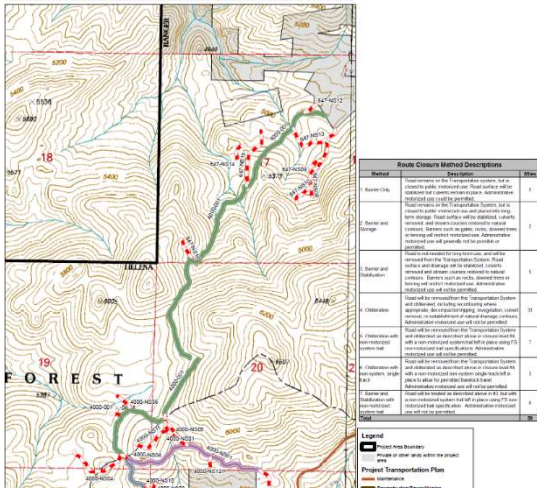


Report F: 4000-North Spurs: 647-NS: 08, 09, 10, 12, 13, 15, 16

Tenmile - South Helena Project
Record of Decision
Transportation Plan and Route Closure Methods Map - Detail



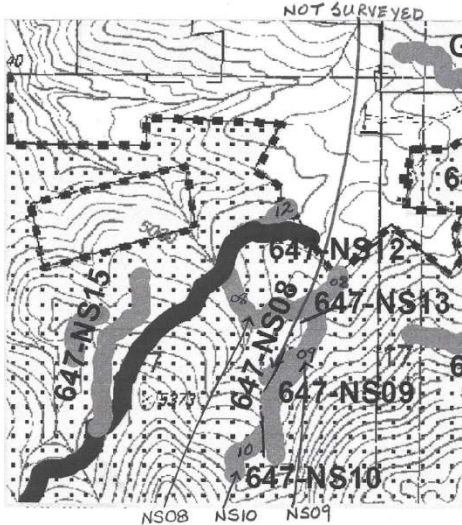
Spurs off the northern half of 4000-001 begin with the prefix 647. All are non-system roads. 4000-001 is also not a Forest system road.

These spurs were surveyed May 11 and 16, 2020 by Gary Ingman.

Map to left is a portion of the *Record of Decision Transportation Plan and Route Closure Methods Map – Detail* that HHA was able to obtain from the Forest Service before they said they would not speak with us due to litigation. We were attempting to decipher road numbers applied to roads on the landscape, but this is the only portion of that map we were able to procure. Because *Alternative 4*

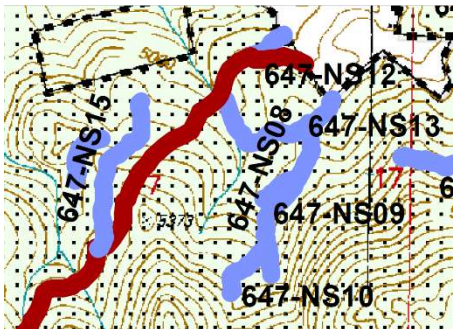
Transportation map was the only map we had that showed road numbers for the entire area, that map was used by Field crews (blue line map below).

Deciphering which numbers attach to which roads was difficult. But all surveyed segments were photographed and gps'ed.



The screen-shot at left shows how the *Alternative 4* map and its numbering scheme was interpreted by the field crew. After the field data had been gathered, it was determined that our interpretation of the numbering scheme was incorrect. Regardless, the photographs taken on the ground depict current circumstances. Conversion of numbers is provided in the table below.

HLCNF #	Helena Hunters#
NS08	NS09
NS09	Not surveyed
NS10	NS10
NS12	NS12
NS13	NS08
NS15	NS15
NS16	NS16





METHODS:

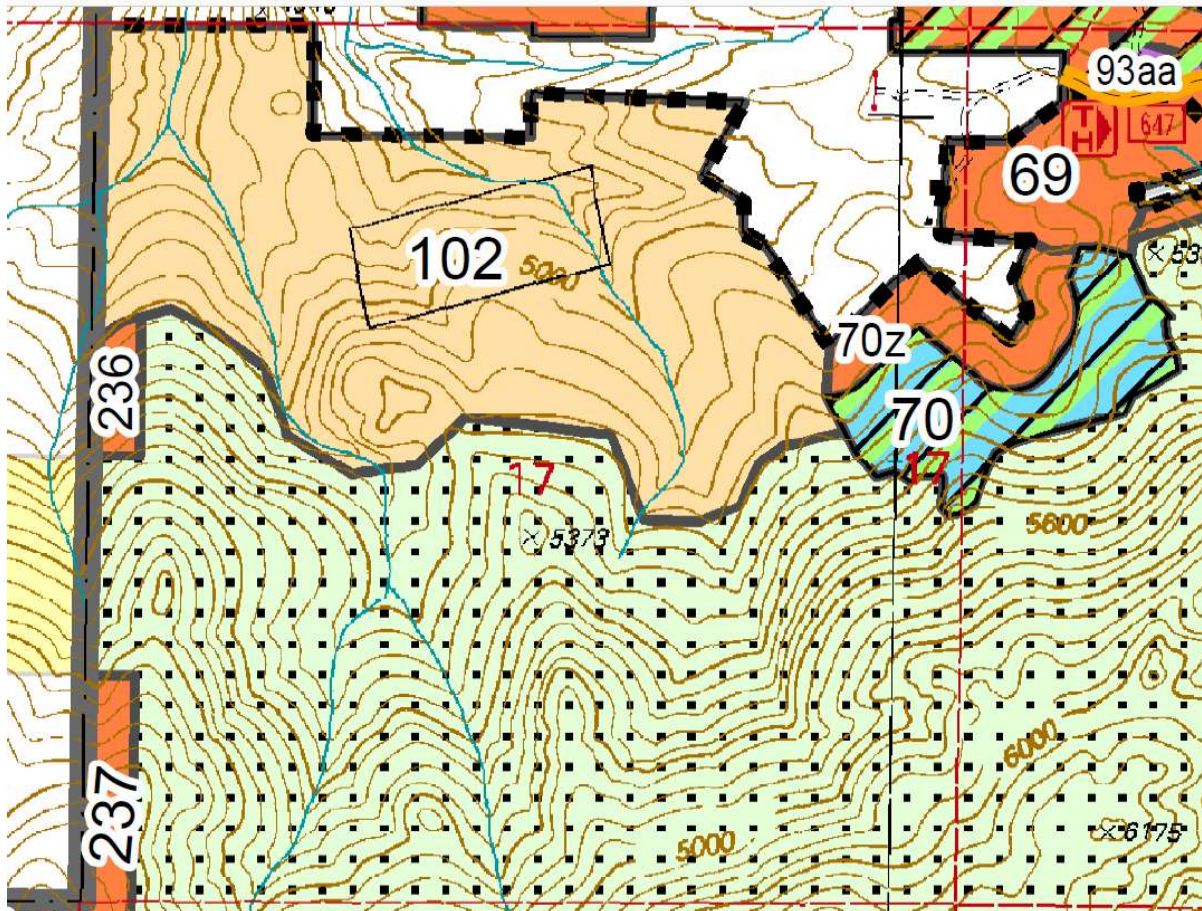
Waypoint = Placemark.

Paper Maps™ mapping app was used to follow a georeferenced USFS PDF map of the “roads”. Paper Maps uses the term “Placemark” instead of GPS Waypoint.

A screenshot of the Paper Maps field map was used to depict waypoints recorded of the “road” and surrounding terrain (at left).

Waypoints were taken approximately every 100-600 feet (50-200 steps). Fifteen waypoints and 37 photos were taken and filed. Representative photos of each road segment are displayed here (slightly less than every other photo taken).

A comparison of the transportation map, with the *Vegetation Treatments Map*, indicates that all of these spurs occur within or lead to the edge of proposed vegetation treatment units 102, 70, 70z, 236, 237. All are naturally recovering or obliterated. No weeds were observed on these surveys.



Existing National Forest Transportation System road? [Matt – Yes/No and explain]

Will road be added to National Forest Transportation System during project, as per Tenmile project ROD?

Will road be used by mechanized equipment as per Tenmile project ROD? Yes [Matt - explain, if possible]

Purpose of the road as per Tenmile project ROD:

[Matt – i.e., to access units ** which include ** and will entail **.]

Closure method proposed for road after project complete as per Tenmile ROD: [Matt – explain obliteration etc.. and what that entails/other info. from record etc..]

647-NS08 NS08 is a short spur that begins as an elk trail and ends as a primitive road behind private land in a more or less land locked setting.



647-NS08-3 Road here is a footpath. 4' width. 5% slope



647-NS08-4 Looking in reverse direction.



647-NS08-5 Fire ring. Road coming up from private is an actual primitive road.



647-NS08-6 Drops down hill to private land.

Field Form 647-NS08

HELENA HUNTERS & ANGLERS FIELD ANALYSIS OF TSH PROJECT TRANSPORTATION/RD CLOSURE MAP										Technician: <u>Ingram</u>	
Route Location: <u>647-NS16, NS15, NS08</u>					Route# (from map): <u>Laryman Jericho (circle)</u>						
Date: <u>5-11-20</u>		Time Out:		Time In:		Duration:		Waypoint every 300' <input checked="" type="checkbox"/>		Pg <u>2</u> of <u>2</u> .	
GPS Model/ID: <u>iPhone 8, Paper maps</u>					Datum: <u>GPS position (UTM/hdms):</u>						
Comments: Eg: Improvements needed for heavy equipment? Big rocks; Tree removal; Side slope (vehicle would roll); Sharp turns											
Field Tools: <u>GPS, map, camera, clip board, field forms, compass, pencils, batteries, personal gear (sunglasses, hat)</u>										<u>6" Tape Measure</u>	
Time	Wpt	Steps	Photo#	Description (of photo)	Comment	Aspect	Width'	Slope	Water	Lat-long/UTM	
	11	200	NS05-13	Looking south			6'	5°	N/A	46.534035 -112.136246	
			NS05-14	Looking north							
	12	200	NS05-15	Looking south			6-7'	5°	N/A	46.53239 -112.137128	
			NS05-16	Looking north							
NS08	13	0	NS08-1	Heading south on spur from trail			N/A	0-5°	N/A	46.537667 -112.130610	
			NS08-2	Looking N/W. Blawie, N. Road							
	14	100	NS08-3	Road here is → footpath.			4'	5°	N/A	46.537059 -112.129455	
			NS08-4	Looking back							
	15	100	NS08-5	Fire ring Road coming up from			6-8'	5-10°	N/A	46.537892 -112.127306	
			NS08-6	private is an actual primitive road						Drops down hill to private.	
<p>Commentary</p> <p>NS16 is a short primitive section of mining exploration trail that ascends a side slope and terminates on a ridge top. It is only a few hundred yards long. It is blending into the landscape and only subtle traces of an old road remain.</p> <p>NS15 is an actual road that could be driven by an ATV or small SUV. It has been cleared of blowdown by a private landowner or possibly the USFS. At its southern end it has extensive blowdown and is not passable by ATV.</p> <p>NS08 is a short spur that begins as an elk trail and ends as a primitive road behind private in a more or less landlocked setting.</p>											

647-NS09 begins as a narrow but actual road that could be driven by an ATV or small SUV. It has been cleared of most blowdown. Over its length, it becomes obliterated by extensive, impenetrable blowdown.



647-NS09-1 Start of road. Looking SSW. 6' tape. 5-10% slope Water 100 yards.



647-NS09-2 Start of road. Looking NNE down towards private land. Immature Douglas fir forest. Some 12" dbh trees. A few Ponderosa pine.



647-NS09-3 7-8' tape. 0-10% slope. Passable with ATV or small SUV.



647-NS09-4 Looking back. 7' road bed. Some blowdown. Map road does not align well with actual road. Larger firs – some painted orange. This is proposed regeneration harvest unit 102.



647-NS09-5 In direction of travel to south. 7-8' wide. 5% slope.



647-NS09-6 Looking back. Actual road location does not agree with transportation map.



647-NS09-7 Looking forward. Passable road ended 100 steps past waypoint 3. No visible trail width.



647-NS09-8 Looking back down grade. Lots of blowdown. Only minimal evidence of a former "road." Larger Doug-fir now, some 2' dbh. Tough getting through the downfall. 20% slope



647-NS09-9 Looking upgrade at extensive blowdown. 5' wide. 15% slope.



647-NS09-10 Looking back down the grade. Extensive blowdown.



647-NS09-11 Looking uphill at boulders. No trace of any former road. Width N/A. 20-25% slope.



647-NS09-12 Looking downhill. Aspen stand, large Doug-fir. Extensive impassable blowdown between waypoints 5 and 6. Skirted around uphill then dropped back down to valley. Moose sign. No sign of any former road on the hill slope to the east above here. Too many rock outcrops. I will search for 647-NS10 closer to the drainage bottom.



647-NS09-13 Coming back down, showing flagged trees and the road.



647-NS09-14 Coming back down. Showing roadbed width 7'. Flagging of trees ends about 100 yards before the road turns to a trail.

Field Form 647-NS09 and NS10

HELENA HUNTERS & ANGLERS FIELD ANALYSIS OF TSH PROJECT TRANSPORTATION/RD CLOSURE MAP							Technician: <u>Ingram</u>				
Route Location: <u>647-NS09, NS10 Nelson Gulch</u>				Route# (from map): <u>647-NS09 (Lazyman Jericho circle)</u>							
Date:	Time Out:	Time In:	Duration:	Waypoint every 300'	Pg <u>1</u> of <u>2</u> .						
GPS Model/ID: <u>iPhone 8</u>		Datum:	GPS position (UTM/hdms): <u>647-NS10</u>								
Comments: Eg: Improvements needed for heavy equipment? Big rocks; Tree removal; Side slope (vehicle would roll); Sharp turns											
Field Tools: <u>GPS, map, camera, clip board, field forms, compass, pencils, batteries, personal gear (sunglasses, hat)</u>											
Time	Wpt	Steps	Photo#	Description (of photo)	Comment	Aspect	Width'	Slope	Water	Lat-Long/UTM	
12:06	1	0	NS09-1	Start of road. Looking S/SW. Good top view		7'	5-10'	100 yds.		46.537252 -112.128207	
			NS09-2	" " Looking N/NE down towards private land. Immature D.fir forest. Some 12" dbh trees. A few P.P.ne. No snow.							
	2	200	NS09-3	Looking in direction of travel. Passable WATV or small 2N.						46.536074 -112.128754	
			NS09-4	Looking back 7' road bed. Some blowdown. Map road does not align well w/ actual road. Larger firs now. Many pointed orange.		11'	0-10'	0% N/A			
	3	200	NS09-5	Looking in direction of travel.		7-8'	5-10'	5% N/A		46.534697 -112.129004	
			NS09-6	Looking back. A sign, actual road location does not agree w/ map.							
	4	200	NS09-7	Looking forward. Possible road end at 100 steps past waypoint 3. No visible trail width.						46.533074 -112.129224	
			NS09-8	" " back down side. Lots of blowdown. Only minimal evidence of a former road.							
	5	100	NS09-9	Looking up side of extensive blowdown.		5'	15-20'	20% N/A		46.533298 -112.129487	
			NS09-10	Looking back down the grade. Lots of blowdown. No readily apparent road bed. Tough getting through the blowdown. Reasonably mature D.fir. Trees not inter-ked here w/ point.							
	6	100	NS09-11	Looking uphill at bladders. No trace of any former road. Width N/A. 20-25% slope.						46.532523 -112.129734	
			NS09-12	Looking downhill. Aspen stand, large D.fir. Extensive, impassable blowdown between waypoints 5 and 6. Skirted around uphill then dropped back down to valley. Moose sign. No sign of any former road on the hillslope to the east above here. Too many rock outcrops. I will search for 647-NS10 closer to the drainage bottom.							
1:25	7	0	NS10-1	This is possibly the spur road NS10. Difficult to say, but will follow it.						46.532702 -112.13003	
			NS10-2	Looking to west. Aspen grove. 17' rgs.				0% 15' to small spring channel			
			NS10-3	Looking to east. D.fir trees. No traces flagged here. Lots of moose droppings.							
	8	100	NS10-4	Looking to west. End of the line. This may or may not be an old spur. 0% slope flat.						46.532671 -112.130988	
			NS09-14	Looking east. Old road bed with blowdown. 100 year old trees in the path.							
			NS09-15	Looking back down. Showing flagged trees and the road.							
			NS09-17	" " " " showing roadbed width of 7'. Flagging of trees ends, before road turns to a trail.							

↳ Segment NS09, not NS10

6" type macro 1/4" 11 photos.

647-NS10 does not exist as any kind of trail or road. You have to use your imagination to conceive that a primitive mine road may once have existed here. It is a boggy aspen grove with extensive blowdown.



647-NS10-1 This is possibly the spur road NS10. Difficult to say, but ill follow it to a small spring channel. Looking west. Aspen grove and large Doug-fir trees. No trees flagged here. Lots of moose droppings.



647-NS10-2 Looking east. 0% slope.



647-NS10-3 100 steps further. Looking to west. End of the line. This may or may not be an old spur. 0% slope.



647-NS10-4 Looking east. Obliterated with blowdown. 100 year old trees in the path.

647-NS12 exists as a short passable ATV or jeep road that drops down to private property in Nelson Gulch and dead ends.



647-NS12-1 Start of NS12 looking NE. 8-9' wide. 0-5% slope



647-NS12-2 Start of NS12 looking at junction with 4000-001. Fir flagged with orange paint here. Road is cleared of blowdown. Immature fir mostly.



647-NS12-3 End of spur NS12. Ends in creek bottom. Aspens. Private land boundary.



647-NS12-4 Looking back up the grade of NS12.

Field Form 647-NS012

HELENA HUNTERS & ANGLERS FIELD ANALYSIS OF TSH PROJECT TRANSPORTION/RD CLOSURE MAP							Technician: <u>Ingram</u>		
Route Location:			Route# (from map): <u>647-NS12</u>			<input checked="" type="checkbox"/> <u>Lazyman</u> <input type="checkbox"/> <u>Jericho</u> (circle)			
Date:	Time Out:	Time In:	Duration:	Waypoint every	Pg <u>2</u> of <u>2</u> .				
<u>5/16/20</u>	<u>11:25am</u>	<u>3:30pm</u>		<u>300'</u>					
GPS Model/ID: <u>iPhone B Paper Mate</u>		Datum:		GPS position (UTM/hdms):					
Comments: Eg: Improvements needed for heavy equipment? Big rocks; Tree removal; Side slope (vehicle would roll); Sharp turns <u>6' tape measure</u>									
Field Tools: <u>GPS, map, camera, tape measure, clip board, field forms, compass, pencils, batteries, personal gear (sunglasses, hat)</u>									
Time	Wpt	Steps	Photo#	Description (of photo)	Comment	Aspect	Width'	Slope	Lat-Long/UTM
<u>2:15pm</u>	<u>9</u>	<u>0</u>	<u>NS12-1</u>	<u>Start of NS12 looking NE</u>					<u>46.539109 - 112.130684</u>
			<u>NS12-2</u>	<u>" " looking at junction w/feature road</u>	<u>Fir flogged w/ orange paint here</u>	<u>8-9'</u>	<u>0-5%</u>		
				<u>of blowdown. Invert use fir mostly.</u>	<u>Road is cleared</u>				
	<u>10</u>	<u>170</u>	<u>NS12-3</u>	<u>End of spur NS12. Ends in creek bottom.</u>	<u>Aspens. Private land boundary.</u>				<u>46.539083 - 112.121158</u>
			<u>steps NS12-4</u>	<u>Looking back up the grade/road NS12.</u>					
	<u>11</u>	<u>N/A</u>		<u>Last waypoint is where NS12 meets the private land boundary.</u>	<u>I'm not sure if I recorded this previously.</u>				<u>46.539109 - 112.121386</u>
<p><u>Commentary</u></p> <p><u>NS09 begins as a narrow but actual road that could be driven by an ATV or small SUV. It has been cleared of most blowdown. Over its length, it becomes obliterated by extensive, impenetrable blowdown.</u></p> <p><u>NS10 does not exist as any kind of trail or road. You have to use your imagination to conceive that a primitive mine road may have once existed here. It is a boggy mspen gluv with extensive blowdown.</u></p> <p><u>NS12 exists as a short passable ATV or jeep road that drops down to private property in Nelson Gulch and dead ends.</u></p>									

647-NS15 is an actual road that could be driven by an ATV or small SUV. It has been cleared of blowdown by a private landowner or possibly the USFS. At its southern end, it has extensive blowdown and is not passable by ATV.



647-NS15-1 Start of NS15 spur road, starting from north end. 6-7" wide. 10-15% slope.



647-NS15-2 Looking north. Road cleared of blowdown.



647-NS15-3 Looking south. Firs marked with orange paint.



647-NS15-4 Looking north. There are parallel roads 50' apart.



647-NS15-5 Looking south uphill. Several roads in this area. 7' wide 10%.



647-NS15-6 Looking north.



647-NS15-7 Looking south. The road on the transportation map is only a trail. This is the actual road. 6-8' wide. 5-10% slope.



647-NS15-8 Looking north.



647-NS15-9 Looking south. Trail cleared of blowdown. 8' wide 10% slope.



647-NS15-10 Looking north. Doug-fir, some Ponderosa.pine. Immature trees.



647-NS15-11 Looking south. 8' wide 10% slope.



647-NS15-12 Looking north.



647-NS15-13 Looking south. 6' wide. 5% slope.



647-NS15-14 Looking north.



647-NS15-15 Looking south. 6-7' wide. 5% slope.



647-NS15-16 Looking north.

Field Form 647-NS15 and NS16

HELENA HUNTERS & ANGLERS FIELD ANALYSIS OF TSH PROJECT TRANSPORTION/RD CLOSURE MAP										Technician: <u>Ingram</u>	
Route Location: <u>647-NS16, NS15, NS09</u>					Route# (from map): <u>647-NS16 (Lazyman Jericho (circle))</u>						
Date: <u>5-11-20</u>		Time Out: <u>9:38 am</u>		Time In: <u>5:20 pm</u>		Duration:		Waypoint every 300' <input checked="" type="checkbox"/>		Pg <u>1</u> of <u>2</u>	
GPS Model/ID: <u>iPhone 8, Paper Maps</u> Datum:					GPS position (UTM/hdms):						
Comments: Eg: Improvements needed for heavy equipment? Big rocks; Tree removal; Side slope (vehicle would roll); Sharp turns											
Field Tools: <u>GPS, map, camera, clip board, field forms, compass, pencils, batteries, personal gear (sunglasses, hat)</u>										6' Tape Measure in photos	
Time	Wpt	Steps	Photo#	Description (of photo)	Comment	Aspect	Width'	Slope	Water	Lat-Long/UTM	
11:05 NS16	1	0	NS16-1	Beginning of spur road at main trail junction			6-8'	59°	N/A	46.528557 -112.141425	
				NS16-2	Looking back E/SW Lodgepole blowdown. Fresh, more tracks. Dead LFP trees, lots of blowdown. Mature, healthy D. fir trees.						
	2	100 (300')	NS16-3	Looking in direction of travel uphill. Narrow, steep grade.			5-6'	159°	N/A	46.529336 -112.141606	
				NS16-4	Looking back downhill. Rocks on trail, little blowdown.						
	3	100	NS16-5	Looking in direction of travel uphill. Grass covered trail.			5-6'	159°	N/A	46.529624 -112.142304	
				NS16-6	Looking back downhill. Trail passable by ATV.						
	4	100	NS16-7	Top of ridge, end of spur road. Fresh elk droppings.			5-6'	209°	N/A	46.530137 -112.142490	
				NS16-8	Looking back down the steep grade.						
NS15	5	100	NS15-1	Start of NS15 spur road, starting from north end.			6-7'	10-15°	N/A	46.537976 -112.133231	
				NS15-2	Looking north. Road cleared of blowdown.						
	6	100	NS15-3	Looking south.	Fir marked for harvest or leave trees?		6-8'	159°	N/A	46.537773 -112.134697	
				NS15-4	Looking north. There are parallel roads 50' apart.						
	7	100	NS15-5	Looking south/uphill.	Season roads in this area.		7'	109°	N/A	46.537173 -112.134598	
				NS15-6	Looking north.						
	8	100	NS15-7	Looking south. The road on the Transp. map is			6-8'	5-10°	N/A	46.536696 -112.135313	
				NS15-8	Looking north. only a trail. This is the old road.						
	9	100	NS15-9	Looking south. Trail cleared of blowdown.			8'	109°	N/A	46.536127 -112.135899	
				NS15-10	Looking north. D. fir, some P. pine. Immature trees.						
	10	100	NS15-11	Looking south			8'	59°	N/A	46.535461 -112.136131	
				NS15-12	Looking north						

HELENA HUNTERS & ANGLERS FIELD ANALYSIS OF TSH PROJECT TRANSPORTION/RD CLOSURE MAP										Technician: <u>Ingram</u>	
Route Location: <u>647-NS16, NS15, NS09</u>					Route# (from map): <u>647-NS16 (Lazyman Jericho (circle))</u>						
Date: <u>5-11-20</u>		Time Out:		Time In:		Duration:		Waypoint every 300' <input checked="" type="checkbox"/>		Pg <u>2</u> of <u>2</u>	
GPS Model/ID: <u>iPhone 8, Paper Maps</u> Datum:					GPS position (UTM/hdms):						
Comments: Eg: Improvements needed for heavy equipment? Big rocks; Tree removal; Side slope (vehicle would roll); Sharp turns											
Field Tools: <u>GPS, map, camera, clip board, field forms, compass, pencils, batteries, personal gear (sunglasses, hat)</u>										6' Tape Measure	
Time	Wpt	Steps	Photo#	Description (of photo)	Comment	Aspect	Width'	Slope	Water	Lat-Long/UTM	
	11	200	NS15-13	Looking south			6'	59°	N/A	46.534035 -112.136246	
				NS15-14	Looking north						
	12	200	NS15-15	Looking south			6-7'	59°	N/A	46.53237 -112.137128	
				NS15-16	Looking north						

647-NS16 is a short primitive section of mining exploration trail that ascends a side-slope and terminates on a ridgetop. It is only a few hundred yards long. It is blending into the landscape and only subtle traces of an old road bed remain.



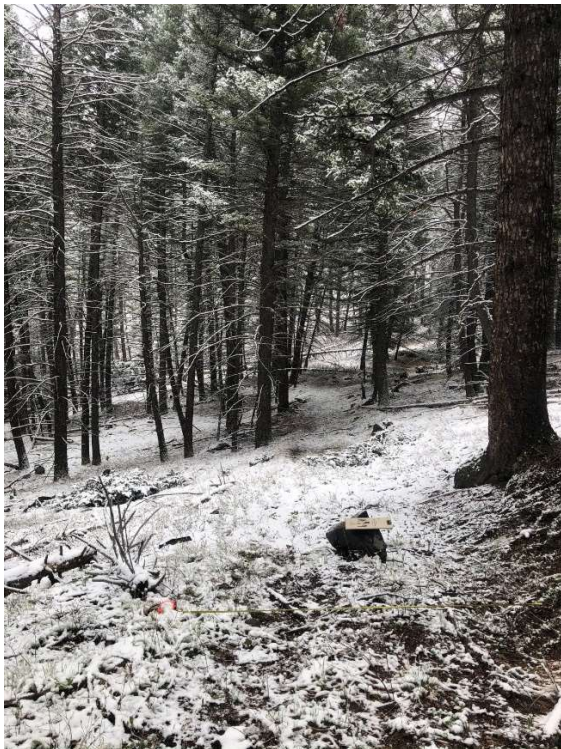
647-NS16-1 Beginning of spur road at main trail junction. 6-8' wide. 5% slope.



647-NS16-2 Looking back SSW. Lodgepole blowdown. Fresh moose tracks. Dead Lodgepole pine trees; lots of blowdown. Mature healthy Doug-firs.



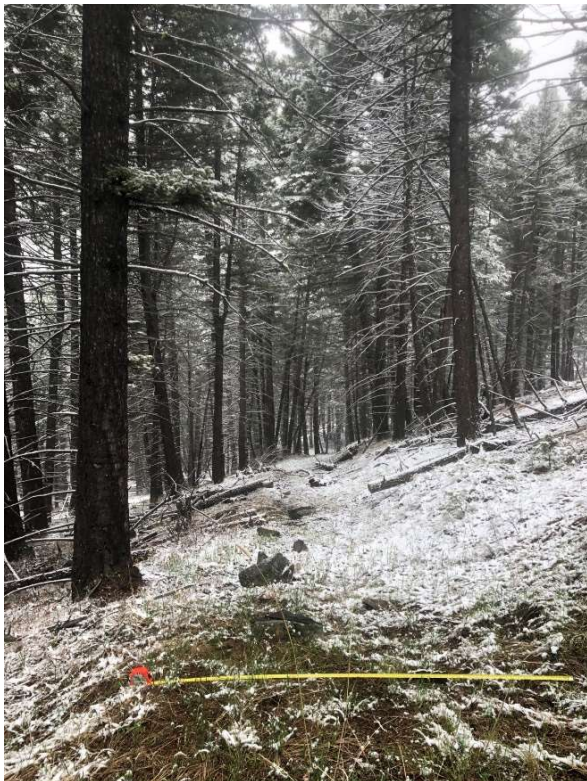
647-NS16-3 Looking in direction of travel uphill. Narrow, steep grade. 5-6'. 15% slope.



647-NS16-4 Looking back downhill. Rocks on trail, little blowdown.



647-NS16-5 In direction of travel uphill. Grass covered trail. 5-6'. 15% slope



647-NS16-6 Looking back downhill. Trail passable by ATV.



647-NS16-7 Top of ridge, end of spur road. Fresh elk droppings. 5-6' wide. 20% slope



647-NS16-8 Looking back down the steep grade.