwoods to M type, and will have a selection harvest. There is only 59 acres of aspen in the 40 to 50 year old and older age classes and only 126 acres in the 30 to 40 year old age class; a regulated compartment would have 187 acres in each age class. Nonetheless 69 acres of poor vigor aspen on droughty soils will be early harvested to ensure regeneration; stand 13 will be converted to red pine after harvest. One drier swamp hardwood stand and an oak stand, a total of 29 acres, will have shelterwood harvests. 59 non forested acres are to be planted to jack and red pine, which will increase forest cover, and increase the conifer component of the compartment, which is currently 1%. Finally, one small red pine stand will be thinned and another will be final harvested and re-planted.

Soil and Topography: The northern 30% of the compartment is in the Roscommon soil association, which is mostly sandy, poorly to very poorly drained soils on flat outwash plains with the water table high most of the year. Somewhat poorly drained Au Gres soils occupy the low ridges that dissect this area. These soils have a severe windthrow hazard, have low site indexes and are inoperable for equipment except on the ridges. Most of this area is swamp hardwoods and lowland brush, with with sparsely forested ridges of mixed upland forest. The southwestern quarter of the compartment is in the Au Gres-Roscommon association. This area has more viable aspen stands than the northern third, although the water table is still high. There are mostly swamp hardwood stands and some large bogs, as well as aspen and a few high oak ridges with well drained Rubicon soils. The Southeastern 40% consists of well drained, deep Rubicon sands supporting fairly high site index aspen and some oak on the high areas, and a combination of less well drained Iosco, Au Gres and Eastport soils in the low areas, supporting good site index upland maple, swamp aspen and lowland hardwood stands. About 5% in the center of the compartment is Eastport-Rubicon soil association, these dunes with droughty and low nutrient soils have unproductive aspen with hypoxylon canker. There are no significant streams in the compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is a continuous block completely bordering state land on the North, West and South, with the exception of two parcels. The Northwestern most 80 acres were acquired in a land exchange since the previous inventory in 1998. The entire eastern edge of the compartment is bordered by Interstate Highway 75. From the southeastern tip of the compartment the land use is predominantly farming. A major Consumers Energy power line runs North-South through the entire compartment. The access road for it is underwater for large periods of the year. Access to the northern half of the compartment is limited to the power line road and one

road entering the northwestern tip of section 4. The eastern terminus of Sterling Truck Trail is just southeast of this compartment; this road gets heavy use. There is, however, very little littering and no ORV abuse, with the exception of stand 490, which will have an Resource Damage Report written for littering and truck damage.

Unique, Natural Features: None per MNFI.

Archeological, Historical, and Cultural Features: None per HAL database.

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations: This compartment is a headwaters for small drainages flowing in all directions, but has no streams with a defined bed and bank within the compartment.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 200 and 400 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan was quarried for gypsum in other areas of the State. Gravel pits are located in the area and there should be some potential on the uplands. The North Adams Field is located just to the south. The Field has produced over 9.5 MBO from the Dundee Formation. The compartment currently is almost entirely leased.

Vehicle Access: This compartment is near the eastern terminus of the Sterling Truck Trail. This road receives fairly heavy traffic. But the northern and eastern $\frac{3}{4}$ of the compartment has poor access. Interstate 75 blocks access along the entire eastern edge of the compartment, and the only north-south running road, along the power line right of way, is flooded much of the year along much of its length. There are a few good dirt roads along ridges in section 9. A limited network of poor dirt roads access section 10, but most of the roads used to harvest the aspen in section 10 are closed or overgrown. One road just enters the northwest corner in stand 78.

Survey Needs: None

Recreational Facilities and Opportunities: The compartment appears to receive moderate to light hunting use. This is the primary recreational use of the compartment.

Fire Protection:

11/3/2008 10:33:09 AM

Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

ARENAC COUNTY

COMPARTMENT: 129

Table 3A

(acres shown in boxes)

MANAGEMENT OBJECTIVE TYPE

COVER TYPE	A	S	V	C	G	H	J	I	L	P	N	Q	X	O	B	R	K	Y	F	E	T	D	U	M	Z	W	Total
A Aspen	767													51	28												846
V Bog or Marsh			31																								31
G Grass					103											59											162
L Lowlnd Brush									314																		314
P Lowlnd Poplr										90																	90
O Oak														35	19												54
R Red Pine																10											10
E Swamp Hrdwds																				564							564
T Tamarack																						14					14
D Treed Bog																							35				35
M Upland Hdwds																								112			112
Total	767		31		103				314	90				86	116					564	14	35		112			2232

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

ARENAC COUNTY

COMPARTMENT: **129**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	7610 Cds	Hardwood	533 Cds
Hardwood	2293 Mbf	Hardwood	357 Mbf
Softwood	359 Cds	Softwood	247 Cds
Softwood	34 Mbf	Softwood	34 Mbf
Sum TotVol	12623 Cds	Sum CutVol	1562 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	
2232		216	

GLADWIN FOREST MGT UNIT

Proposed Treatments
With NO Limiting Factors

Compartment: 129 Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDf Status
13	A4	28	40	58	red pine	immature	final harvest	1	planting	
comnts Fmd : Final harvest reserving all oak. Early harvest due to poor aspen vigor. Trench/plant R, which is recommended spp to plant on Greyling soil). Will be R/J/A: any combo is ok. Same soil as R stand 14 just across power line clearing. J in stand has good SI.										
14	R9	2	60	70	red pine	mature	final harvest	1	planting	
comnts Fmd : Good, High SI red pine site. >50% of trees are close to being too large for sawlogs. Final harvest with reserves and replant to red pine. Will be red pine stand with an oak component; any mix of oak/pine/maple acceptable.										
19	M9	93	85	68	northern hardwood	mature	selection	1		
comnts Fmd : Most of aspen has died. Uniform oak seedlings 6 ft tall on ave. Single tree selection: mark removal trees to reduce BA to 70. Favor removal of ash, especially large ash, for EAB, then aspen. Do not cut oak, white pine, hemlock, yellow birch or cedar of any size. Don't include cedar drain at NW corner. 1/3 of stand in E central along highway and long strip adjacent to stand 1 is true E; do not cut. Harvest area will be roughly 60 ac. Next YOE consider a shelterwood after stand becomes more windfirm. On moderately well drained Rubicon-Iosco association soils. WP stumps. Expect maple and oak stand with maple and oak regeneration. Any combination of these species is acceptable. Mark for logability.										
73	A4	5	40	52	aspen (upland)	immature	final harvest	2		
comnts Fmd : Final harvest early. Dry/frozen, dormant specs non-negotiable. Leave all oak for retention. Poor vigor. This stand same as 81. May have hypoxylon: low level of mortality in stand. Expect aspen/oak stand. Plant jack pine if regen fails.										
78	O8	19	50	60	red pine	two aged	final harvest	2	planting	
comnts Fmd : Final harvest RIDGE ONLY, reserving red pine and oak for retention. Interplant red pine if regen is inadequate. Expect oak/maple stand with some aspen. Any percentage mix of these species is acceptable. Oak ridge around N, E and S edges with diverse older R, O, A with medium-low SI. W central portion is M5 with M, O, A and B and some E type patches. Grnd cov bracken, G on ridge, L in E type patches.										
81	A5	15	40	50	aspen (upland)	immature	final harvest	2		
comnts Fmd : Low vigor/SI. Final harvest early to release oak and ensure regen of aspen. O2 sap/seed ground cover. Dormant and dry/frozen spec non-negotiable. Use sapling protection spec for oak. Expect aspen regen and release of oak advanced regen: oak component of new stand should be much higher. Any combo of A/O is acceptable.										
82	R6	8	48	55	red pine	immature	shelterwood-prep	1		
comnts Fmd : Shelterwood harvest, reducing BA to 80. Narrow enough that rows are not needed. Mark leave trees with green. Retain larger trees (BA 9 to 14"). Don't remove oak (don't mark). Variable density. Low vol but easy access. Thinning will fatten trees, which are near sawlog size. Ground cover oak seedlings, duff, grass.										
83	A6	17	40	58	aspen (upland)	mature	final harvest	2		
comnts Fmd : Low SI. Harvest early to help ensure good regen. Leave oak and pine for retention (saw 1 R). Harvest dry/frozen/dormant non-negotiable to max stem density. Getting toward decadent and parts of stand are sparse. Do not harvest N end: too wet and trees are sap sized. Should regenerate to aspen/maple/oak. Any mix of these species is acceptable. Plant jack pine if regen fails.										
88	G0	59		55	red pine	nonstocked		0	planting	
comnts Fmd : Interplant J, white spruce or red pine (in order). Aspen has low SI. Cover bracken, L, V, E about 7% aspen, oak maple.										
112	E6	12	88	62	swamp hardwoods	two aged	shelterwood-prep	2		
comnts Fmd : Drier part of former stand 12. Shelterwood harvest, reducing BA to 50. Favor removal of ash, especially largest ash, even over aspen. Reduce ash BA for EAB. Harvest dry/frozen non-negotiable. Stand could be cut today and this has been wet summer. Ground cover bracken, swamp grass, forbs. Will remain E type: regen should be heavier to maple with some ash, oak and aspen. Any mixture of these species is acceptable.										
211	O8	17	78	60	oak	mature	seed tree	2		
comnts Fmd : Seed tree harvest: leave 20 BA white and pin/red oak seed trees. Orange mark take trees. Sell negotiated without red line per unit manager. Good oak seedlings/saps throughout stand; harvest should release oak. Interplant red pine if deer overbrowse oak seedlings (do not anticipate). Mixed deciduous includes white oak, red maple and white pine. Do not cut pine.										
490	G0	10		55	grass	nonstocked		0	other - specify in remarks	
comnts Fmd : Sand blowout from vehicles. Low level dumping. Severe knapweed. Close road after tsales and rehab.										
Total Acres.....		285								

**Proposed Treatments
With Limiting Factors**

Compartment: 129

Entry Year: 2010

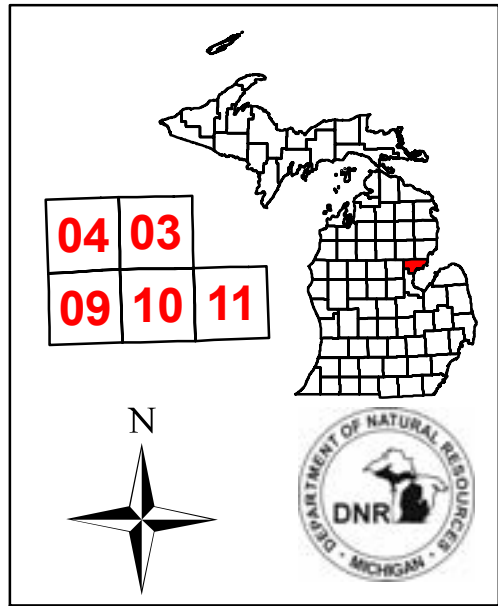
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
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TREATMENT LIMITING FACTORS:

Total Acres..... 0

Covertime & Treatment Map

Compartment 129
 T19N, R3E, Sec. 3, 4, 9 - 11
 County: Arenac
 Unit: Gladwin
 YOE: 2010
 Acres: 2,232 GIS Calculated
 Stand Examiner: Mark Reichel
 Map Revised: 10/27/2008
 Map Phase: Pre-Review



Legend

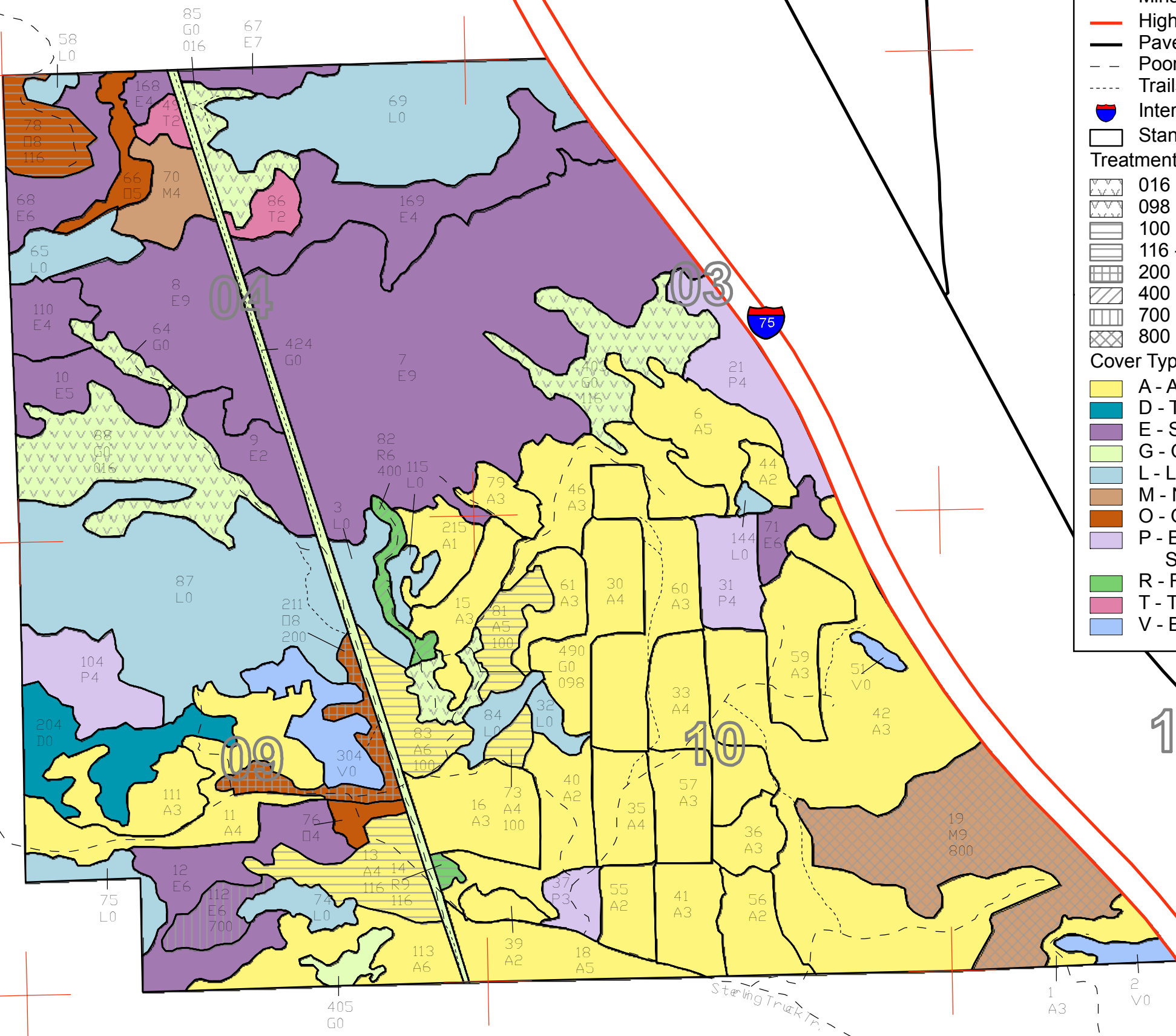
- Miris Corners
- Highways
- Paved Roads
- - - Poor Dirt Roads
- - - Trails
- Interstate Highway
- Stand Boundaries

Treatments

- 016 - Planting
- 098 - Other/Other
- 100 - Final harvest
- 116 - Final harvest/Planting
- 200 - Seed tree
- 400 - Thinning
- 700 - Shelterwood-prep
- 800 - Selection

Cover Types

- A - Aspen
- D - Treed Bog
- E - Swamp Hardwoods
- G - Grass
- L - Lowland Brush
- M - Northern Hardwoods
- O - Oak
- P - Balsam Poplar, Swamp Aspen, Swamp White Birch
- R - Red Pine
- T - Tamarack
- V - Bog or Muskeg





DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

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

Conservation Area	Type	Description
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