NPS Form 10-900
(3-82)

OMB No. 1024-0018
Expires 10-31-87

United States Department of the Interior
National Park Service

National Register of Historic Places Inventory—Nomination Form

For NPS use only
received MAY 27 1987
date entered AUG 3 1987

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic: Sumpter Valley Railway, Middle Fork (John Day River) Spur

and/or common: Oregon Lumber Company Railroad

3 contributing features: roadbed; Davis Creek Bridge; water tower, Big Boulder Crk
Number of non-contributing features: 0

2. Location

street & number: Historic right-of-way of the Sumpter Valley Railway's Middle Fork Spur from a point near Bates, Oregon, to a point near Susanville, Oregon — N/A not for publication

city, town: Bates — X vicinity of — Second Congressional District

state: Oregon — code 41 — county: Grant — code 023

3. Classification

Category	Ownership	Status	Present Use	
X district	___ public	___ occupied	X agriculture	___ museum
___ building(s)	___ private	X unoccupied	___ commercial	___ park
___ structure	X both	___ work in progress	___ educational	___ private residence
___ site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	N/A in process	X yes: restricted	___ government	___ scientific
	N/A being considered	___ yes: unrestricted	___ industrial	___ transportation
		___ no	___ military	X other: recreation

4. Owner of Property

name: see continuation sheets, item 4

street & number: N/A

city, town: N/A — ___ vicinity of — state

5. Location of Legal Description

courthouse, registry of deeds, etc.: Grant County Assessor

street & number: Courthouse

city, town: Canyon City — state: Oregon — 97820

6. Representation in Existing Surveys

title: Statewide Inventory of Historic Properties — has this property been determined eligible? ___ yes X no

date: 1982 — ___ federal X state ___ county ___ local

depository for survey records: State Historic Preservation Office

city, town: 525 Trade Street SE, Salem — state: Oregon — 97310

7. Description

Condition		Check one	Check one
___ excellent	___ deteriorated	___ unaltered	_X_ original site
_X_ good	___ ruins	_X_ altered	___ moved date N/A
___ fair	___ unexposed		

Describe the present and original (if known) physical appearance

The linear historic district includes portions of the Middle Fork Spur from the vicinity of Bates, Oregon, to the Mitchell Tract, historic end of the railroad. Of the original 23 miles, 16.2 are proposed for nomination. The general condition of this portion is good, with the railroad bed preserved and some ties in place. Associated features in varying states of preservation are: water tower at Big Boulder Creek, a reload site on Camp Creek, and stock corrals at Camp Creek. Features destroyed include eleven wooden trestles and bridges crossing the Middle Fork of the John Day River and other streams. One small bridge at Davis Creek remains in place. Associated with the Middle Fork Spur were numerous temporary logging spurs which left the main line to penetrate the timbered areas adjacent to the railway. Although evidence of some of these remains, none is proposed for inclusion. The total acreage of the proposed district is 196.25 acres; the width is 100'--the original right-of-way of the railway on patented land. There are no non-contributing features within the district.

(Continued)

LANDOWNERS IN THE LINEAR DISTRICT

T11s R35e	Section 20	TL 500A3	Gordon Busby Prairie City, OR 97869
		TL 500	Orrin Forrest Prairie City, OR 97869
	Section 19	TL 500	Orrin Forrest Prairie City, OR 97869
	Section 18	TL 500	Orrin Forrest Prairie City, OR 97869
T11s R34e	Section 13	TL 500	Orrin Forrest Prairie City, OR 97869
	Section 11	TL 100	U. S. Malheur National Forest John Day, OR 97845
	Section 10	TL 100	U. S. Malheur National Forest John Day, OR 97845
	Section 4	TL 100	U. S. Malheur National Forest John Day, OR 97845
T10s R33e	Section 36	TL 1600	Dan Lufkin Prairie City, OR 97869
		TL 100	USDA Malheur National Forest John Day, OR 97845
	Section 26	TL 100	USDA Malheur National Forest John Day, OR 97845
		TL 1300	Mildred Deardorff Rt. 2, Box 201 John Day, OR 97845
	Section 27	TL 1300	Mildred Deardorff Rt. 2, Box 201 John Day, OR 97845

	Section 28	TL 1300	Mildred Deardorff Rt. 2, Box 201 John Day, OR 97845
	Section 29	TL 100	USDA Malheur National Forest John Day, OR 97845
	Section 20	TL 1000	Lavelle Holmes P. O. Box 296 Monument, OR 97864
		TL 1100	Robert Holland 315 S. W. Brent John Day, OR 97845
		TL 1300	Mildred Deardorff Rt. 2, Box 201 John Day, OR 97845
	Section 19	TL 1000	Lavelle Holmes P. O. Box 296 Monument, OR 97864
		TL 1100	Robert Holland 315 S. W. Brent John Day, OR 97845
T10s R32e	Section 24,25	TL 1500	Lola O'Rourke Bates, OR 97817
	Section 35	TL 1600	Edward Hines Lumber Co. 200 S. Michigan Ave. Chicago, IL 60604

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GENERAL DESCRIPTION OF THE MIDDLE FORK SPUR SYSTEM

The Middle Fork spur ran northwestward from Bates, Oregon down the Middle Fork of the John Day River to a point near Susanville, Oregon. The line was originally built as a part of the Sumpter Valley Railway, but shortly after its construction in 1916, it entered the proprietary service of the Oregon Lumber Company. Under OLC ownership, it was used for hauling logs from landings in the timber to the mill site at Bates. Generally, the line follows the course of the Middle Fork through a valley descending from an altitude of 4100' at Bates to 3400' at its lowest point on the Middle Fork, then ascending to 3800' on Camp Creek.

The Middle Fork spur was a narrow gauge line, built to the 36" standard of the Sumpter Valley Railway rather than the conventional 56.5" gauge. Its greatest extent was 23.7 miles. By 1945, use of the road had been discontinued, and in 1947 its parent line, the Sumpter Valley Railway was abandoned.

LANDSCAPE AND SETTING

The Middle Fork spur crosses a section of eastern Oregon renowned for its scenery, remoteness, and historic associations.

The Blue Mountains are complex mountains formed by uparching of late Cenozoic faults. The resulting terrain is rugged, with the major drainages running from northwest to southeast. Each drainage provides a green valley along the river, while the ridges separating the valleys provide dense coniferous forests and spectacular mountain passes.

Although the landscape along the railway has all the characteristics associated with the natural beauty of western scenery, it is also an industrial landscape. The forests have been logged and old growth trees are replaced by second growth in many stands. The meadows have been grazed and the native grasses cut for hay. Gold mining and dredging has altered the terrain in some areas. As the sole source of mechanical transportation for most of this area, the Sumpter Valley Railway played a central role in its industrialization. Understanding the landscape, then, requires understanding the interplay between the natural resources, the process of gaining access to those resources, and the pattern of human habitation which followed.

ENGINEERING AND DESIGN

Joseph A. West, the engineer responsible for the Middle Fork Spur's design and construction, was influenced by three factors: the route the line was to follow, the narrow gauge equipment which would use the line, and the special requirement of a logging railroad. According to oral sources, the main line of the system was built to engineering standards nearly as high as those of the Sumpter Valley Railway main line. Field investigation generally confirms this. The high construction standards assured that the spur's main line could easily be maintained and would endure the rigors of hard use. In addition to the main line, the Middle Fork system also contained temporary logging spurs. The nature of a logging railway is to extend temporary spurs into the timber wherever possible. As the Oregon Lumber Company purchased timber sales on he Middle Fork drainage, the railway followed up steep canyons to progressively higher elevations along its route

Field investigations by the Malheur National Forest have located over 20 rail spurs in the Middle Fork drainage. Historical investigations from documentary sources suggest additional spur lines. For the purposes of our survey, we have considered the spurs to be of two types. Permanent, major spurs are those which operated for longer than five years and displayed some of the engineering characteristics of main line construction. Temporary spurs are shorter lines built to remove timber from a specific tract and then to be dismantled. The following matrix clarifies some of the characteristics of each type:

SVRR Main Line	Permanent Spurs	Temporary Spurs
connect to station points	connect to minor spurs	end at logging site
raised roadbed 8'-10'wide crown, 15'-35'wide base	raised roadbed 6'-8'wide crown, 10'-15'wide base	roadbed not raised ties laid on depressed or slight roadbed
cuts and fills greater than 6'	cuts and fills greater than 6'	cuts and fills less than 6'
grade less than 5%	grade less than 5%	grade greater than 5%
rock roadbed	rock roadbed	soil roadbed often incorporating logs in the fills

ties ballasted	ties ballasted	no ballast
ties sawn and treated	ties sawn	roundwood ties
wyes, sidings, water tanks	wyes and water tanks	no wyes or tanks
trestles use vertical bents, members in compression	trestles use vertical bents, or horizontal members in deflection	trestles use horizontal members only

Generally, the permanent spurs were built to last long enough to recoup their cost, while the temporary spurs were not built to last beyond the time it took to remove the timber they reached. This logic is apparent in most of the engineering aspects.

One of the engineers' central concerns was to ensure proper drainage for the roadbed (Camp, 1904). This was accomplished by building ditches to carry water along the roadbed and culverts to carry it across the roadbed. Since both of these are expensive to build, the quality of the drainage system is a convenient index to the intended life of the roadbed. On main line construction, the preferred method of crossing a watercourse was to fill the watercourse to the grade level with rocks and to provide a culvert for the stream to go through. This method required expensive earthwork, but it was permanent and the resulting structure required little maintenance beyond cleaning the culvert each year. Most of these fills are still in place on the main line with only a few (20%) damaged by washouts.

The second choice on the main line was a trestle or bridge. Trestles were less expensive initially, but they required continual maintenance, since the timber they are made from is vulnerable to rot and insect damage, fire, and stress. Significantly, all the main line trestles and bridges are now gone except for the single span bridge at Davis Creek.

On the spurs, trestling was the common solution to watercourse crossings. Major spur trestles, like main line trestles, were built from a series of vertical frames called bents. Each bent is shaped like a letter "A", with legs on the ground and the top designed to accommodate the track. This kind of construction lets the builders place the bents on concrete pads so they do not contact the soil and to keep the timbers vertical, so they do not soak up as much rainwater. Both of these design features prolong the life of the timbers. The major timbers in this kind of trestle are compressed by the weight of the trains. Since compression loads are the easiest for timbers to bear, they are likely to retain their strength as they age.

Vertical trestling of this type, however, is expensive to build. It must be designed carefully, and it requires good timbers, metal hardware, concrete foundations, and other costly items. A less expensive alternative is to build the trestle from logs laid across one another in a horizontal pattern. Brown (1934) calls this "crib" trestling. For this kind of trestle, engineering expertise is unnecessary, the material is close at hand, and the construction time is minimal. The resulting trestle, however, is short lived. Since it contacts the soil, it rots, and since the logs must bear the weight of the trains by deflection rather than compression, it does not retain its strength.

On the main line, then, we would expect to find fills and culverts and some vertical trestling or bridges. On the major spurs we find vertical trestling and some horizontal trestling. On the minor spurs, we find almost exclusively horizontal trestling.

Middle Fork Spur Engineering Characteristics

A. Roadbed

The roadbed is the most enduring part of a railroad. Because roadbeds for main line use conventionally maintain grades no greater than 5% (Camp, 1904), designing the roadbed in mountainous areas is a significant engineering challenge. Like other mountain railroads, the Middle Fork Spur maintained its grade through a continuous series of cuts and fills, the cuts removing material from the high places and the fills depositing it in the low places. Taken together, cuts and fills are often called "earthwork." Curves on the roadbed need to have as long a radius as possible to minimize the resistance to the trains passing over them. Since curves are essential to maintain an even grade, however, railroad builders had to trade off between curves and gradients to reach an optimum.

According to Walter M. Camp (1904), 4 degrees of curvature was the maximum good engineering practices allowed for broad gauge rod locomotives in use at the turn of the century. The locomotives in use on the Middle Fork Spur, however, were narrow gauge gear locomotives which were designed specially for extreme grades and curves encountered on logging spurs. Although West could have designed the main line of the Middle Fork to take advantage of the capabilities of this equipment, he chose not to. As a result, grades and curves on the Middle Fork Spur match SVR main line standards.

Portions of the roadbed of the Middle Fork spur were built to a 15' average width at the crown, 5' wider than other spurs. The bed was built of rock, averaging 30" in elevation off the grade.

B. Trestles, Bridges, and Fills

Some canyons and watercourses along the Middle Fork spur were crossed by the picturesque wooden trestles associated with logging railroads, but the commoner structures were bridges or earthwork fills and wooden culverts. Culverts in the original construction were wooden and were built in the shape of a long rectangular box. Later culverts were conventional corrugated steel.

Wreckage from the trestle on Balance Creek indicates that trestles on the Middle Fork spur were made with vertical bents of sawn timber set on rock pads.

Bridges across the Middle Fork and other streams were made from 8"x15" timbers in 10' spans. Six timbers were bolted together with 2" steel spacers to form a 58" grid that the ties could be spiked across.

C. Spurs

Along the main line, the Oregon Lumber Company built logging spurs to accommodate their log trains. These spurs varied in length from short spurs a mile or two long to the Vincent Creek spur which Ferrell (1967) estimates ran ten miles up that drainage.

Other spurs in the system which have left some evidence of their construction standards include the following:

Cottonwood Creek
Davis Creek
Deerhorn Creek
Gorge Creek
Little Boulder Creek
Little Butte Creek
Murdock Creek
Placer Gulch

D. Sidings

Sidings, which are sections of track laid parallel to the main line, were located at strategic places so that trains could pass one another or so that cars could be loaded or unloaded.

E. Other Engineering Features

Where the railway crossed fence lines, the builders provided wooden cattle guards. These were bridge-like structures built over excavations in the roadbed. Wooden water tanks were another feature. These made water available to locomotives at several points along the line.

Middle Fork Spur Artifacts

Artifacts associated with the railway itself--as opposed to those associated with other activities such as logging, telegraphy, or camp life--fall into three categories. The first category is ties and timbers. These are by far the most common artifacts to be found along the roadbed. The second group is the fastenings used to secure the rails to the ties (spikes) or to each other (fish plate bolts). These are also quite well distributed. The third category consists of rail and rail-related devices. These are quite rare.

A. Ties and Timbers

Ties for the main line and spurs were cut 74" long, although the standard length for narrow gauge ties was 72" (Camp, 1904). This is noticeably shorter than conventional 8' ties for standard gauge lines. The effects of using shorter ties were two: a) they could not be re-used by other railroads so they were left in place after abandonment, b) they could not be used for fence posts by ranchers so they have tended to remain in place on those portions of the railway not converted to motor vehicle use.

Material for the ties was indigenous softwood, especially fir. The Oregon Lumber Company had began its business by cutting ties for standard gauge lines--principally the Union Pacific--so sawn ties were in good supply. On the spurs, however, the supply of sawn ties was supplemented with hewn ties made from 8" to 10" logs.

At switches, the 74" ties were replaced with 8' to 10' ties that were long enough to accommodate both sets of rails.

B. Fastenings

Spikes on the Middle Fork spur came in a variety of sizes. For mainline use, spikes were 6" long and 1/2" square. Another common size on the mainline was the 5 3/8" spike, which was also 1/2" square. These sizes were used on the major spurs as well as the mainline and probably represent a standard spike for the railway system. Smaller spikes, used on spurs, sidings, and other peripheral tracks were 7/16" square and included 5" and 4 1/2" lengths. There seems to be no clear distinction between the importance of the spur line and the size of its spikes.

Rails were held together by splices usually called fish or angle plates. These were steel straps bolted to each rail at the joint and then spiked to the ties. Although the fish plates themselves are relatively rare along the right of way, the distinctive bolts used on the fish plates are quite common. The fish plate bolts are 4 1/2" long and 3/4" in diameter. The thread is 3/4 X 10, which is ASME standard coarse thread for 3/4" bolts. The head of the bolts is rounded like a carriage bolt head, but it is thicker and more nearly hemispherical than a carriage bolt head. The heads are 1 1/4" in diameter. Beneath the head is an oval collar, 5/16" thick, 3/4" at the narrow part of the oval, and 1" at the broad part. This oval collar fits neatly into a recess in the fish plate, holding the bolt from turning as it is tightened or loosened. Nuts for the fish plate bolts are either square or hexagonal, apparently used interchangeably.

C. Rail

Unlike ties, rail was valuable during the railway's life and afterwards. As a consequence, the rails were removed by the company at the time of abandonment, and any that were overlooked were removed by others. Beyond their value as steel scrap, the light 40 lb. rail was convenient for mining use, fencing, or concrete reinforcement. What little rail remains is confined to the remoter spurs.

Steel fish or angle plates surface occasionally along the right of way. These are steel forgings c. 1/2" X 2" X 18" with holes bored in each end to fit the fish plate bolts. Less common than the fish plates are steel tie plates, which went beneath the rail on the tie. Evidence available suggests that these may have been confined to the main line. They are not common on any part the railway, but they were not found on any of the spurs during our survey.

CONDITION OF THE MAIN LINE

At the time of its abandonment in the early 1940's, the Middle Fork spur was suffering from years of hard use and wartime exigencies. The cuts had not been cleaned, the sidings were in poor condition, and the fencing was in disrepair.

At the time of abandonment, salvage crews removed the rails. After abandonment the railway began to deteriorate in a predictable fashion. Trestles and bridges built of timber weakened and washed out during the spring runoff. Culverts plugged and the fills washed out around them. Ballast between the ties washed out. Cuts filled up with rocks and dirt, and fills eroded to a fraction of their original size. Grasses in the meadows grew over the roadbed, and in the forest trees grew on it.

Human forces contributed to the deterioration as well. Buildings were torn down or moved, ties were lugged off for firewood, and water tanks were attractive targets for vandals. Most often, the roadbed was recognized for what it was--i.e., a well built route between points--and was modified for motor vehicle use.

Considering the hazards it has been exposed to, however, much of the roadbed is in remarkably good condition. For discussion purposes, we will establish here five categories to mark the major gradations in the railway's current condition.

Condition A

This condition offers the roadbed undisturbed and the ties in place. Fragile engineering structures like trestles or bridges may be missing, but the earthwork features are well preserved. Vegetation will have grown up on the roadbed, with grasses overgrowing it in meadows and trees up to 8" in diameter displacing the ties. Game trails or human trails may follow the roadbed, but it will not be used for motor vehicle traffic.

Condition B

In condition B, the surface of the roadbed has been altered to accommodate motor vehicles, but the major roadbed features are still intact. Cuts, grades, and fills are preserved in their original form. Bridges and culverts may have been replaced and the earthwork modified slightly, but the essential design of the railway is clearly visible. Ties are usually visible where they have been pushed to one side of the roadbed. Other artifacts, including spikes and fish-plate bolts are visible along the route.

Condition C

On condition C stretches, the route of the railway may be deduced, but nothing remains beyond the engineers' choice of route. In mountainous terrain, however, this choice is a significant achievement. Condition C prevails on the railway where the route has been chosen by modern highway engineers. Their practice in building over the railway has been to use the railway right-of-way, so short portions of the road may be visible.

Condition D

Condition D designates those sections of the railway which are completely obscured so that the original route is no longer discernible. In most cases, this means that something else has been built over the route. Construction that obliterates the route includes highway development along the Middle Fork and industrial activity at the Bates mill site. In these cases, excavation would probably reveal features or artifacts associated with the railway.

CONDITION OF THE TEMPORARY SPURS

The current condition of the temporary spurs reflects the facts of their construction and their use. The spurs have not fared as well as the main line in the war with the elements, but some are in respectable shape. For example, the ties were laid on the ground with little roadbed beneath them. Some of the ties are still in place, but they have rotted down to a thickness of less than two inches. Other natural forces including washouts, erosion, and vegetation have also damaged the minor spurs.

One unfortunate feature of minor spur construction is the use of logs to hold the roadbed. On the raised portions, logs were laid parallel to the direction of the track, and earth was heaped over them to provide a base for the ties. As these logs rot out, whole sections of the roadbed may be missing. Since the ties were removed from most of the minor spurs so they could be reused, and the roadbed itself was built of wood and soil, the phenomenon of the disappearing spur is rather common.

A final factor contributing to the spurs' poor condition is the conversion from rail to truck logging. As the lumber industry revived in the late 1930's, activity in the woods increased tempo. The older lumber firms like the Oregon Lumber Company continued their railroad operations, but the newer firms used logging trucks. Gradually, the

railroad operations began to use the cheaper truck logging technology to meet the competition. The spurs that had access to roads could easily be converted to truck roads by simply removing the steel and the ties and widening them out. The resulting conversion effectively obliterates all evidence of the railway. Since roadbed features such as fills and cuts were not well pronounced on the spurs to begin with, they did not survive the conversion. Evidence of conversion from rail to truck logging is apparent in the Vincent Creek system and others.

The following drainages contained spur lines. Evidence of these spurs has been located in each case, but there is no remaining evidence of a continuous line in any drainage, nor is there any evidence of construction meeting the "permanent spur" standards.

Drainage	MNF Site Numbers			
Cottonwood Creek	0233	0224		
Camp Creek	LC96	0249		
Davis Creek	0047	0325		
Dead Cow Gulch	0341	0338	0326	
Deerhorn Creek	0340	0332		
Gorge Creek	0318			
Little Boulder Creek	0302			
Little Butte Creek	0320			
Murdock Creek	0300			
Placer Gulch	0048			
Vincent Creek	0304	0314	0377	0376
Jungle Creek	0385			

CRITERIA FOR LINEAR DISTRICT NOMINATION

The following criteria were esablished for Linear Historic District nomination on the other portions of the Sumpter Valley Railway system:

1. Integrity of the roadbed must be maintained. The roadbed should not be interrupted for more than .10 miles. On the main line, roadbed integrity is most often threatened by highway construction; on the spurs, logging road construction has the same effect.

2. Sections to be nominated should display associations with communities. Historic places along the route of the railway such as Bates are an important part of the railway's significance.

3. Sections to be nominated should display a concentration of engineering features characteristic of Sumpter Valley Railway construction. These features are outlined in "General Description of the Main Line" section.

4. Sections nominated should display features associated with the industries that the railway served. These include logging and lumber manufacturing and--to a lesser extent--ranching.

5. Sections chosen should display associations with nationally recognized figures involved in the railway's construction or operation.

Overview of the Proposed District

Length of the district	16.2 miles	
Width of the district	100 feet	
USGS map reference	Bates, Oregon Susanville, Oregon	
Area within the district	196.25 acres	
Condition of the Railway		
A. (Roadbed features intact)	4.9 miles	30%
B. (Engineering preserved)	9.15 miles	57%
C. (Route visible)	1.13 miles	6%
D. (Route obscured)	.94 miles	5%
E. (Restoration)	-0-	
Date of Construction	1916-1917	
Extant Features	Water tank at Big Boulder Creek T10s R33e S26	
	Bridge at Davis Creek T11s R35e S20	
	Camp Creek corrals T10s R32e S35	
	Camp Creek reload T10s R32e S35,36	

Features Destroyed -
Crossings of the Middle Fork, John Day River:

Caribou Creek trestle
T11s R34e S13

Deerhorn Creek trestle
T11s R34e S11

Flat Creek trestle
T11s R34e S11

Little Boulder Creek trestle
T11s R34e S11

Little Butte Creek trestle
T11s R34e S10

Gorge Creek trestle
T11s R34e S10

Windlass Creek trestle
T11s R34e S4

Sunshine Creek trestle
T10s R33e S26

Holmes Pasture trestle
T10s R33e S27

Other Watercourse Crossings:

Balance Creek trestle
T10s R33e S20

Camp Creek trestle
T10s R33e S19

Historic District Nomination Section I - Placer Gulch to Windlass Creek

This proposed section contains 6.5 miles of the Middle Fork spur from the crossing of Placer Gulch to the crossing of Windlass Creek. Placer Gulch is the first major tributary of the Middle Fork below the Bates mill site. The landscape of the Middle Fork valley for the first four miles is meadow land, and the roadbed follows the river rather closely. The grade is even, with a gentle gradient allowing the river to meander its course. The roadbed is elevated c. 48" above the grade to prevent damage during spring run-off. Moist spots along the way require extensive ditching in this section. At the southern end of the meadow, the roadbed crosses to the east side of the river.

At Deerhorn Creek, the valley narrows, and the road crosses to the west bank, then re-crosses to the east bank c. 350 yards downstream. The terrain is rocky in this portion of the nomination section, with the river's descent more abrupt. Below Little Boulder Creek, the roadbed crosses to the west bank for .3 miles then re-crosses to the east bank at Gorge Creek. This section of the route runs through a gorge which is reminiscent of Boulder Gorge on the Powder River--a major engineering challenge for the Sumpter Valley Railway's main line. The creek names--Little Boulder and Gorge Creeks--may refer to that more spectacular gorge 40 miles to the east. Above Little Butte Creek, the railroad bed crosses to the west bank, continuing on that side to a crossing near Windlass Creek. The lower portion of the nomination section is less rugged than the gorge, but has 100' cliffs on each side of the canyon.

Roadbed Integrity

The condition classes in this nomination are generally B, with sections of A and one short section of C in a meadow above Deerhorn Creek. Irrigation developments in the meadow at the eastern end of the nomination section have eroded the roadbed at some points, but it remains generally in good condition with the ties removed for motor traffic. The section of the roadbed through the gorge is generally good, with minor hiatuses. Much of the roadbed on the west bank of the river has the ties in place, while most of the roadbed on the east bank has had the ties removed and suffered some damage from construction and maintenance activity on the county road.

Features of Section I - Including one separately-counted contributing feature

The first few miles of the Middle Fork Spur were marked by the departure points of the largest temporary spurs in the system. These include the spurs on Vinegar Creek, Vincent Creek, Placer Gulch, Davis Creek, Deerhorn Creek, Little Boulder Creek and Murdock Creek. Because the temporary spur construction practices did not include permanent roadbeds, little remains of them today.

Major bridges or trestles crossed the Middle Fork at a point near Caribou Creek, Deerhorn Creek, Flat Creek, Little Boulder Creek, Little Butte Creek, Gorge Creek, and Windlass Creek. Although the abutments for some of these crossings remain, none of the bridges is extant. The minor streams were crossed by culverts except for Davis Creek which has a single span timber bridge still standing. The remaining bridge is counted as a contributing feature.

Historic District Nomination Section 2 - Ragged Creek to Pepper Creek

This section of the Middle Fork spur is 9.45 miles long, extending from the Middle Fork valley south up Camp Creek. The portion of the Middle Fork valley that the section runs through is timbered, with meadows along the river and gentle gradients. The railroad followed the river's west bank for most of the distance to Camp Creek, but remained on the timbered slope rather than the bottom land.

At the crossing of County Road 20 near Ragged Creek, where the nomination section begins, the railroad bed has been graded for motor vehicle use and is numbered Forest Road 046. After two hundred yards the forest road leaves the right-of-way, which continues up the west bank of the river across Sunshine Creek to a bridge across the river near the Sunshine Guard Station. The roadbed then continues on the east side of the river through a forested area and emerges into the pasture of the old Holmes Ranch. It follows the river for approximately .5 miles and then crosses to the west bank, contouring along the timbered slope across Dunstan and Balance Creeks to the Camp Creek Valley. At this point, the railroad turns south along Camp Creek, crossing the creek at the O'Rourke ranch and continuing up the west side of the creek. The proposed terminus of the nomination district at Pepper Creek is a point of convenience rather than the historic end of the railroad. That point was probably .5 miles further up Camp Creek where a water tower was located. The integrity of the spur above Pepper Creek is seriously impaired by roadbuilding, however, and the roadbed is no longer extant. Portions of T11s R32e comprised the historic Frank Mitchell tract, which was timber that the spur was built to reach in 1916.

Roadbed Integrity

The condition of the roadbed in nomination section 2 varies between condition class A and condition class B, with short stretches of C. From the Ragged Creek crossing to the Middle Fork crossing near Sunshine Creek, the roadbed remains largely intact. On the east bank of the river below the crossing, County Road 20 obscures portions of the roadbed for .30 miles, a hiatus acceptable because of the overall quality of the section. Below Big Boulder Creek, the roadbed enters an irrigated pasture which has eroded it completely. After crossing to the west bank, however, condition improves. The remaining portion of the roadbed in the Middle Fork Valley is in good condition. As the roadbed turns south to follow Camp Creek, it crosses Forest Road 36 and Camp Creek. This portion has been destroyed by road construction. The condition on the westside of Camp Creek is good, with many ties in place, although badly deteriorated.

Features of Section II - Including one separately-counted contributing feature

Features of nomination section 2 include crossing points on the Middle Fork at Sunshine Guard Station and in the Holmes pasture; on Balance Creek, and on Camp Creek at the O'Rourke Ranch. The bridges at these crossings have been washed out. Wreckage from the Middle Fork crossing near the Sunshine Guard Station remains in place, however.

At Big Boulder Creek a water tower remains. This structure held a tank that stored water for locomotives. The tank was fed by pipe from Big Boulder Creek and used by road crews after the railway was abandoned. The intact water tower is counted as a contributing feature.

In the Camp Creek canyon below Whiskey Creek was a reload site that included a log pond and sidings. The pond and wreckage from equipment remain at the site but are not counted as contributing features.

Important temporary logging spurs left this section of the linear district at Jungle Creek, Gibbs Creek, Whiskey Creek, and Cottonwood Creek.

8. Significance

Period	Areas of Significance—Check and justify below				
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion	
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science	
___ 1500–1599	___ agriculture	___ economics	___ literature	___ sculpture	
___ 1600–1699	___ architecture	___ education	___ military	___ social/ humanitarian	
___ 1700–1799	___ art	___ engineering	___ music	___ theater	
___ 1800–1899	X commerce	___ exploration/settlement	___ philosophy	X transportation	
X 1900–	___ communications	X industry	___ politics/government	___ other (specify)	
		___ invention			

Specific dates 1916-1917 **Builder/Architect** Joseph A. West

Statement of Significance (in one paragraph)

The Middle Fork Spur was a significant part of the Sumpter Valley Railway system, a narrow gauge common carrier line that served Oregon's Blue Mountain region from 1890 to 1946. Built in 1916, the spur ran twenty miles from a mill site at Bates, Oregon, to a timber tract near Susanville, Oregon. The spur meets National Register criterion A in its association with the broad pattern of events in the history of the Blue Mountain area. The Sumpter Valley Railway and its spurs made industrialization of the Blue Mountains possible, providing transportation to an area of over 7,500 square miles, which at its peak contained six timber-dependent communities and a population estimated at c. 5,000. As the resources of timber, range, and minerals dwindled, the railway's traffic declined until its abandonment in 1946. The railway corridor today has one viable community and a population of less than 500. The Middle Fork Spur of the Sumpter Valley Railway is of interest in its association with historic personages including David Eccles, frontier capitalist, and his son Marriner Eccles, who became chairman of the Federal Reserve Board after his association with the Sumpter Valley Railway and the Stoddard Lumber Company. Joseph A. West, the engineer responsible for the Middle Fork Spur's design, was a prominent civil engineer in Salt Lake City. Currently, the Sumpter Valley Railway and its spurs are counted as one of the nation's best examples of narrow gauge railway design and operation.

(Continued)

9. Major Bibliographical References

see continuation sheets, item 9

10. Geographical Data

Acreage of nominated property 196.25 acres

Quadrangle name Bates, Oregon, and Susanville, Oregon **Quadrangle scale** 1:62500

UTM References see continuation sheets, item 10

	Zone	Easting	Northing		Zone	Easting	Northing
A				B			
C				D			
E				F			
G				H			

Verbal boundary description and justification The nominated area is a linear district comprised of two discontiguous sections of historic spur right of way having clear, visible traces of roadbed and extending, all told, 16.2 miles between Bates and the vicinity of Susanville in Grant County, Oregon. The right of way corridor is 100 feet in width on both patented and Federal (continued)

List all states and counties for properties overlapping state or county boundaries

state	N/A	**code**	**county**	**code**
state	N/A	**code**	**county**	**code**

11. Form Prepared By

name/title Ward Tonsfeldt

organization Ward Tonsfeldt Consulting **date** 8-15-86

street & number 1363 Harmon Blvd. **telephone** 503-389-7965

city or town Bend **state** Oregon 97701

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

___ national ___ state X local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature

title Deputy State Historic Preservation Officer **date** May 14, 1987

For NPS use only

I hereby certify that this property is included in the National Register

William B. Bushong **date** 8/3/87

for **Keeper of the National Register**

Attest: **date**

Chief of Registration

GPO 911-399

SIGNIFICANCE OF THE MIDDLE FORK SPUR

The railroad down the Middle Fork of the John Day River was built in 1916-17 as a spur of the Sumpter Valley Railway, which was a narrow gauge common carrier serving the communities in Oregon's Blue Mountains between 1890 and 1946. Railroad historians have recognized the Sumpter Valley Railway as one of the nation's most colorful narrow gauge lines (Ferrell, 1967; Shaw et al., 1949). Lucius Beebe, essayist and railroad enthusiast, photographed the line shortly before its abandonment. The road's founder, David Eccles, was an important frontier capitalist and railroad builder; his son, Marriner Eccles, worked on the railroad before becoming head of the Federal Reserve system under F.D. Roosevelt (Eccles, 1951).

For most of its life, the Middle Fork Spur served as a logging railroad for the Oregon Lumber Company. While logging railroads were by no means uncommon during the first quarter of this century, the Middle Fork Spur is a significant example of its type because of its association with the Sumpter Valley system and because of its role in the industrialization of an area of the Pacific Northwest that remains remote, yet retains rich historic associations. The genesis of the Middle Fork line, and its subsequent history cannot be separated, however, from the tangled affairs of its parent line--the Sumpter Valley Railway--and the lumber firms that dominated Eastern Oregon's economy early in this century. To understand the significance of the line, then, we must first understand its historical context.

David Eccles and the Sumpter Valley Railway, 1890-1895

In the final decades of the nineteenth century, Baker was the dominant city in Eastern Oregon. From its beginning as a mining camp to its subsequent prosperity as a shipping point on the transcontinental railroad, Baker prevailed over rival cities by a series of fortunate developments that bolstered its economy. Among these developments was the arrival in the 1880's of Salt Lake City capitalist David Eccles and a group of his associates. After several preliminary ventures, they incorporated the Oregon Lumber Company in 1889 to cut timber they had acquired on the Powder River drainage west of Baker. Prior to the completion of the transcontinental railroad in 1884, lumber in eastern Oregon had been cut only for local consumption; by 1887, however, manufacturers began shipping pine lumber out to distant markets (History, 1902). Railroads, along with mining and timber, loomed large in the local press, and no doubt held a similar place in the public's imagination. When Eccles and his group proposed building a new railroad west from Baker into the Sumpter Valley, public response was positive indeed.

Access to Oregon Lumber Company timber was the obvious rationale for the new railroad, but access to the gold mines in the Cracker Creek basin was an added factor. A third factor was the elusive prospect of a north-south narrow gauge interstate line, first proposed in the Seattle, Walla Walla and Baker Railroad scheme and then resuscitated in the Nevada-California-Oregon Railroad, which operated a narrow gauge road from Reno, Nevada to Lakeview, Oregon (Shaw et al., 1948; Arrington, 1975; Ferrell, 1967). If the Sumpter Valley road could eventually connect to another line to the north or south, Baker would become a crossing point for north-south and east-west interstate railroads; this was a very attractive prospect in 1890.

David Eccles--financier of the Sumpter Valley Railway and its first president--was one of the great capitalists of the American West. His humble origins, colorful personality, entrepreneurial zeal, and religious background have made him a favorite figure for historians and biographers (Eccles, 1951; Arrington, 1975; Beal, 1962; Sutton, 1950; Horne, 1968).

Eccles is associated foremost with the construction industry and secondarily with lumber, railroads, sugar beet processing, and banking. The Utah Construction Company (now Utah International) was Eccles' largest and most durable venture. A close second--at least during his lifetime--was the Oregon Lumber Company, which was an amalgam of mills Eccles purchased or built in Oregon during the 1880's and 1890's. The list of Oregon Lumber Company mill sites eventually included Baker, Hood River, Inglis, Meacham, North Powder, Pleasant Valley, Dee, Chenowith, Viento, Haynes Spur, Little Salmon River, and Bates. The mills at Chenowith and Baker each reached the capacity of 100,000 bf/day, which was respectable in the 1890's (Arrington, 1975; Cornwall, 1924).

For the next fifty years, the operations of the Oregon Lumber Company and the Sumpter Valley Railway Company were inextricably connected.

OLC Capitalists	SVRC Board
David Eccles	David Eccles
C. W. Nibley	C. W. Nibley
William Eccles	William Eccles
J. Stoddard	J. Stoddard
H. H. Spencer	F. M. Shurtliff
Thomas Dee	
George Romney	
Hyrum Young	

In July of 1890, the road was completed nearly as far as McEwen, which was to be the first terminus, twenty-five miles up the Powder River. The first car of logs reached Baker on August 1, 1890, and the remaining mileage to McEwen was completed in the summer of 1891 (History, 1902). The next extension of the line--to Sumpter--was not begun, however, until 1895.

Eccles and the Utah group dominated the lumber business in Baker County and the lumber business dominated the railway's traffic, but as early as 1893 it began to exhibit signs of an economic life of its own. The Stoddard Lumber Company built a mill at McEwen which soon became a thriving community boasting "two stores, two blacksmith shops, a saloon, Odd Fellow's Hall and a Methodist Church" (Ferrell, 1967, p. 16). Scheduled passenger service was inaugurated in 1893, and the first timetable appeared on May 31.

Sumpter, 1896-1901

Gold strikes on Cracker Creek near Sumpter in the late 1880's increased Baker County's use of the Sumpter Valley Railway after it reached McEwen. It is almost certain, however, that no one--the Eccles group, the citizens, or the miners themselves--anticipated the magnitude of the mining activity which was to develop in Sumpter during the late 1890's. In 1897, Sumpter had a population of c. 300; by 1903, it had grown to nearly 4,000 and "Golden Sumpter" became synonymous with sudden wealth (Potter, 1976). In addition to the predictable trappings of a boom town--hotels, saloons, and three newspapers--Sumpter also had a smelter, an opera house, and a hospital--81 businesses in all and eight brick buildings. In 1902, according to a contemporary account, "though...the vices that go wherever prosperity reigns are well represented, the forces which make for morality, culture, and the highest enlightenment are also here" (History, 1902, p. 220).

Commercial activity on the scale that Sumpter offered in 1896 was welcome news to the Sumpter Valley Railway Company. Traffic soon grew to four trains each day between Baker and Sumpter (Potter, 1976). During the first years of production, shipments of concentrates to the smelters at Tacoma and Everett have been estimated at 800,000 lbs./year (Potter, 1976). However, PUC records for 1909, well after the best years for the district, show the Sumpter Valley railroad shipping 1,559 tons (3,118,000 lbs.) of ore. In addition to the ore shipped from Sumpter, some was smelted in the smelters built there in 1900 and 1903 (Potter, 1976). Neither of the two smelters was successful, however, and the largest mines continued to ship their ore to Tacoma (Ferrell,

1969; Potter, 1976; Lindgren, 1901). In addition to the ore, the railroad enjoyed the general freight and passenger traffic associated with the boom.

> It must be kept in mind that any railroad serving a mining district often carries more tonnage into the mother lode than from it. The reason for this heavy traffic was huge quantities of mine timbers, milling equipment used to extract the gold, to say nothing of the miners themselves. (Ferrell, 1967, p. 20)

In 1909, passenger traffic generated $39,788 or 29.6% of the road's traffic revenue (PUC, 1909). Manufactured and agricultural goods constituted less than 5% of the freight traffic, however. The remaining 95% of 1909's freight traffic was logs and lumber, a percentage that reveals the close connection between the Sumpter Valley Railway Company and the lumber business.

Whitney, Tipton, and Austin, 1901-1905

Fourteen miles beyond Sumpter, the road reached the townsite of Whitney in the fall of 1901 (Shaw et al., 1949). Here was an ideal mill site, and a junction point for logging railroads operated by lumber companies cutting the surrounding timber. Whitney developed as a mill town with a population of loggers and millworkers, a weekly newspaper, stores, hotels, and "of course, the inevitable saloon" (Shaw et al., 1947, p. 74). In addition to the lumber-related activities, Whitney served as a shipping point for the mines in the area. Miners wintered in Whitney, returning to mines near Greenhorn or other points at higher elevations as the weather moderated (Potter, 1976).

To the west of Whitney along the railway's chosen route lay a pass reaching an elevation of 5,097 feet. The road to Tipton, as the next station was named, was begun in April, 1903, but not completed until the summer of 1904 (Ferrell, 1967). Although the route was a short 7.65 miles, grades and rock work--as well as winter-- delayed completion. According to the account in the Sumpter Miner, "Railroad Day," which was celebrated on August 3, was sufficiently festive.

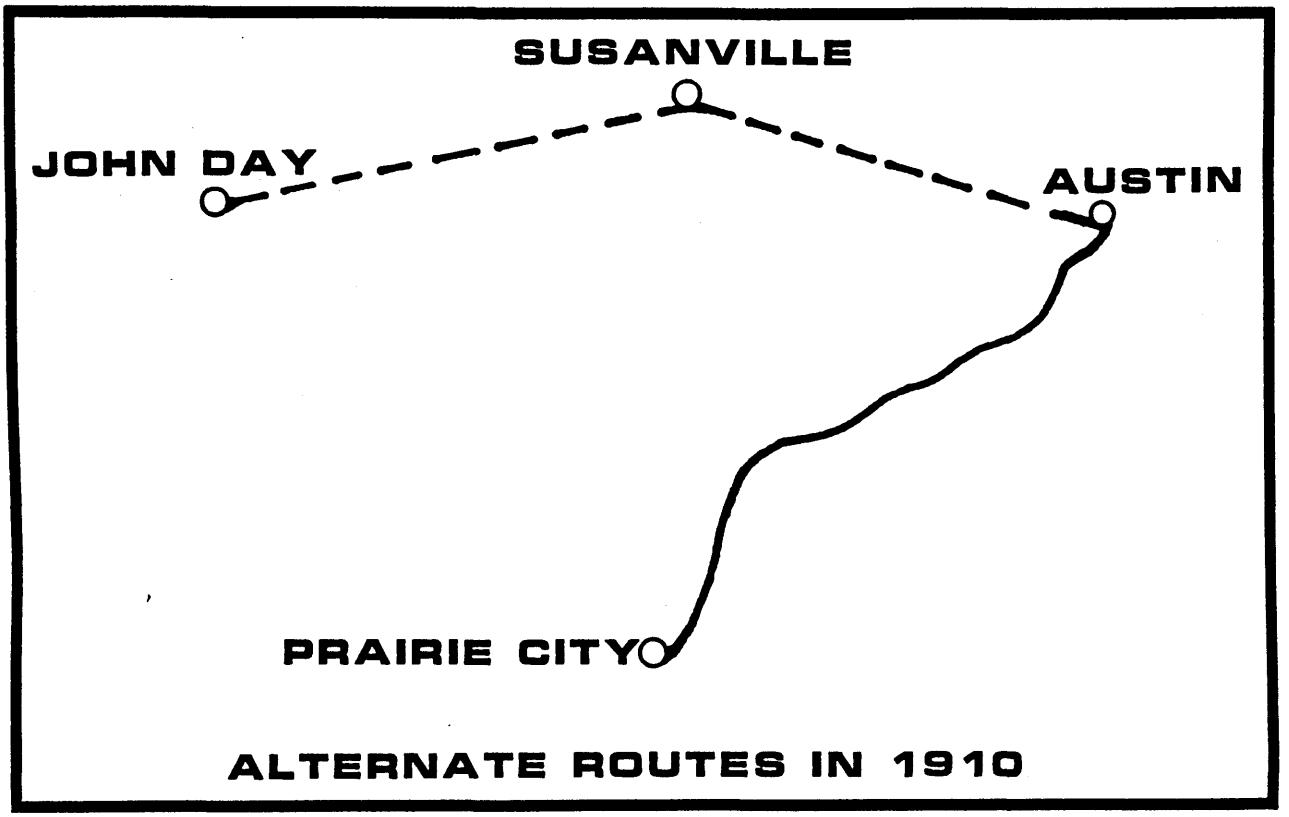
The raison-d'etre for Tipton was its proximity to the mines at Greenhorn. This mining district was experiencing a boom in 1904 and Greenhorn City had a population of c. 600 (Potter, 1976). The Sumpter Miner announced that the Sumpter Valley Railway Company would build into Greenhorn City (July 6, 1904), but consideration of the town's elevation (6,271 feet) and the ephemeral nature of mining towns apparently restrained the firm. Descending from Tipton, the railway pushed west to Austin, completing that section in the fall of 1905

(Ferrell, 1967). The townsite of Austin had been a stage stop on the Baker-to-John Day road. Railroad connections brought two saw mills by 1912 and the town became a major junction point as the mills built logging spurs into their timber holdings. Loggers, mill workers, miners, and homesteaders brought the population up to 144 by 1910 (Olcott, 1915).

To the John Day Valley

As early as 1903, the newspapers agreed that the Sumpter Valley Railway should serve the John Day Valley (BCH, Jan. 22, 1903). This was in keeping with the basic plan to connect with the Nevada-California-Oregon line at Lakeview (Arrington, 1975). Two different proposals for the route to the John Day were current. One proposal was the route through Prairie City, the other was a route down the Middle Fork of the John Day River to Susanville, then across the mountains to the town of John Day (Shaw, 1949). In 1904, we find the railway company meeting with the citizens of Prairie City in July (SM, July 27, 1904) and then speculating publicly about the more northern route in November (SM, Nov. 23, 1904). Obviously, the railway wanted to encourage rivalry between the towns to get the best bargain it could. In Shaw's analysis, the choice was a difficult one:

> Practical considerations of the road's own interests would have suggested Susanville as the logical place toward which to build for two very sound reasons: First, it would have tapped considerable stands of excellent timber all along the route; second, building would have been on a downgrade along the Middle Fork of the John Day River. To build to Prairie City, on the other hand, would require the crossing and descent of another spur of the mountains and the timber was comparatively light on this line. (p. 78).



The company eventually chose the Prairie City extension.

The route from Austin to Prairie City was twenty miles long and required the extreme engineering practices on grades and curves that by this time had become a feature of the railway. Ten miles beyond Austin, the line negotiated its third and highest pass--5,280' at Dixie Summit.

At its fullest extent, the railway reached slightly over 80 miles from Baker to Prairie City. According to Shaw, this required 18,144 degrees of curvature or 224 degrees per mile of main line track (1949, p. 81). Although this much curvature was within the capacity of narrow gauge rod locomotives, it would have stretched the capacity of standard gauge rod locomotives. "This leads to the conclusion that to have operated the Sumpter Valley Railway as a standard gauge line with other than geared locomotives would not only have been expensive but highly unsatisfactory, since the uniformly heavy grade would only have increased the difficulty (Shaw et al., 1949, p. 82). At any rate, the railway was never re-gauged to conventional standards.

The Sumpter Valley Railway in 1916

By the eve of US entry into World War I, then, the Sumpter Valley railway had developed in a curious but consistent fashion. Conceived as a logging railroad, the line continued to supply logs to the Oregon Lumber Company mill and other mills at Baker. The lumber operators, however, hit upon the idea of building mills along the railway. The advantage for the lumbermen was that the point of manufacture was closer to the timber. The value of the lumber shipped from the mill was higher than the value of logs shipped to the mill although freight rates were the comparable. By adding more value to their product prior to shipping, then, the mill owners effectively lowered the railroad's freight rates.

Each of the lumber companies operating in the Blue Mountains built logging spurs from the Sumpter Valley railway main line into their timber holdings. They ran their own equipment on the spurs, loading logs onto cars and bringing them down to the main line sidings, where the SVR delivered them to mills at Baker, Austin, Bates, Whitney, Sumpter, McEwen, and Salisbury. The by-product of this pattern of development was the communities that grew up along the railway at the mill sites. Each of these generated additional traffic, since the railway was the only reliable means of reaching them from Baker or other points in the outside world. The mining industry, too, provided traffic in the form of passenger and freight movements along the route.

As the century advanced, the railway's business continued to concentrate on lumber while showing some diversification. In 1914, passenger traffic produced revenues of $58,779 and freight produced $251,870--a ratio of about 1:4 which was nearly the same as the ratio in 1893 (PUC, 1914). Freight traffic during that year included the following:

Agricultural products (including hay)	2980 tons
Livestock and wool	2507 tons
Mineral products	2704 tons
Lumber and logs	176171 tons

The industrialization in the Blue Mountains, then, followed a pattern set by the progress of the railway. The main line of Sumpter Valley road furnished an artery through the mountains, getting people, supplies, and logs to the various mills, then getting their product down to Baker where it could be finished and shipped throughout the nation. While the Sumpter Valley maintained the main line, each of the lumber companies built their own railroads branching off the main line into the timber. The lumber companies cut the timber and yarded it to

their own line, then loaded it onto cars and sent them to the mill via the main line. In some cases, the logging roads ran into the mills, so the main line was not necessary, but each mill required the services of the railway for lumber shipments and supplies.

Building the Middle Fork Spur - 1916

Although the Sumpter Valley Railway ran to Prairie City after 1911, Austin was in one sense the real terminus of the line. The Prairie City extension had been no great success. Most of the traffic to Baker came from the two large mills at Austin. Beyond Austin, the Prairie City traffic consisted of mail, freight, passengers, and--during the season--livestock. It is probably safe to speculate that before the Prairie City extension was completed, the railroad had abandoned the old dream of a narrow-gauge interstate line. The N-C-O and the Seattle, Walla-Walla, and Baker lines were moribund, and the entire concept of narrow gauge railroading had fallen out of fashion (Camp, 1904; Shaw et al., 1949).

When the Prairie City extension was built, a switchback on the line limited the size of trains to an engine and four cars. Longer trains could pass, but they required shuttling the engine back and forth between the sidings at Dads Creek and Dixie to make and remake the train. In addition, the curves and grades on the Austin to Prairie City extension were extreme enough to cause frequent derailments (Brainerd interview). By 1918, the railway was using a motor coach for Prairie City passenger, freight, and mail service, and by 1930, they were petitioning the PUC for permission to abandon the line.

Meanwhile, in 1916, the war in Europe was creating a superb market for lumber. The Baker mills were running at capacity for the first time in ten years, and the popularity of ponderosa pine lumber among remanufacturing firms was growing (BMD, April 23, 1916 and Oct. 3, 1916). The temptation to expand operations must have been overwhelming; indeed, the only real question for the Sumpter Valley road was where to expand.

In April of 1916 the railway proposed an expansion into Malheur County, presumably across the John Day Valley and then perhaps up Canyon Creek (BMD, April 27, 1916). Four months later, the company announced a second, less ambitious, plan which would see the construction of three new logging spurs. One of the new spurs would

open the China Creek drainage west of Whitney, one would follow Trout Creek on the south slope of Huckleberry Mountain, and the third would descend the Middle Fork of the John Day River along the route previously considered for the main line to the John Day Valley (BMD Aug. 4, 1916).

The Trout Creek and China Creek spurs would provide additional logs for the mills at Whitney and Baker, and the new spur would provide logs for the two mills at Austin, one of which was an Oregon Lumber Company mill, and the other a closely aligned mill operated as the W.H. Eccles Lumber Company. These mills were currently cutting timber up the Middle Fork drainage to the east of Austin. The Baker White Pine Company mill at White Pine was also cutting on the upper Middle Fork and would be a potential user of the lower Middle Fork spur. Together, the three spurs were to open access to over three billion board feet of new timber (BMD, Aug. 4, 1916).

In the newspaper account of the new spur plans, the spokesman for the railway was careful to stipulate that the spurs would be logging railroads--"nothing more"--and that they would not be used for freight or passenger operations. In the case of the Trout Creek and China Creek spurs, this was no great surprise since there was little likelihood of either passenger or freight traffic to those points, but the Middle Fork spur was a different case entirely. The mines in the Susanville area were active, and supported a permanent population of 53 people in 1900 (History, 1902). Although the Sumpter Valley Railway was unwilling to maintain regular service down the Middle Fork, the firm could hardly have been blind to the possibility of traffic with the Susanville-Galena district.

The more interesting possibility, of course, was the eventual extension of the new spur beyond Susanville to the John Day Valley. By 1916, the railway had had ample time to realize the disadvantages of the Prairie City route. Perhaps for this reason, the new spur was carefully surveyed by Joseph A. West, who had been responsible for the survey and construction of the SVR main line (BMD, Aug. 4, 1916). Oral sources commonly characterize the Middle Fork spur as "built as well as the main line" (Hardy interview).

As Adams (1961) points out, the only practical reason for a railroad used solely for logging to become a common carrier was to take advantage of the law allowing common carriers to condemn private land for their right-of-way. The disadvantage of common carrier status was the PUC inspections, and the higher standards of road and rolling stock that common carriers had to meet. In the case of the Middle Fork spur, however, the land in question was either in the hands of the Oregon

Lumber Company or the Whitman National Forest, neither of which would have contested the right-of-way. Maps prepared by the Charles Metsker Company early in the 1920's (c. 1922) show the spur--still labeled "Sumpter Valley Railway"--running across OLC and USFS lands as far as Tincup Creek (T. 11s. R. 24e. sect. 4), which is slightly west of the spur's western terminus as shown on the 1918 Whitman National forest maps. This tends to confirm the possibility that the Middle Fork spur may have been built as a part of the SVR system rather than as a logging spur.

Oregon Lumber Company correspondence for December of 1917 and for 1918 records a substantial traffic in steel rail and the angle bars which were used to join rails together (Neuhausen Collection). The OLC office in Portland was buying rail for three railways at this time--the Sumpter Valley spurs, the Mount Hood railway, and the railway for its new timberland in western Oregon (BMD Jan. 25, 1917). Since all three were building as logging operations expanded, and the government was regulating the sale of rail as a war material, the negotiations were rather tortuous. The only direct reference to the Middle Fork spur in 1918 correspondence is an unsigned letter dated July 25 in which someone at the Batesville mill complains about selling rail to the government at $75.00/ton. The writer--who was not Norman Stoddard, the mill's manager--argues against selling the rail on the grounds that the price was too low and the mill would soon need the rail itself. By 1918, then, OLC had assumed responsibility for the construction work on the Middle Fork spur and they were planning to build more track.

Building the Mill at Bates

Four months after the Sumpter Valley Railway's announcement of the new spurs, Frank B. Mitchell, whose name had figured into previous newspaper articles as owner of a timber tract near Susanville, bought 124,000,000 board feet of timber on the stump from the Whitman National Forest. This purchase brought Mitchell's holdings on the Middle Fork up to 27,000 acres. On the strength of this, he proposed to build a new mill at Austin (BMD, Oct. 13, 1916, p. 5). In the following months, Mitchell and his associates, who were identified as the Pacific States Timber Investors "from Minneapolis," acquired a mill site near Austin and began construction (Timb., Dec., 1916; BMD, Dec. 2, 1916 and Dec. 17, 1916). Construction of the mill and its related structures continued through the summer months, and on September 10, 1917, the new mill opened (BMD, Sept. 7, 1917).

NEW EASTERN OREGON MILL OPERATES - The new sawmill of the Pacific States Timber Investment Co., located at Batesville, Ore., on the Sumpter Valley Railways, has begun operations.

The plant is a two-band and resaw mill, electrically driven throughout. The equipment is as follows: two 8-foot band mills; one 7-foot Mershon resaw; two 54-inch edgers; one 24-foot slab slasher; 24-inch automatic trimmer and the usual complement of log deck machinery, live rolls and transfers.

The lumber goes direct from the trimmer to the flat cars for shipment to Baker, where it is dried and re-manufactured. The mill is driven throughout by motors. Power is generated by a 500 K. W. steam turbine and alternator. Steam is supplied by one 500 H. P. Colby combination boiler. The mill machinery was supplied by the Allis-Chalmers Manufacturing Co. The mill has a capacity of 130 to 150 thousand feet daily.

The company has spared no expense in making the homelife of its employes the most pleasant possible. A hotel of Colonial design, with 35 rooms, has been built to accommodate the single men. This contains a large lobby with a fireplace, reading room, billiard room and shower baths. Every room is steam heated.

For the family men have been built 12 five-room bungalows, all equipped throughout with modern plumbing and are supplied with mountain water. All the houses have bath rooms and are electrically lighted. A large house for Superintendent Norman Stoddard has also been built. (Timb. Oct., 1917)

At this point, it becomes very interesting to speculate about the identity of the Pacific States Timber Investors. Apparently, Mitchell and his associates were in fact a group of investors from Minnesota who were pursuing opportunities in the Oregon pine country. According to the articles of incorporation, duly executed in Minneapolis and filed in Salem under the Oregon provisions for foreign corporations, the firm was organized in Minnesota in 1907 (PSTI, 1907). Other Minnesota firms such as Shevlin-Hixon and Brooks Scanlon were also moving into Oregon's ponderosa areas during these years. On the other hand, the Eccles family and their associates from Utah dominated the forest operations in the Blue Mountains. In one previous case, the Utah group had formed a firm to act as a nominee when the Oregon Lumber Company was forbidden to bid on federal timber because of past irregularities (see appendix

A). The Oregon Lumber Company case was not settled in the courts until 1922 (BMD, Sept. 18, 1918 and Nov. 30, 1922). If the Oregon Lumber Company was stigmatized, then, the Pacific States Timber Investors could have purchased the timber as a front for the OLC and built the mill under the new name.

Ten months after the mill opened, at any rate, it was considered an Oregon Lumber Company mill by the Baker Morning Democrat which had consigned the story of the mill's opening in September to a single paragraph on page five. The paper was enthusiastic now about the mill's potential and its accommodations, comparing Batesville to a "healthful mountain resort."

> Around the glow of the warm fireplace [in the workers' quarters] the wage earner can almost imagine himself a stockholder in the lumber concern and with the comforts afforded he is a very disloyal man who does not feel like rendering a full day's work for the kind of consideration shown by the management (July 24, 1918, p.8)

It is perhaps appropriate to note here that the first fatal logging accident on the Bates operation occured on March 2, 1918, after the plant had been running only six months--a factor not characteristic of "healthful mountain resorts" and one that could diminish the wage earners' appreciation of management's consideration.

There are three pieces of evidence which suggest that the Bates mill was created with the involvement of the Oregon Lumber Company.

a) The mill was built to cut green lumber for finishing or remanufacture in Baker. The OLC mill in Baker was rebuilt after a fire in 1916, so the plan for this unusual dual mill operation had to have been developed at this time. (Timb., Jan., 1917)

b) The new millsite was named Batesville for Paul Bates, a Portland attorney who represented the Eccles' interests. (McArthur, 1982, p.43.)

c) The mill superintendent was Norman Stoddard. The Stoddards were related to the Eccles family through David Eccles' second marriage (plural) to Ellen Stoddard in 1885. The Stoddard Lumber Company was closely aligned to the OLC and other Eccles interests. (Timb., Oct. 1917; Arrington, 1976, p.65)

By 1926, the Pacific States Timber Investors was firmly in the hands of the Oregon Lumber Company, with W.A. Whitney of the OLC serving as president and J. Heilner--a Baker attorney--serving as secretary, treasurer, and attorney (PSTI, 1926).

Operations - 1918-1928

During its first decade of operations the spur provided logs for the Bates mill on a regular basis. Calculating the traffic on the spur is rather difficult because we do not know what portion of the mill's log supply came from the Middle Fork valley or how much the narrow gauge cars could carry. If we assume, however, that all of the timber came from the Mitchell holdings, then we can reach an approximation of the traffic. The Bates mill at full operation cut c. 100 thousand board feet of lumber each shift. The Baker White Pine Company mill in Baker cut 150 thousand board feet each shift (BMD, Nov. 1, 1923). According to a newspaper account, the Baker White Pine mill needed thirty-five carloads of logs six days each week to meet its requirements. On a proportional basis, then, the Bates mill would have needed twenty-four carloads of logs each working day. This would mean one or possibly two trains each day. If the mill was building up a surplus of logs in anticipation of winter snow closures or summer fire closures, the traffic would increase. If trains returning to the landings carried the camp supplies and personnel, then two trains at most would have met the need.

During the World War I years, the market for lumber was excellent and prices rose steadily. Labor conflicts between the mill owners and the Industrial Workers of the World (IWW) intensified as the industry became more profitable. The federal government threatened on at least one occasion to "take over" the industry to assure war production goals were met (BMD, Feb. 28, 1918). In March of 1918, the Oregon Lumber Company and other Baker mills went onto an eight-hour day schedule, in recognition of the IWW's most popular cause. In spite of this concession, the IWW was credited with burning the Sumpter Valley Railroad machine shop in Baker (BMD, April 30, 1918 and May 2, 1918). A second fire in 1919, which was not blamed on incendiarism, consumed much of the South Baker mill district including the SVRC yards (BMD, June 29, 1919). Within less than a year, Baker millworkers were joining the Loyal Legion of Loggers and Lumbermen, (4L), which was the industry's answer to the more radical groups (BMD, May 29, 1920).

At the end of the war, lumber production continued to rise until 1920, which most sources cite as the single best year for the lumber

firms in the Blue Mountains. The Baker Morning Democrat reached this conclusion in 1921, after an industry-wide decline had reduced West Coast production to 54% of capacity (BMD, March 4, 1921). Oregon Lumber Company profit and loss statements for the period confirm the newspaper's findings:

OLC Baker Operations Gross Sales

1917	1918	1919	1920
581,747	590,289	698,874	1,056,330

(LDS, 1920)

Sumpter Valley Railway operating income, projected in appendix D shows the same general pattern, with 1920 as the second highest year in the company's history. In a letter written in 1953, Harold Coons, then the supervisor of the Whitman National Forest, speculates that the 1920's record cut reflects the last of the private timber supply, which the lumber firms were apparently willing to liquidate to get their capital back (WWNF, Nov. 23, 1953).

At any rate, the market collapsed in 1921, and the Bates mill and its railway were idle for fourteen months, re-opening in December of 1921 (BMD, Dec. 14, 1921). Prices for pine lumber had diminished by nearly 50% in the intervening year.

Pine Prices for Baker Mills

	1920	1921 (February)
#4	$38.50/mbf	$19.10/mbf
#3	$46.00/mbf	$23.00/mbf
#2	$64.00/mbf	$29.65/mbf

(BMD, Feb. 23, 1921)

In the early months of 1922, the Bates mill was again shut down, but by the beginning of 1923, all mills in the Blue Mountains were operating at full capacity (BMD, April 27, 1922 and Jan. 18, 1923).

For the rest of the 1920's prosperity was the general rule for the Baker mills. The Bates mill suspended operations for a short time in 1925 (BMD, Sept. 20, 1925), but the year's total production included

$115,000 sales at the box factory, and shipment of 550 carloads of shop grade pine for remanufacture (BMD, Jan. 31, 1926). In 1926, the Oregon Lumber Company was operating two logging camps to supply the Bates mill.

In 1928, the lumber business was less active than it had been with U.S. total production off 14.2% (BMD). The Baker White Pine Company declared itself bankrupt during the summer of 1928, the Stoddard Lumber Company absorbed the ailing Grande Rhonde Lumber Company the following December, and the Oregon Lumber Company was rumored to be for sale (BMD, Aug. 26, Dec. 23, Oct. 9, 1926).

Operations, 1928 - 1938

During the next decade, the national depression curtailed the growth that the Oregon Lumber Company had enjoyed during the 1920's. The company's strategy for dealing with adverse markets was to shut down production in Bates first, then Baker--cutting off the extremities to prolong life in the central core. In 1931, the Oregon Lumber Company re-built the Nibley Hilgard Lumber Company mill at Whitney, which had burned in 1916. This smaller mill offered additional green lumber production for shipment to the Baker plant during good markets; during poor markets it could be run with a smaller crew than the large mill at Bates. For families living in Bates, the early 'thirties were trying times. The company permitted employees to live in company housing rent-free during the closures, however, and steam from the mill's boilers provided heat for the entire town during the winter months (O'Rourke interview).

In November of 1932, the western pine mills were operating at 16% of their capacity. Thirty-eight of the 117 mills were in production. In January of 1933, only 22 of 115 remaining pine mills were producing lumber (BMD, Nov. 26, 1932; Jan. 7, 1933). Table 2 lists the closures and openings of the Bates mill during the 1930-1933 period.

An article in the September 1933 issue of The Timberman presented the Oregon Lumber Company as one of the oldest firms in the state and one well-positioned to take advantage of a rebound in the industry. The Mt. Hood and Baker-Bates mills were capable of combined production of 150,000,000 board feet of pine and fir per year, and the firm's timber holdings were considered sufficient to provide a "perpetual operation" basis. Two years later, however, the OLC found itself reorganized by the court (BMD, Sept. 18, 1935).

In addition to the uncertain market conditions and the difficult financing climate, the firm also had to deal with the industry-wide

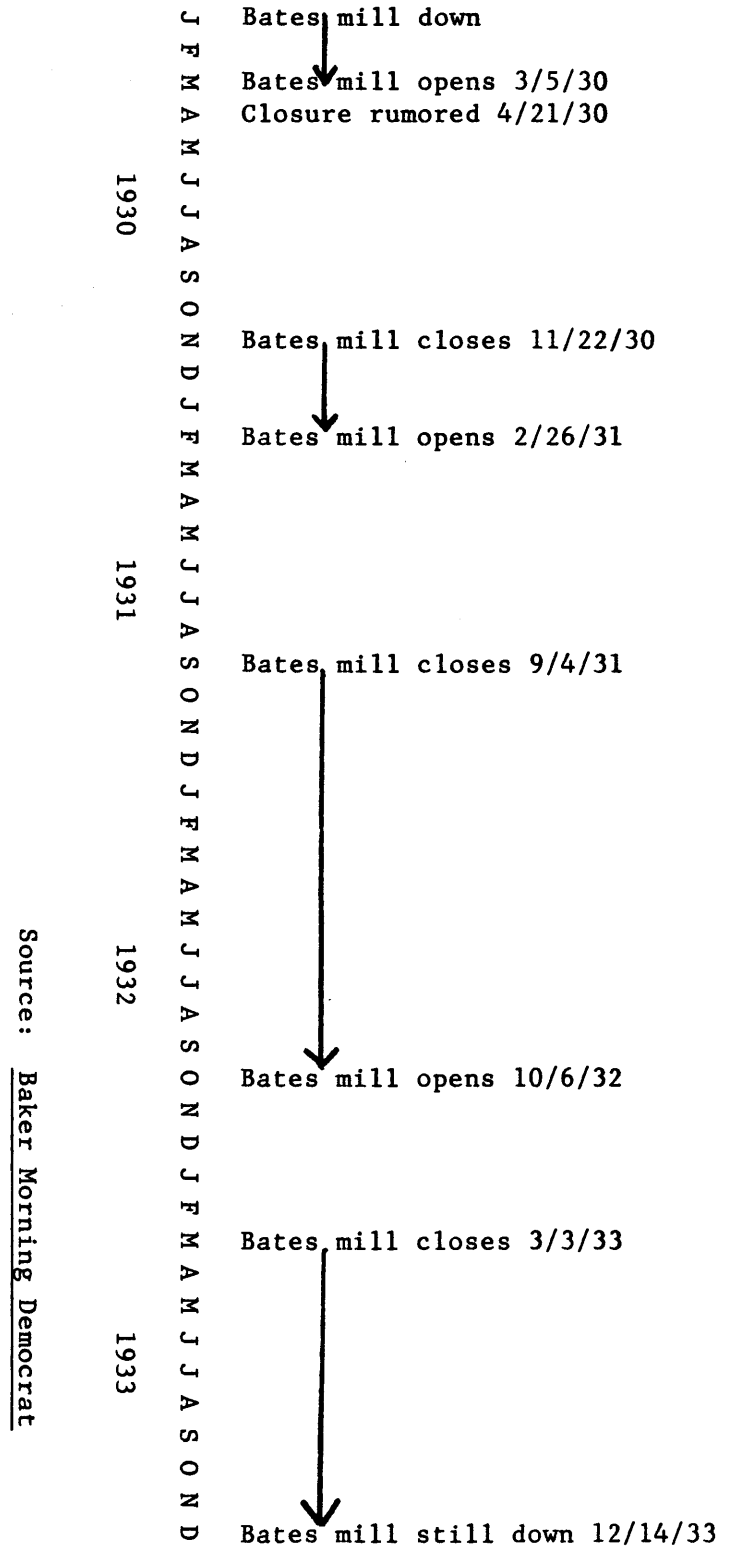


Table 2
Bates Mill Closures 1930-1933

Source: Baker Morning Democrat

National Recovery Act restrictions on lumber production. The millowners' case against the NRA was loud--and often motivated by little more than capitalists' pique at regulated markets--but the most salient issue was the NRA's blanket quota for western pine production. This apparently ignored the difference between species and the complexity of the traditional markets for each (BD-H, Dec. 19, 1933; Dec. 13, 1934; May 27, 1934; June 19, 1935).

By the late 1930's the situation was improving. Mills were up throughout the west, and the OLC mills in Baker and Bates absorbed $60,000 worth of new equipment, including new dry kilns at Baker (BD-H, May 11, 1937). In September 1938, the OLC was featured in a West Coast Lumberman article that praised the firm's efficient "milling in transit" operation. Cutting green lumber at Bates and finishing it 60 miles away at Baker appeared to the journalist to be a revolutionary scheme that had anticipated "on a large scale what is now being tried by numerous smaller semi-portable mills in the pine district" (p. 22).

As the activity level increased during the late 1930's in the mill and in the woods, Bates resumed its former status as a community. The number of company houses for mill workers grew to 90 (Emlaw papers) and the loggers' families accompanied them in the woods camps (O'Rourke interview). In 1937 the only documented use of the Middle Fork spur for purposes other than logging occurred when the company transported sheep from corrals on Camp Creek to Baker (Cook Allen interview). By 1939, U.S. lumber sales were at a 9-year high as the world war market that Bates had been built to feed in 1917 resumed. Shipments from Baker rose 30% above 1938 shipments (BD-H, Nov. 6, 1939) and the same factor was quoted for increase in lumber delivered throughout the nation (BD-H, Nov. 27, 1939).

Abandonment

In 1935, during a period of sporadic activity at the Bates mill, the Baker Democrat-Herald reported that logs were coming to the mill not on the Middle Fork spur, but from a truck landing near Taylor siding (Sept. 6, p. 5). This early attempt at truck logging was a harbinger of a major change in the industry as most western mills converted from rail to truck transport during the 1935-1940 period. Most of the Blue Mountain mills stuck to the rails as they re-opened, but soon converted to the less expensive trucks. The reasons for the change are too complex to detail here, but among them were lower operating costs, Forest Service road-building policies, smaller Forest Service timber sales, improved equipment, and the increased use of contract or "gyppo" loggers rather than company crews. In 1938, the

OLC mill at Bates was supplied by a contract crew--the Bert Sheldon Logging Company of Union--who cut and yarded 160 to 170 thousand board feet each working day (West Coast Lumberman, 1938). Contract crews provided their own equipment, and that equipment was not compatible with the rather primitive OLC narrow-gauge machinery (see appendix C).

As the war drove the price of steel scrap up, the little used rail became valuable again--ironically in much the same way that it had been in 1918. A salvage crew from Japan removed the temporary spurs and main line track from the Camp Creek area in 1940 (O'Rourke interview). Earl Emlaw, who was Chief Engineer (civil) for the Oregon Lumber Company from 1930-1935 and subsequently Lands Agent for the firm until 1962, photographed log loading at Camp Creek in May of 1940. The two locomotives on the Middle Fork spur (OLC #101 and #102) were both idled in 1941 (Emlaw to Tonsfeldt, March 20, 1986).

In 1946, the Sumpter Valley Railway applied to the Interstate Commerce Commission to abandon its line from Bates to Baker (BRC, Nov. 7, 1946). The Bates mill had been supplying the railway with virtually all of its traffic, but had recently installed dry-kilns, so its product would no longer be shipped to Baker for finishing. Furthermore, the prognosis for the Bates mill was not good since little available stumpage was left in the Middle Fork drainage.

> The future operation of the sawmill of the Oregon Lumber Company located at Bates and which furnished more than 99 per cent of all of the tonnage handled by the line will be curtailed to conform to the timber allotment provided and directed by the United States Forest Service under its perpetual yield program. The resulting lumber manufactured at Bates will be shipped dry instead of green, as in the past, thereby reducing the tonnage available to the line both as to the amount of lumber produced and the weight per thousand feet of the product. Under the plan of controlled cutting the maximum to be produced in the area served by applicant will be but 33 million board feet per year. That tonnage would yield in freight revenue only $137,074. The expense of operating the line in the year 1945 was $143,352, and not all of the maintenance necessary to continued operation was performed. Had the line been fully maintained, as it must be if the company is to continue to handle the output of the mill at Bates, the expense of operation and the operating loss will be correspondingly increased. It, therefore, becomes obvious that a cheaper motor vehicle operation will have to be substituted for the more expensive rail operation.
> (PUC Abandonment Hearing Transcript, 1946)

The Oregon Lumber Company continued to operate the Bates mill until 1962, however, when it was sold along with the rest of the firm to the Edward Hines Lumber Company. In 1974, Hines dismantled the mill and the town (Sunday Oregonian, Oct. 27, 1974). By the 1970's, company towns had become anachronistic, and the problems of meeting environmental concerns were deemed insurmountable. Austin, Bates' neighbor to the north, had become a ghost town during the 1930's, and the other Blue Mountain mill towns including Whitney, Sumpter, McEwen, and Salisbury were in similar circumstances. Indeed, Bates surprised many people by lasting as long as it did.

APPENDIX A

Access to Timber, 1901-1924

While the Sumpter Valley Railway was building into the forest of the Blue Mountains in the years after the turn of the century, events that would have a profound effect on the company's fortunes were unfolding across the continent in Washington D.C. In 1891, Congress had passed the Forest Reserve Act, allowing forested areas of the West to be withdrawn from public entry--which meant settlement--and managed by the federal government. On July 28, 1902, 3,053,178 acres of the Blue Mountains were withdrawn to form the Blue Mountain Forest Reserve (Hodgson, 1913). The response to this event was a good deal of confusion.

According to Hodgson (1913), the people living in the affected areas divided themselves into three groups: the cattlemen welcomed the Forest Reserve, since it would mean better grazing management and protection from itinerant sheepherders; the miners objected to the Reserve, since they feared that their timber supply would be interrupted; and the lumber companies were simply appalled at the entire idea. The Federal Forest Inspector, H. D. Langille, was equally appalled by the practices of the lumber companies. Hodgson quotes from Langille's 1906 report:

> The Oregon Lumber Company (which has recently absorbed the Grande Ronde Company) has its headquarters and mills at Baker City, and logs are brought to them over the Sumpter Valley Railway which was first built to Sumpter but has now been extended to Whitney to reach the timber belt of that section. All along the line of this road the destruction of the timber is almost complete.
>
> During the past twenty (20) years this Company has been actively engaged in acquiring title to timber lands, not only in this part of the state, but elsewhere. It is common knowledge that their employees have been supplied with funds with which to purchase lands under the Timber and Stone Act, and it is a matter of record that these claims have been transferred to the Company on the same day or the day following receipt of patent. In this way large areas of timber land which are now included within the temporary withdrawal of the reserve are held by this Company. If these lands are retained in the reserve the timber will be stripped off and the lands relinquished for Scrip. (p.15)

For the lumber companies, the practical result of the Reserve (and the National Forest system that followed it) was that timber was no longer so easily available. As Langille's report suggests, the lumber companies had been acquiring public land by extralegal means. These included bogus claims for mining, fraudulent claims on 160-acre Timber and Stone Act tracts, illegal purchases of state school sections, and other expedients. In 1908 Stephen A. D. Puter, "king of the Oregon land fraud ring" wrote a book "from the dismal recesses of a prison cell" exposing his own and others' illegal activities. His account of the "Blue Mountain Forest Reserve Conspiracy" indicates an immensely complex scheme that began to unravel with the 1905 indictment of six conspirators and continued until the statute of limitations on the offenses ran out (Puter, 1908). In October of 1911, David Eccles and the Oregon Lumber Company were indicted for their past offenses (SM, Oct. 4, 1911). The case dragged on after Eccles' death in 1912 and was eventually settled in 1922 (Arrington, 1975; BMD, Nov. 30, 1922).

The extensions of the Sumpter Valley Railway into the higher altitude timber of the Blue Mountains "opened up" the forest as most commentators suggest, then, but after 1902 getting the legal right to cut that timber was no longer as simple as had been the case. Lumber companies were obliged to purchase stumpage from the Forest Service, or to purchase rights from other firms, or to secure rights from firms that had acquired them before the formation of the Reserve. Each of these methods was expensive, and as the demand exceeded the supply--at least in the near term--the price went up. The last great tract in the area was the Middle Fork tract that Eccles bought in 1911 from a Wisconsin operator named Jones. Because Eccles and his Oregon Lumber Company had been enjoined not to purchase Federal timber at the time, he had to suffer the injury of a reportedly high price and the insult of buying and logging it in his brother William's name (Arrington, 1975).

APPENDIX B

Lumber Companies

The major lumber companies operating along the Sumpter Valley Railway route were the Oregon Lumber Company, the Stoddard Brothers Lumber Company, the Nibley Hilgard Lumber Company, the Baker White Pine Lumber Company, and the William Eccles Lumber Company. Minor firms included the Sumpter Lumber Company, the Sumpter Valley Lumber Company, the Shockley and McMurran Lumber Company, the Cavenaugh Lumber Company and the Gardinier Lumber Company. The following summary lists the major mills, areas of operation, and dates of activity.

Oregon Lumber Company

Operations--1889-1956

Mills--Baker, Whitney, Austin, Bates (others throughout Oregon)

Capacity-100,000 board feet/day (1924)

Oregon Lumber Company's Baker County mills accounted for much of the production in the region. During the later years, the Baker mill dried and finished green lumber cut at other locations, especially Bates. The firm was sold to the Hines Lumber Company in 1956.

Stoddard Brothers Lumber Company

Operations--1883-1953

Mills--Baker, McEwen, Sumpter (Sumpter Lumber Company)

Capacity--50,000 board feet/day (1924)

The Stoddard family entered the lumber business in Oregon with Eccles in 1883 and formed their own firms in 1892. After 1914, the company changed its name to Stoddard Lumber Company. The firm succeeded Shockley and McMurran Lumber Company (1914), the Baker White Pine Lumber Company (1929), and the Grande Rhonde Lumber Company (1929) before suspending operations in 1953.

Baker White Pine Lumber Company

Operations--1912-1928

Mills--White Pine, Baker

Capacity--150,000 board feet/day (1924)

Most commentators remark on Baker White Pine Lumber Company's reputation as a "high class" operation, with good equipment, well built logging spurs, and a modern mill. The founder, Frank Gardinier, formed several other lumber firms after his separation from the Baker White Pine Lumber Company in 1923.

W. H. Eccles Lumber Company

Operations--1911-1925

Mills--Austin

Capacity--75,000 board feet/day

The W. H. Eccles Lumber Company (named for David Eccles' brother) was formed to purchase the huge tract which lay on the Middle Fork of the John Day River above Bates. The firm purchased the Baker mill of the Wisconsin and Oregon Lumber Company in 1911 and moved it to Austin. When the John Day tract was exhausted, the mill was removed.

Nibley Hilgard Lumber Company

Operations--1912-1916

Mills--Whitney

Capacity--N. A.

C. W. Nibley was first president of the Sumpter Valley Railroad and an enthusiastic capitalist. When the Whitney mill burned in 1916, the Oregon Lumber Company took over the firm, rebuilding the Whitney mill in 1932. A closely allied firm, the Nimbley-Mimnaugh Lumber Company, operated in Wallowa County until 1923 when it merged with the Stoddard Lumber Company.

(sources: Ferrell, 1967; Arrington, 1975; Baker Centennial Album, 1974; Hudspeth, 1979; SM, Sept. 20, 1904; BMA, Apr. 20, 1907; BMD)

APPENDIX C

The equipment favored by the lumber companies was generally gear-driven locomotives manufactured by Lima (Shay design), Climax, or Heisler. According to Ferrell (1967), the Oregon Lumber Company owned at various times six Lima Shays, three Heislers, one Climax. The Stoddard Lumber Company owned one Shay, three Climaxes,and four Heislers; the Baker White Pine Company had three Climaxes; the Nibley Lumber Company had one Heisler, and the W. C. Eccles Lumber Company had two Heislers and a Climax. These geared locomotives were popular with logging operators because they could climb steep grades and develop their tractive effort--or pulling power--at low speeds.

Unlike the lumber companies, the Sumpter Valley Railway concentrated its locomotive fleet on conventional rod-driven locomotives which were more appropriate for main line operations. During the entire history of the railway, narrow gauge lines throughout the U. S. were either re-gauging to standard gauge or abandoning their operations. As a result, the Sumpter Valley fell heir to used narrow gauge equipment that at bargain prices. Ferrell's painstaking analysis of the Sumpter Valley Railroad's locomotives (1967, p. 104-7) accounts for thirty-two engines owned by the line during its fifty-six years of operation. Two of the locomotives were logging Shays, purchased by the Oregon Lumber Company but originally "lettered" Sumpter Valley. The roster also included two switch engines and a White motor truck refitted for passenger service. The balance of the engines were built by the Brooks or Baldwin firms between 1878 and 1900 and acquired by the railway from their original owners. The exceptions were four Baldwins acquired new in 1915 and 1916, and two new Schenectady locomotives purchased in 1920. The most famous locomotives owned by the railway were two large articulated Baldwin 2-6-6-2T engines usually referred to as Mallets, although they had simple rather than compound engines. These came to the firm late--1940--after a decade's service with the Uintah railroad in Colorado. They were reportedly the largest narrow gauge locomotives ever built for domestic use.

While the firms followed conventional practice in their railway operations, their practice in logging was somewhat unusual. Generally, industrial logging in the western forests benefited immensely from John Dolbeer's invention of the portable logging winch in the 1882. By the first decade of the twentieth century, most logging in the west was done by rail and railroad logging technology had become nearly

standardized (Koch, 1979; Brown, 1934). Timber operators west of the Cascades favored highlead yarding, which used large steam winches called donkey engines to move the logs on cables to the track where they could be loaded onto cars with loading booms also powered by donkey engines.

East of the Cascades, where the timber was less dense and the terrain gentler, the loggers favored the huge rail-mounted machines which combined the tasks of skidding or yarding the logs and then loading them onto railroad cars. Since the rail-mounted machines were more mobile than the donkey engines, they offered a considerable advantage. The most common method in pine country "railroad shows" from c. 1905 to c. 1925 involved a further refinement using horse drawn high wheels to move the logs to the track then to load them with one of the rail-mounted loaders (Lamm, 1944; Andrews, 1956; Pierre, 1979).

The most famous of the rail-mounted loaders and by far the most popular was the McGiffort machine, a mechanical monster which could pull empty cars to the logging site, load them with logs while moving them underneath itself, and pull the loaded cars back to the main line. The Clyde company, which manufactured the "McGiffort Self-Propelling Log Loader," claimed that the machine could cut logging costs by 66% and double output (Clyde Iron Works, n.d.). Even allowing for a certain amount of commercial hyperbole, the claim is probably not far from the truth. Other loading methods were limited to the slow and dangerous crosshaul method or cumbersome A-frame loaders which could not move the cars (Wackerman, 1949).

In spite of the advantages of track-mounted loaders or skidders, however, the Blue Mountain lumber companies continued to use the old methods and machinery, including some remarkable contraptions which they made themselves (Ferrell, 1967). The Timberman directory of lumber companies for 1924 lists the equipment of the Stoddard Lumber Company, the Baker White Pine Lumber Company, and the W. H. Eccles Lumber Company, and shows none of them using rail-mounted skidders or loaders (Cornwall, 1924). Photographs taken as late as 1922 show cars being loaded by steam donkeys and A-frames (Ferrell, 1969, p. 58). Whether motivated by economy, the difficulty of converting the equipment from standard gauge to narrow gauge, or considerations of the light 40 lb. rail used on the spurs, the firms clung to their old-fashioned yarding and loading equipment until the end.

APPENDIX D

Sumpter Valley Railway Company Financial Statements
As Reported to Oregon Public Utilities Commission

	Operating Income	Operating Expense	Tax	Operating Earnings
1893*	11,658	11,631	383	d.4,856
1909	139,452	93,135	n.a.	n.a.
1911	250,310	164,501	n.a.	n.a.
1914	316,237	239,922	9,900	66,414
1916	342,087	245,370	10,039	86,677
1917	355,984	274,397	11,275	70,309
1919	449,885	367,835	16,129	65,920
1920	496,261	384,469	19,395	43,807
1921	328,621	259,237	28,549	40,809
1922	511,536	364,049	29,946	117,540
1923	482,298	369,773	32,148	80,357
1924	491,056	398,125	31,000	61,831
1925	457,354	358,211	22,072	76,993
1926	434,704	317,986	33,879	82,789
1927	308,284	262,488	23,307	22,392
1928	259,296	231,206	23,257	4,776
1929	337,143	249,635	23,420	64,088

*Six months ending June 30, 1893.

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NEWSPAPERS

Baker

Bedrock Democrat (BBD) 1870-1929

Baker Herald (BCH) 1900-

Baker Morning Democrat (BMD) 1887-

Baker Democrat-Herald (BD-H) 1932-

Sumpter

Sumpter Miner (SM) 1899-1908

Blue Mountain American (BMA) 1896-1917

Whitney

Whitney Pointer (WN) 1901-1905

Prairie City

Grant County Journal (GCJ) 1912-

Portland

Portland Oregonian (O)

1 July 1911, p.7
5 April 1912, p.6
2 August 1912, p.2
1 October 1913, p.1
6 November 1913, p.1
6 May 1914, p.11
15 August 1937, sect. 4
11 August 1946, p.1
19 October 1947, p.23
18 December 1949, p.15

UNPUBLISHED MATERIALS

Baker, Oregon

Wallowa-Whitman National Forest (WWNF)

Site Files are survey reports made by the forest's cultural resources personnel. They contain data on SVRC sites and spur line sites (restricted).

Tucker, Gerald F. Historical Sketches of the Wallowa NF This is a scrapbook of historical information relating to the forest.

Forest maps in the forest's collection contain useful information about the railway.

Sumpter Valley Railway Restoration, Inc. (SVRRI)

Blueprints The restoration has a set of original railway blueprints in reproduced form. Additional information about train movements and operations is also on file.

Baker County Library (BCL)

The McCord Collection contains photographs of the railway operations.

La Grande, Oregon

Eastern Oregon College Library Special Collection (EOSC)

The best single collection of manuscript materials relating to the railway. Includes blueprints from 1940's, operation materials, and maps.

John Day, Oregon

Malheur National Forest (MNF)

Site Files contain survey reports of railway related sites from Tipton to Prairie City. (restricted use)

Prairie City (PCRD)

Prairie City Ranger District

An unpublished and anonymous History of the Hines Lumber Company which is useful background material.

Portland, Oregon

Oregon Historical Society (OHS)

The photographic collection in the OHS contains a Sumpter Valley Railway file as well as Baker and Grant County files. Manuscript holdings include a biographical account of Eccles by Dietrich Demling entitled The Role of the Railroad in the Development of the Grande Ronde Valley. Also important is the complete run of Western Railroader in the periodicals collections.

National Railroad Historical Society (NRHS)

The Earl Emlaw Collection contains materials relating to the railway, especially rolling stock and operations.

Multnomah County Library (MCL)

The Oregonian Index is essential to any historical research in this state.

Eugene, Oregon

The University of Oregon Manuscripts Collection (U of O)

The Thomas Neuhausen Papers have files of correspondence for the Sumpter Valley Railway and the Oregon Lumber Company for 1918. Neuhausen was a state lands commissioner early in the century. After resigning his post, he served on the board of the railway and the OLC.

Salem, Oregon

Public Utilities Commission (PUC)

PUC records include annual reports of commercial activities, the 1909 Inventory of the railway, and other documents including the railway's various Abandonment Files.

Commerce Department (PSTI)

Corporate documents of the Pacific States Timber Investors

Corvallis, Oregon

Oregon State University (OSU)

The OSU archives contain extension agents reports, which give excellent information about economic and social conditions in the rural areas of the state.

The Kerr Library Map Room has the best collection of local maps, including the Sanborn Fire Maps, in the state.

Bend, Oregon

Central Oregon Community College Library (COCC)

Leo Shurtliff's Journal contains good information about the operations of the railway during the building period.

Salt Lake City, Utah

LDS Church History Department (LDS)

Information about Eccles and the businesses is available here, including a revealing profit and loss statement for the lumber company.

ORAL SOURCES

Orville (Cook) Allen	Mt. Vernon, OR
Babs Brainerd	Prairie City, OR
R. Cooms	Austin, OR
Sam Eccles	Huntington, OR
Earl Emlaw	Portland, OR
George Hardy	Salem, OR
Janice Justice	Malheur National Forest
Red Justice	Malheur National Forest
Ralph McCray	Baker, OR
Lola O'Roark	Susanville, OR
Grace Pierce	Austin, OR
Charles Welch	Prairie City, OR

NPS Form 10-900-a
(3-82)

OMB No. 1024-0018
Expires 10-31-87

United States Department of the Interior
National Park Service

National Register of Historic Places Inventory—Nomination Form

VERBAL BOUNDARY DESCRIPTION (continued)

Forest lands and encompasses, in all, 196.25 acres, more or less. The terminii of either section comprising the district are more particularly described in the following passages and are precisely fixed by UTM reference points.

The proposed linear district contains the extant portions of the Middle Fork Spur of the Sumpter Valley Railway. Because portions of the railway have been destroyed, there are two hiatuses in the district. Generally, the district begins near Bates, Oregon, and continues to a point within the Mitchell Tract. These are the historic beginning and ending points of the line. Of the original 23.7 miles of railway, 16.2 are proposed for nomination. For convenience in describing the extant portions of the line, the proposed district has been divided into two sections.

The width of the district is 100', 50' on each side of the centerline of the roadbed. This was the right-of-way that the railway used when crossing patented land.

Nomination section 1 - Placer Gulch to Windlass Creek

Beginning at the intersection of the railway and Placer Gulch in the SE1/4 of section 20, T11s R35e, the district shall continue west along the railway as far as the crossing of the Middle Fork, John Day River, in the SW1/4 of section 4, T11s R34e. The width of this portion of the district shall be 100', 50' on each side of the centerline of the roadbed.

The resulting area is 81.8 acres, more or less.

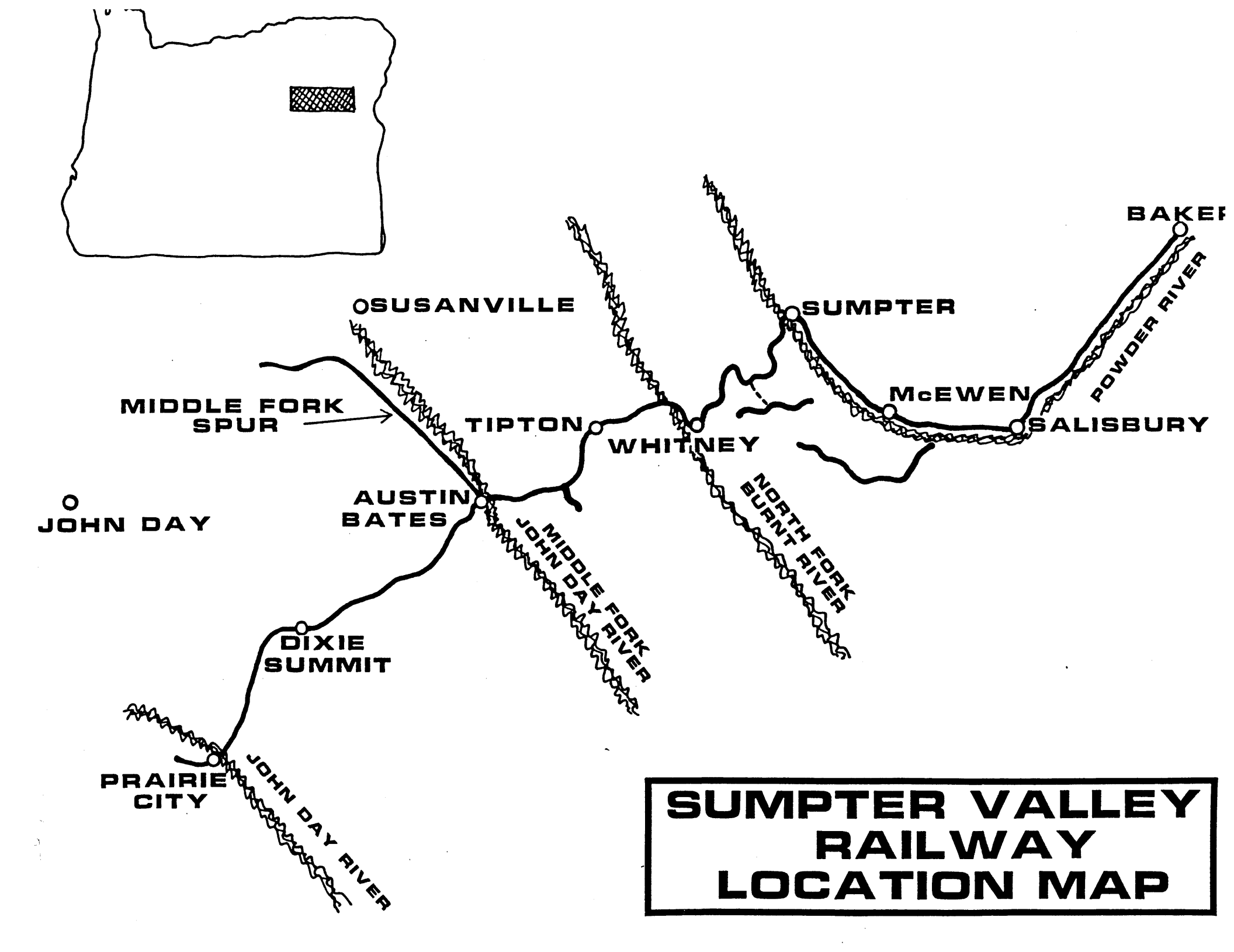
Nomination section 2 - Ragged Creek to Camp Creek; southerly up Camp Creek to Pepper Cree

Beginning at the crossing of the railroad, which is numbered as Malheur National Forest spur 046, and Grant County road 20 in the NE1/4 of section 36, T10s R33e, the district shall continue westward along the railroad as far as the southern boundary of section 35, T10s R32e, a line of convenience ending the district. The width of this portion of the district shall be 100', 50' on each side of the centerline of the roadbed.

The resulting area is 114.45 acres, more or less.

SECTION 1
A 11/379225/4938950
B 11/378150/4939350
C 11/375450/4941700
D 11/375200/4942150
E 11/374750/4941950
F 11/373800/4942800
G 11/371050/4943950

SECTION 2
H 11/366725/4946050
I 11/365850/4946125
J 11/365400/4946750
K 11/364500/4947300
L 11/364100/4947100
M 11/362350/4948250
N 11/361250/4947950
O 11/360000/4948650
P 11/359100/4948750
Q 11/357800/4949800
R 11/357550/4949600
S 11/356950/4947450
T 11/355550/4946500
U 11/355050/4945700
V 11/354350/4945350


BAKER
SUSANVILLE
SUMPTER
POWDER RIVER
McEWEN
MIDDLE FORK
SPUR
TIPTON
WHITNEY
SALISBURY
JOHN DAY
AUSTIN
BATES
MIDDLE FORK
JOHN DAY RIVER
NORTH FORK
BURNT RIVER
DIXIE
SUMMIT
PRAIRIE
CITY
JOHN DAY RIVER
SUMPTER VALLEY
RAILWAY
LOCATION MAP