

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Yosemite NATIONAL PARK

FILE NO. 601.01.3

DEVIL POSTPILE NATIONAL MONUMENT BOUNDARY SURVEY

1934

By Theodore Cronyn

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NEWTON B. DRURY,

Director.

Engineer's Office



United States Department of the Interior

NATIONAL PARK SERVICE

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IN REPLY REFER TO:

L1417

JUL 11 1978



Memorandum

To: Superintendent, Sequoia and Kings Canyon

From: ^{ASST} Superintendent, Yosemite

Subject: Devil's Postpile National Monument Boundary Survey, 1934

In cleaning out some of our old files we came across this survey report which may be of some use to you if you do not have a copy.

Also enclosed is a copy of Drawing No. NM-DP-2001, which shows the boundary traverse.

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FUG Leslie P. Arnberger

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REPORT
DEVIL POSTPILE NATIONAL MONUMENT

LOCATION

The Devil Postpile National Monument is in the northeast quarter of unsurveyed Township 4 South Range 26 East, Mount Diablo Base and Meridian, California. It is within Madera County and within the Sierra National Forest, near the northeastern boundary of each. It lies in the valley of the Middle Fork of the San Joaquin River, and extends somewhat up the slopes to east and west of the river, which flows in a general southerly direction in this region.

FORMER SURVEY

When the Devil Postpile area was sent aside as a National Monument in 1911, a survey was made of the Monument by Mr. Walter Huber, who was then the District Engineer of the U. S. Forest Service. In the limited time available for this survey, it was not possible to make a closed traverse of the area, and corner No. 4 was not established, although the other three corners were set.

PURPOSE OF 1934 SURVEY

When the Monument was placed under the supervision of the Superintendent of Yosemite National Park in 1934, it was found necessary to make a retrace-ment survey to establish the following:

- (1) The location of the existing three corners of the Monument on the ground.
- (2) The true position of Corner No. 4, and to set this corner with its witness points or bearing trees.
- (3) To determine and mark upon the ground the boundary lines of the Monument, from corner to corner.
- (4) To tie the Monument to the system of the U. S. General Land Office surveys, thus determining its exact position relative to the adjacent physical and political features, for mapping and other purposes. Each of these objects was necessarily somewhat intricate in its execution.

The three corners set by the U. S. Forest Service in 1911 were found by Rangers Gage and Lowery in 1934, and were shown by the latter to the engineering party. The information obtained in Ranger Gage's partial preliminary survey in June-July 1934, aided materially in the later survey.

ACCESSIBILITY

There is a road, in use by automobiles throughout the summer, as far as Soda Springs Meadow in the northeast corner of the Monument. This is a narrow road with many sharp turns. The Bureau of Public Roads has surveyed a road from the Tahoe-Los Angeles Highway, westward to Mammoth Pass, which is on the Sierra Nevada crest east of the Monument. The Bureau has likewise made a reconnaissance survey for a proposed road from Mammoth Pass westward to the valley of the Middle Fork of the San Joaquin River near the northeast corner of the Monument.

Various trails lead to the Postpile area. There are trails from Yosemite, from the western part of the Sierra National Forest, from the lower Middle Fork, from Fish Creek on the south, and a well-traveled trail from Mammoth Lakes and Mammoth Post Office on the east.

The distances by road from the Monument to various points are as follows:

Mammoth Post Office	15 miles
Tioga Pass	51 "
Yosemite Valley	126 "
Bishop	58 "
Los Angeles	350 "

The nearest store and service station are at Mammoth Post Office. It is of interest to note the contrast between the distance to the Yosemite Valley by road, as stated above, and the air-line distance which is only 30 miles. The distance by trail is very much less than the road mileage.

HISTORICAL NOTES

The Devil Postpile area was set aside as a National Monument by President Taft, on July 6, 1911. It had previously been a part of the Sierra National Forest, and was administered by the Forest Service until 1933. Effective August 10, 1933, the Monument was placed under the jurisdiction of the National Park Service, and on March 24, 1934, under the supervision of the Superintendent of Yosemite National Park.

It is noted that the area still maintains its identity as a

National Monument. It is observed also that the Presidential proclamation creating the Monument reads, "Devil Postpile," not "Devil's." The Monument area was included in Yosemite National Park from the establishment of the Park in 1890 until 1905, when the eastern boundary of the Park was changed to its present position. From 1922 until 1927 there was under consideration a plan to add to Yosemite the entire upper basins of the Middle Fork of the San Joaquin and of Rush Creek from the south boundary of the Devil Postpile Monument northwesterly to Koip Peak and Mount Lyell. This project was abandoned about 1927.

N A T U R A L F E A T U R E S

Within this area of approximately 800 acres there is a variety of natural features. At the end of the road in Soda Springs Meadow, there is an attractive camp ground under the pines beside the Middle Fork of the San Joaquin. At the upper (northern) end of this meadow, the river descends over basaltic columnar rock in two beautiful cascades. At the south end of the meadow there is a group of soda springs where cold carbonated water flows freely the year around.

A few hundred feet farther down stream is the Devil Postpile itself, the geological formation from which the Monument takes its name. The postpile is a hill composed of lava rock in basaltic columnar formation. The west side of the hill has been worn away by glacial action until there is exposed a sheer wall of these columns with maximum heights of fifty feet. At the foot of this cliff there is a high talus slope of broken columns; the depth to which the columns extend below this slope is unknown. The cross-section of the group of columns, where exposed on the top of the formation, has been worn smooth by glacial action, until it has the appearance of a mosaic or tile inlay. This glacial polish is one of the most interesting and instructive features of the Monument. At present, there is only a faint trail leading to this formation, and no sign indicating its presence.

Below the postpile, on a small flat above the east bank of the river, there is an old log cabin which is a source of interest to tourists; some of them even ask permission to camp in it. The cabin, supposed to have been built by Mr. Ernest Card of Incline, California, has a flag-pole nearby, and a sundial; vines climb the sides in summer. This picturesque relic of early habitation is beginning to disintegrate, but can yet be saved for a time by a little judicious repair.

About a quarter-mile farther south, down the river, Reds Creek has a striking cascade as it descends over the rock wall of the river gorge. The river has many curious rock formations along its course.



The Devil Postpile. View looking eastward from the King Creek Trail on the west side of the Middle Fork of the San Joaquin River.



Close-up of the face of the Devil Postpile, showing columns almost vertical, and broken pieces on the talus slope.



Columnar Basalt, bent and curved. Part of
the Devil Postpile.



Top of Devil Postpile

The exposed cross-section of the basaltic columns shows glacial polish and striations.

Two miles below the Soda Springs Meadow are the Rainbow Falls, whose beauty compares favorably with that of Vernal Falls in Yosemite. The Rainbow Falls are about 140 feet in height and about 60 feet across. One half the width of the fall has a sheer drop to the bottom, while the other half strikes a dome-shaped rock mass and cascades downward in a circular formation. It is said that a rainbow can be seen at any sunlight hour in the mist and spray from this fall. The river flows in a deep gorge for some distance below this point.

Along the western wall of the Middle Fork Valley, about a mile below Soda Springs Meadow, there is a series of basaltic cliffs that deserves special mention. Here there is a stratum of lava rock, partly amorphous, overlying another stratum of columnar formation. Both have been cut away, presumably by glacial action. But the lower structure has either fallen away or been eroded from under the upper in such a way as to leave it overhanging and protruding in some places, so that the effect is one of a series of buttresses, such as are used in certain types of dams and buildings.

The natural features of the Monument itself are by no means the only attraction of this region. Immediately to the west and northwest is an area described by J. N. Le Conte as "one of the finest groups of mountain peaks, the finest group of residual glaciers to be found in the Sierra Nevada."*

There are Mt. Ritter, Banner Peak, and the Minarets, varying in height from 12,500 to 13,150 feet above sea level. These peaks of black metamorphic rock are of especially rugged formation, and their great elevation, both relative and absolute, causes them to stand out as "the most magnificent piece of mountain scenery in the Sierra Nevada." * The canyons adjacent to these peaks are cut to a great depth, and are dotted with numerous lakes.

About a mile southeast of Soda Springs Meadow, the Forest Service maintains a summer Ranger Station at Reds Meadow. Here there are hot springs from which water is piped to a free bath-house and free camp ground. In this location there are also beautiful fields of wild flowers in the summer.

Approximately 9 miles south is the canyon of Fish Creek with the Red Slate group of peaks at its head. The region near all these natural features is accessible by trail.

(*Footnote: J. N. LeConte: "The Devil's Postpile," Park Service Files)



Southern part of Soda Springs Meadow. The Devil Postpile camp ground is behind the trees at right center. The "Old Swimming Hole" is at the bend of the river.



The old log cabin near the Postpile. The Middle Fork of the San Joaquin in the background.



The Middle Fork of the San Joaquin River, with
a glimpse of Soda Springs Meadow in the background.



Looking north up the gorge of the Middle Fork, with the cascades of Reds Creek at the right. This is practically unknown since the nearest trail is some distance to the east.

GEOLOGICAL HISTORY*

The underlying rock in this area is granite, which antedates the glacial epoch and must be more than a million years old. The lava rock of which the Devil Postpile is formed, and which is in evidence at various other points in the Monument, was later poured forth from a volcanic fissure in the Mammoth Pass. The greater part of this black fluid flowed westward into the valley of the Middle Fork, where it spread northward to Pumice Flat and southward a short distance beyond Rainbow Falls. The thickness of the formation ranges from 100 to probably 700 feet; it dates from the interglacial epoch preceding the latest glaciation; that is, from a period 100,000 to 200,000 years ago.

When the next and latest glacier advanced down the valley of the Middle Fork of the San Joaquin River, it overrode this mass of lava rock. The basalt had cracked into columns during the process of cooling, and was easily quarried away by the glacier, column by column. In the long time that the glacier persisted, the larger part of the basalt was excavated away, leaving intact the most durable parts of the lava rock and laying bare the basic granite over a large portion of the valley. The hump now called the Devil Postpile is one of these more resistant parts; the sheer western face of the columnar formation was first exposed by this action. Additional columns have broken off in the weathering of the centuries. The same basalt formation appears at the cascades above Soda Springs Meadow, at Rainbow Falls, and at various other points along the course of the Middle Fork; also in the line of cliffs paralleling the valley, high up west of the river but within the Monument, other remnants appear.

Toward the end of the ice age, and after the Middle Fork Glacier had melted back to its source, there began the deposition of the pumice rock which covers so great a portion of this area. The pumice consists of small fragments of siliceous lava blown by spasmodic explosions from a series of craters extending northward from Mammoth Mountain to Mono Lake. To use a homely comparison, the method of formation of pumice appears to be precisely similar to that of our present-day puffed cereals. The lava is permeated with steam or gas while under pressure in the interior of the earth and expands as soon as the pressure is released. Upon expulsion of the lava from the ground, the fragments are separated one from another, cooled and solidified during their flight through the air. The interstices of the pumice, which were at first filled with steam or gas, are now filled with air, so that the rock will float upon water, for a time at least. The pumice, which rarely occurs in lumps larger than a man's thumb, was scattered over the Monument area as far south as Rainbow Falls. It has now disappeared from some of the steep rock slopes, but is still present on many slopes and on all the level areas in the northern part of the Monument.

[*Source: "The Devil Postpile and its Strange Setting." --Francis E. Matthes, Park Service Files.]



Rainbow Falls of the Middle Fork of the San Joaquin River, 140 feet high and 60 feet wide, in Southeast portion of Devil Postpile National Monument.

On the higher granite points in the Monument, and in certain places on the basalt rock, there is found the glacial polish left by the grinding movement of the ancient ice-mass. The most notable example of this condition is on the top of the Devil Postpile, as described previously in this report.

INSTRUMENTS AND METHODS

The instrument used was a new Keuffel and Esser transit, No. 62145. Horizontal angles were doubled and the mean value used. Triangulation angles were turned at least four times. Distances were slope measured with a 300-foot steel tape, a 100-foot tape being used one day only. The mean of two horizontal distances was taken, as calculated from the direct and reverse vertical angles and the corresponding slope measures.

ORIENTATION

To orient the survey, observations on Polaris were made on three nights, at a point in Soda Springs Meadow, near the northeast corner of the Monument. The greatest difference between any two of the Polaris lines was one minute of arc. The third line (in point of time) was accepted as correct, having been determined with a new instrument in perfect adjustment. These observations were made at eastern elongation. The southern end of the Polaris course was also Station 1 of the boundary traverse. At Station 1, the angle was turned from the Polaris azimuth to the line (Sta. 1 - Sta. 2), and the azimuth of the line 1-2 thus determined.

SURVEY PROCEDURE

From Stations Nos. 1 and 2, a traverse was run to Corner No. 3 -- the northeast corner of the Monument, as set in 1911. Thence a random traverse was run to Corner No. 2, the northwest corner, with general direction determined by the data obtained in Gage's preliminary survey.

When Corner No. 2 was reached, a preliminary calculation gave the approximate bearing and length of the north boundary, for use in running the south boundary.

From Corner No. 2 the same traverse was continued as a random line, running southward toward Corner No. 1, the southwest corner of the Monument. When Corner No. 1 was reached, a preliminary calculation gave the approximate length and bearing of the west boundary for use in running the east boundary.

So far the survey had consisted in determining the unadjusted relative positions of the three existing corners. From existing Corner No. 1 it was then possible to continue the traverse eastward on the south boundary

with a line parallel to the north boundary and of length equal thereto. Thus there was determined the unadjusted location of Corner No. 4, the southeast corner, which had not been established.

From this temporary location for Corner No. 4, the traverse was continued northward up the east boundary with a line parallel to the west boundary as already run. Closure was made on original stations 1 and 2 at Soda Springs Meadow. The total length of this traverse was 33,557.69 feet, or 6.36 miles.

It will be understood that all these traverse lines along the boundaries of the Monument were not continuous straight lines; it was necessary to angle to right or left to avoid trees or other obstacles. The method of determining the location of the corner-to-corner straight lines is described below.

CLOSURE OF TRAVERSE AND ADJUSTMENT OF ERROR

The closed traverse circuit of the Monument was found to have an angular error of closure of three minutes, which is equivalent to 1.22 seconds of arc per station.

The linear error of closure was found to be 9.54 feet (4.90 feet in latitude, 8.19 feet in departure). This corresponds to one foot in 3518. Both of these closures, angular and linear, are within limits of usual surveying practice.

The angular error was distributed throughout the traverse, a minute at a time, before calculation of the traverse.

The latitudes and departures were then calculated, and their error determined, with values as noted above. These errors in latitude and departure were then pro-rated throughout the various latitudes and departures, eliminating the discrepancies between north and south, east and west.

DETERMINATION OF THE TRUE POINT FOR CORNER NO. 4

Convenient coordinates were assumed for Traverse Station No. 1, and the coordinates of every traverse station and of each of the three existing corners calculated therefrom. This includes Traverse Station No. 98, the approximate location of the southeast corner, No. 4.

The following procedure conforms to the practice of the U. S. General Land Office in restoration of missing corners. By proclamation (1) the east and west boundaries are parallel and of equal length; (2) the north and south boundaries are parallel and of equal length; (3) the east and west boundaries are north-and-south lines, and the north and south boundaries are east-and-west lines. Inasmuch as the southwest, northwest, and northeast corners had been set, the west and north boundaries were fully determined.

Conditions (1) and (2) were capable of fulfillment, but condition (3) depended for its fulfillment upon the relative positions of the three existing corners. That is to say, the south and east boundaries of the Monument must be equal to, and parallel to, the north and west boundaries respectively, whether the latter follow the cardinal directions or not, and regardless of their correspondence with the proclaimed lengths.

As a matter of fact, the actual lengths and bearings of the north and west boundaries on the ground do not accord with the President's 1911 proclamation. The south and east boundaries were therefore laid out in accordance with the requirements stated in the preceding paragraph, in the following manner:

Corner No. 4 should be as much south and east of Corner No. 1 as No. 3 is south and east of No. 2. Likewise No. 4 should be as much south and west of No. 3 as No. 1 is south and west of No. 2.

Actually it was found that all these conditions were satisfied by a point 0.36 feet south and 1.23 feet east of traverse station No. 98, and the corner pipe was set at a point so determined.

ACTUAL DIMENSIONS AND AREA

The north boundary of the Monument, between old corners No. 2 and No. 3 was found by computation to have length 2612.66 feet and bearing $S 89^{\circ} 15' 17.8'' E.$; the south boundary has the same length and bearing between old corner No. 1 and new corner No. 4.

The west boundary, between old corners No. 1 and No. 2, was found by computation to have length 13,475.82 feet, and bearing $N 0^{\circ} 52' 15.4'' E.$; the east boundary has the same length and bearing from new corner No. 4 to old corner No. 3.

The area of the Monument was found by computation to be 798.463 acres, or 1.2476 square miles.

MARKING THE TRUE BOUNDARY LINES ON THE GROUND

Using the computed coordinates, the positions of all corners and all traverse stations were plotted. Straight lines were then drawn between adjacent corners of the Monument, and the right angle offset measured from each traverse station to the straight line as plotted. This distance was then measured off in the field in the proper direction in each case, and the true boundary marked with flagged lath. At some points where the traverse line was distant from the true line, the transit was used to determine the position of the true boundary line.

The tin boundary marker signs were not available before the survey party finished its work and left the area. The signs were later put up by chairman James Warford, who made a trip from Yosemite to the Monument for this purpose.

The signs were nailed to trees along the boundary in the customary manner, the intention being to space them so that at least one sign shall be visible to a person approaching the Monument at any point.

A TIE FROM THE DEVIL POSTPILE NATIONAL MONUMENT
TO A CORNER OF THE U. S. GENERAL LAND OFFICE SURVEY

To begin this part of the survey program, it was first necessary to find a U.S.G.L.O. survey corner to which to tie. The corner of Sections 30 and 31, T 3 S, R 27 E and Sections 25 and 36, T 3 S, R 26 E, was found beside the present road from Mammoth Post Office to the Monument. It is of interest to note that two of the Bearing Trees for this corner were found to be scribed "BMP M 115," in addition to other markings. This corner was on the old boundary of Yosemite National Park.

The tie-in was accomplished as follows: At Station No. 7 of the boundary traverse, near the northeast corner of the Monument, a second traverse was initiated. This "B" line was run in a northeasterly direction to Pumice Flat, and closed back to the starting point.

One course of the "B" line traverse was taken as the base for a triangulation from Pumice Flat eastward to a point high up on the Sierra Nevada crest.

This latter high triangulation point was made a station of a third traverse, the "A" line, initiated at the section corner mentioned above and running westward over the Sierra Divide to the triangulation point and closing back to its origin.

These traverses and the triangulation were closed and balanced in each case. The "B" line had an angular error of 12 seconds per station, and a linear error of 1 in 10,936.

The "A" line traverse had an angular error of 2-1/2 seconds per station, and a linear error of 1 in 4453.

The angles of the triangulation were turned at least four times; the sum of the three angles then differed from 180° by only .963 minute. This error was distributed equally among the three angles. The accepted length of the triangulation base was the mean of three chainings.

The true bearing of the line from the corner of Sections 30 and 31, T 3 S, R 27 E, and Sections 25 and 36, T 3 S, R 26 E, to the northeast corner of the Monument (corner No. 3) is S 58° 05' 06" W. The corresponding distance is 12,569.67 feet (N6645.09'; E 10,669.55').

LOCATION AND DESCRIPTION OF CORNERS

CORNER NO. 1, DEVIL POSTPILE NATIONAL MONUMENT.

This southwest corner of the Monument is situated at the confluence of the Middle Fork of the San Joaquin River and King Creek. It was established in 1911, and was described as follows in 1934:

A 24-inch Lodgepole pine on dry land at the intersection of King Creek and the Middle Fork, 13 feet northwest of the right bank of the river, about eight feet east of the left bank of King Creek, ten feet north of the junction of the two streams. This tree corner was found to be scribed on both north and east sides as follows:

"COR No 1 D P N M"

with three chops and a long blaze above the markings on the north.

From this corner a 22-inch Lodgepole pine on the southeast side of the Middle Fork bears S $1^{\circ} 19'$ W, 90.0 feet distant, blazed on the north, but unmarked until 1934. This tree was marked, "D P N M W2 COR 1," in August, 1934.

An 18-inch dead Lodgepole pine bears N $22^{\circ} 17'$ E, 26.90 feet distant, blazed on the south side and marked, "D P W No 1," previous to 1934. This tree was further marked in 1934 to make the markings read as follows: "D P N M W No 1 COR 1." On the same date, two additional witness points were set, as follows:

Witness Point No. 3. A 2-inch iron pipe, 3 feet long, 6 inches out of ground, concrete-filled, copper pin center on top, bears from the tree corner N $78^{\circ} 58'$ W, 62.30 feet distant. This pipe is on an east slope, 29 feet west of the right bank of King Creek.

Witness Point No. 4. A 2-inch iron pipe, 3 feet long, 6 inches out of ground, concrete-filled, copper pin center on top, bears from the tree corner N $26^{\circ} 38'$ E, 34.83 feet distant.

CORNER NO. 2, DEVIL POSTPILE NATIONAL MONUMENT

The northwest corner of the Monument is situated on a broken east slope, about five-eighths of a mile northwest of the northwest corner of Soda Springs Meadow, 1700 feet west of the Middle Fork of the San Joaquin River, about 550 feet west of the trail from Soda Springs Meadow to Minaret Creek, and 465 feet north of a small nameless creek flowing east.

This post corner, set in 1911, was found in 1934 to be as described in the notes of the former survey. The true bearings and distances from the corner to the witness trees were found to be as follows, with the markings on the trees:

Witness No. 1 -- N 86° 00' W, 20.65 feet -- "W 1 COR 2"
Witness No. 2 -- N 41° 24' E, 16.30 feet -- "W 2 COR 2"
Witness No. 3 -- S 53° 23' E, 11.20 feet -- "W 3 COR 2"

During the 1934 survey, each of these trees was marked, "D P N M" in addition to the marks previously existing.

Two more witness points for this corner were established in 1934, as follows:

Witness Point No. 4. A 2-inch iron pipe 3 feet long, 6 inches out of ground, concrete filled, copper pin for center. True bearing from the corner, N 39° 50' W, 16.7 feet distant.

Witness Point No. 5. A 2-inch iron pipe 3 feet long, 6 inches out of ground, concrete filled, copper pin for center. True bearing from the corner, S 1° 45' E, 20.7 feet distant.

CORNER NO. 3, DEVIL POSTPILE NATIONAL MONUMENT

The northeast corner of the Monument is about a quarter-mile northeast of Soda Springs Meadow, on a broken southeast slope, about 150 feet northwest of the road from Soda Springs Meadow to Punice Flat at the first hairpin turn west of the junction of the road to Reds Meadow.

This post corner, set in 1911, was found in 1934 to be as described in the notes of the former survey. The two old witness trees were described in 1934 as follows:

A 45-inch red fir with true bearing from the corner S 43° 42' W, 25.5 feet distant, blazed on the northeast and marked, "D P W No 1." Additional scribing was done in 1934 to make the marking read, "D P N M W No 1 COR 3."

A 36-inch pine with true bearing from the corner N 77° 29' E, 33.0 feet distant, blazed on a scar on southwest side, "D P W No 2." Additional scribing was done in 1934 to make this marking read, "D P N M W No 2 COR 3."

In 1934 two additional witness points were set as follows:

Witness Point No. 3. A 2-inch iron pipe, 3 feet long, 6 inches out of ground, concrete filled, copper pin for center, true bearing from the corner N 48° 09' W, 14.85 feet distant.

Witness Point No. 4. A 2-inch iron pipe, 3 feet long, 6 inches out of ground, concrete filled, copper pin for center, true bearing from the corner S 46° 22' E, 20.37 feet distant.

CORNER NO. 4 - DEVIL POSTPILE NATIONAL MONUMENT

The southeast corner of the Monument is situated about 2100 feet south of Rainbow Falls, about 1185 feet east of the trail along the South Fork, and about 200 feet west of the trail from Rainbow Falls to Fish Creek. It is situated in a hollow draining south, on a general west slope.

This corner was set in 1934 for the first time, and is described as follows with its accessories:

A 2-inch iron pipe, 3 feet long, 8 inches out of ground, concrete-filled, copper pin for center,

Whence: A 60-inch fir bears N 60° 35' E, 58.3 feet distant, marked, "D P N M COR 4 W 1,"

A 50-inch fir bears S 44° 02' E, 12.85 feet distant, marked, "D P N M COR 4 W 2,"

An 18-inch pine bears S 43° 35' W, 2.80 feet distant, marked, "D P N M COR 4 W 3,"

A 26-inch pine bears N 64° 37' W, 23.55 feet distant, marked, "D P N M COR 4 W 4."

DESCRIPTION OF SECTION CORNER TO WHICH
THE DEVIL POSTPILE BOUNDARY SURVEY WAS TIED

The Corner of Sections 30 and 31, T 3 S, R 27 E, and Sections 25 and 36, T 3 S, R 26 E, is situated on the north side of the road from the Postpile to Mammoth, approximately one mile east of the Pass, and 15 feet north of the roadway. The blazes on two of the bearing trees are easily visible from the road.

The true position of this corner was identified, in the absence of standing stake, by measuring backward from the bearing trees to the intersection of the distances given in the notes of the original survey. By digging at this point, there was uncovered a portion of an old stake, with unmistakable axe marks showing on the partly-rotten wood. A hub was placed at this point as Station No. 1 of the "A" line Traverse.

It is of interest to note that a piece of the old corner stake, found lying loose on the ground surface, and also two of the bearing trees, were marked, "YNP N 115." This corner was on the eastern boundary of Yosemite National Park from 1890 to 1905. It is assumed that this stake was set during the 1905 Park Boundary Survey, at the true point for the corner as previously established.

From the remnants of the old stake found in the ground, bearing trees are located as follows:

A 28-inch Lodgepole pine, true bearing S $25^{\circ} 52\frac{1}{2}'$ E, 44.98 feet distant, marked, "T 111 S R 27 E S 31 B T."

A 16-inch Lodgepole pine, true bearing N $59^{\circ} 27\frac{1}{2}'$ W, 82.55 feet distant, marked, "T 111 S R 26 E S 36 B T." Also marked on a second, newer blaze, "T YNP M 115."

A 72-inch fir, true bearing N $48^{\circ} 05\frac{1}{2}'$ W, 61.55 feet distant, with old blaze, unmarked, under 50 counted annual rings. A second blaze, under 26 annual rings, is marked, "B T YNP M 115."

A 30-inch Lodgepole pine, true bearing N $66^{\circ} 50\frac{1}{2}'$ E, 49.75 feet distant, has a scar, apparently an old blaze, under 53 counted rings. The only mark visible is a possible "T" on chop mark below the scar.

DESCRIPTION OF WHAT APPEARS TO BE A SECTION CORNER IN A
TOWNSHIP REPORTED AS UNSURVEYED BY THE U. S. GENERAL LAND OFFICE

Solely as a matter of information for possible future reference, this corner was tied to the boundary survey of the Devil Postpile National Monument. For the same reason it is described here. This corner was not accepted as authentic. It is located on the west slope at the foot of the Marmoth Pass, about 376 feet south of Rainbow Falls and 832 feet east thereof. From the southeast corner of the Monument, it is situated 1717.32 feet north, and 602.07 feet east.

The corner and accessories are described as follows:

An old post, apparently of fir, 4" x 4", 2-1/2 feet long, bottom rotted off; marked with one notch on east edge and 4 notches on south edge. Marked, "S 12," on northeast, "S 1" on southeast, with other marks illegible; "S 14" on southwest, and "S 11" on northwest.

Whence:

A 30-inch fir bears N $50^{\circ} 37\frac{1}{2}'$ E, 52.35 feet distant, marked, "S 12."

A 24-inch fir bears S $52^{\circ} 06\frac{1}{2}'$ E, 20.9 feet distant, marked, "S 13."

A 40-inch fir bears S $72^{\circ} 14\frac{1}{2}'$ W, 33.25 feet distant, marked, "26 E S 14," other marks illegible.

A 30-inch pine bears N $77^{\circ} 20\frac{1}{2}'$ W, 38.3 feet distant, marked, "T 4 S R 26 E S 11."

The three firs bear signs of old chop marks below the marked blazes.



Corner No.1, the southwest corner of the Monument.
This tree corner is at the intersection of King Creek and
the Middle Fork of the San Joaquin River.



The Northwest Corner (No. 2) of the Devil Postpile National Monument. One of the original witness trees is in the background.



The northeast corner of the Devil Postpile National Monument,
with one of the original witness trees in the background.



Southeast corner of the Devil Postpile National Monument
as set in 1934. One bearing tree is shown.

PERSONNEL AND TIME

The members of the survey party were as follows:

Transmitman,	Theodore Cronyn
Chainman,	George Barth
Chainman,	James Warford

Ranger Lowery assisted on line one day, and also assisted parts of two days on calculations.

The survey party left Yosemite on July 10, 1934, and arrived at the Postpile the same afternoon. That afternoon and the next day were spent in walking over the area to see the three existing corners of the Monument, and in getting the lay of the land. This exploratory work was done by Park Engineer Hilton, Chief Draftsman Smith, Transmitman Cronyn and Ranger Lowery.

Azimuth observations on Polaris were made in the early morning on July 12, July 13 and July 15, 1934.

The traverse of the Monument was started on July 12. The last portion of true boundary line was flagged out on August 16, and the return trip to Yosemite started on that day.

In 25 $\frac{1}{2}$ working days the following work was performed:

- (1) Traverse, Monument Boundary, 6.36 miles
- (2) Traverse to Pumice Flat, 1.98 miles
- (3) Traverse across Sierra Divide, 2.63 miles,

or a total of 10.97 miles of traverse.

- (4) Triangulation from Pumice Flat to Sierra Crest with base measured three times.
- (5)^A Preliminary computation of traverses of north and west boundaries of the Monument to determine their approximate directions and lengths, as a guide for running the south and east boundaries.
- (B) Final computation of entire boundary traverse, with adjustment of errors.
- (C) Computation and adjustment of traverses (2) and (3)
- (D) Computation and adjustment of triangulation (4 above)
- (E) Plotting entire boundary traverse and scaling offsets to straight lines.

- (6) Making offsets from boundary traverse stations to true line on the ground, clearing and flagging true line of entire boundary, 6.093 miles.
- (7) One day for the entire party was spent in a search for a Government survey corner to which to tie the boundary survey.
- (8) Log of road from Mammoth Post Office to Soda Springs Meadow, with aneroid barometer readings at every profile break, 15 miles.
- (9) Each of the three old corners of the Monument was re-referenced by the setting of additional witness points, as described in another section of this report.
- (10) Tie to questionable section corner southeast of Rainbow Falls.
- (11) Excursions to take pictures of various points for this report.

As noted elsewhere, boundary marker signs were nailed by a chainman, after the survey had been completed. Two hundred and sixty of these signs were used, an average of one sign every 129 feet along the entire boundary. The cost of these signs was \$0.08397 each, or \$21.83 for all used.

The cost of the field work was as follows:

Transitman	30½ days	@	8.80	\$268.40
2 Chainmen	60 "	"	6.80	408.00
Truck	3 "	"	1.00	3.00
Signs				21.83
			Total	701.23

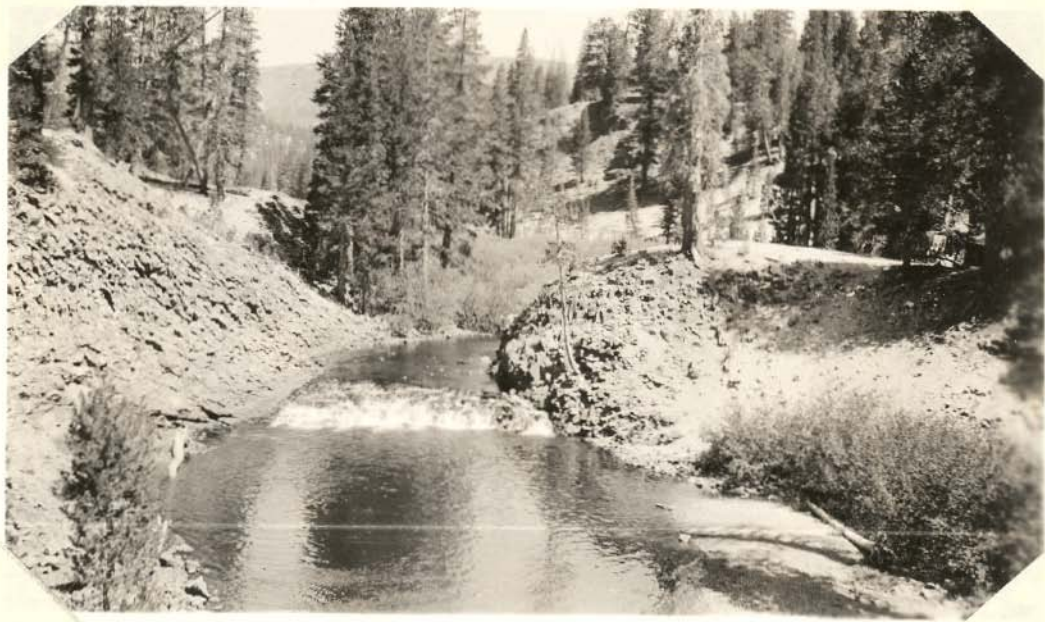
DESCRIPTION OF TERRAIN ALONG THE BOUNDARY LINES

It is to be understood that in following the boundaries, the terms "south" or "southerly," etc. refer to the true bearings of the several lines, as given elsewhere in this report.

NORTH BOUNDARY, WESTWARD

For 430 feet westward from the northeast corner (Corner No. 3), the boundary passes over broken terrain sloping southward toward Soda Springs Meadow.

Thence, the north boundary descends a steep west slope, reaching the left bank of the Middle Fork of the San Joaquin River at 1093 feet west of Cor. No. 3. The river, which flows south here, has a width of 52 feet. This point on the river is a short distance north of two cascades, where the river descends through a gorge in a columnar basalt formation. These



One of the two cascades over which the Middle Fork of the San Joaquin descends into Soda Springs Meadow. Basalt formation.

two cascades, immediately above Soda Springs Meadow, form one of the natural attractions of the area, and have the advantage of easy access for the visitor.

The remainder of the distance to the northwest corner (No. 2) is an ascent over an eastern slope. This is broken terrain with occasional ledges; at a point 550 feet easterly from the northwest corner the line crosses the trail from Soda Springs Meadow to and up Minaret Creek, ascending toward the Minarets.

WEST BOUNDARY SOUTHWARD

The first 600 feet southward on the west boundary lie on a broken east slope with several ledges. After crossing a small nameless creek which flows eastward to the Middle Fork, the line ascends an increasingly steep north slope, with many ledges.

At a point 2400 feet southward, the line reaches the top of a granite ridge, which extends eastward from the Ritter Range and falls away rapidly to the east of this point on the boundary. This is the granite knob that rises on the west of Soda Springs, and is the highest point within the Monument. Elevations were not carried in this survey, but by calculation of slope chaining, it appears that this point has an elevation of about 8,300 feet or 700 feet above Soda Springs Meadow. This compares with an elevation of 7,900 feet indicated by the proclamation map of 1911, which seems to be an enlargement from the 1905 U.S.G.S. Map.

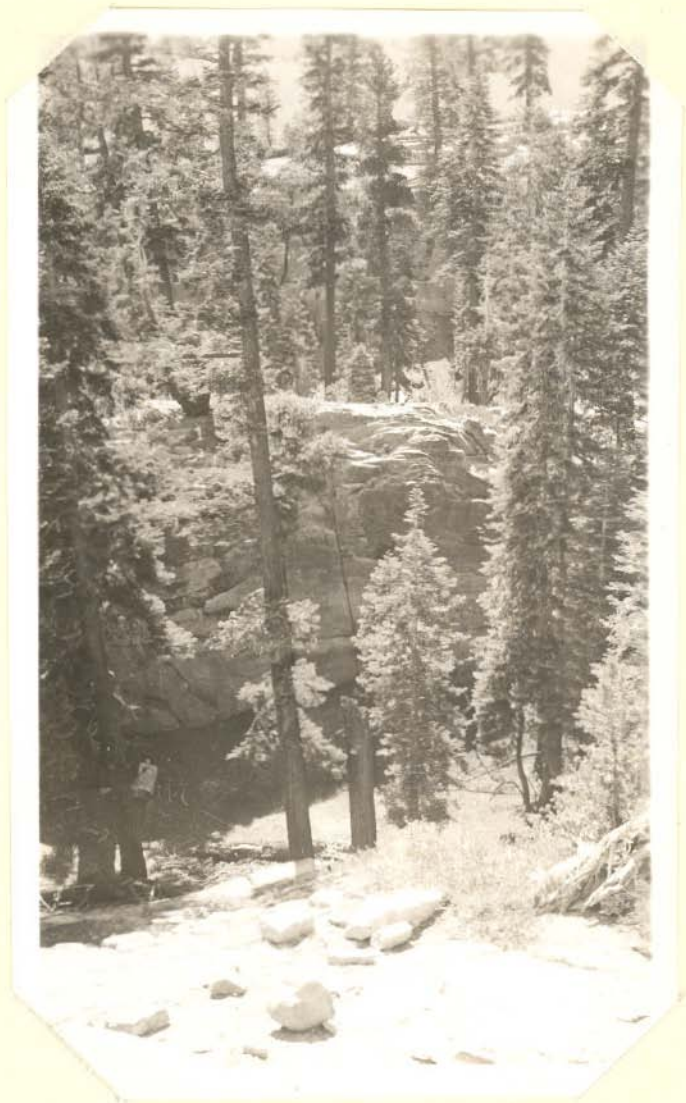
In this area there is a geological formation which should be of great interest to any visitor who climbs this height. The top of this granite ridge is separated into a series of ridges by a number of clefts or fissures running about N 10° E and S 10° W. These fissures vary from 100 feet to 300 feet in width, and from 100 feet to 200 feet in depth. They do not appear to run down the north side of the ridge, but continue southward with diminished depth on the lower levels encountered there.

From a point a half-mile south to a point 4100 feet south, there is a rapid descent over extremely rugged terrain, with cliffs, ledges and steep slopes covered with boulders. Thence, southward there is encountered a broken plateau country; at 5560 feet south, the trail from Soda Springs Meadow to King Creek bears northeast and southwest. This trail is used to reach the high country to the west, as is the Minaret Creek trail mentioned above. This broken plateau area extends southward to a point 8400 feet from the northwest corner.

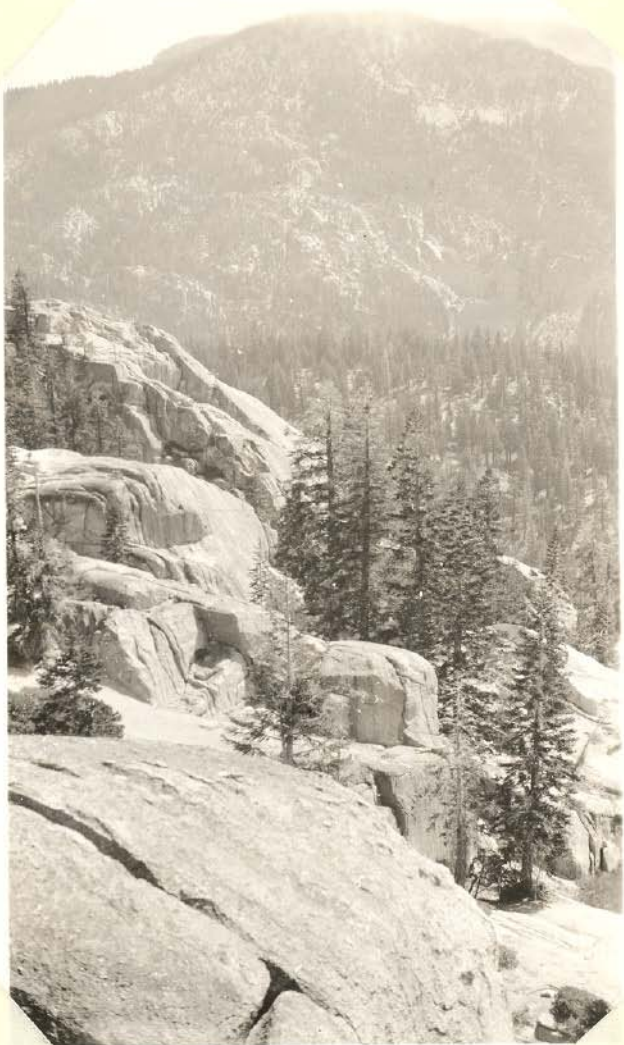
Opposite this point of the west boundary, and about one-eighth mile east thereof, there is a series of geological formations which are noteworthy. Here there occurs a columnar basalt formation overlaid by lava rock which is partly amorphous, partly columnar. The underlying columns have broken away, presumably quarried by glacial action, leaving the upper formation overhanging and protruding, so that the effect in several places is that of buttresses. There is no trail to this formation, which extends for



View northward from the highest point on the west boundary of the Monument, 700 feet above the campground at Soda Springs Meadow. The east end of Volcanic Ridge appears at the extreme left, and San Joaquin Mountain and Two Teats are on the skyline at right center.



View eastward from traverse Station 36 on the west boundary of the Monument. Two of the characteristic clefts of this granite mountain are shown, with the ridge between them. The granite slope in the foreground shows glacial polish.

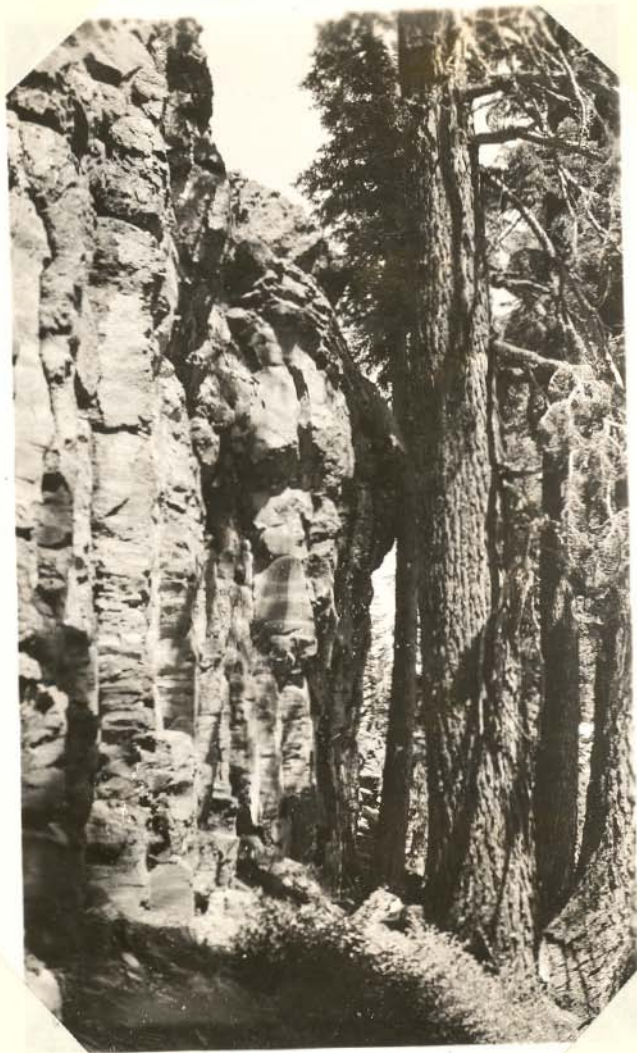


View eastward from Station 41 of boundary traverse. The glaciated and fissured granite ridge in the left foreground is within the west boundary of the Monument. In the background are the hill east of the Postpile, and Mammoth Mountain. Both are east of the Monument.



The Buttresses

Top of steep slope west of the Middle Fork of the San Joaquin. Rough columnar basalt, eroded and weathered. Trails would open up the west boundary and its interesting formations. There is no bridge across the South Fork to reach even the Soda Springs.



Irregular basaltic columns near
"The Buttresses". Top of slope, west of the
Middle Fork, The tree in the center is in
contact with the cliff.

perhaps a thousand feet north and south. The engineer's party came upon it by accident when walking over the Monument area.

At one point near these buttresses, there is another curious natural phenomenon. On the steep east slope, with lava rock above, below, and all around, there is perched a rounded, granite boulder, smooth and symmetrical of oval shape, about 24 inches long and 15 inches thick. This "ostrich egg" appears to have been smoothed by glacial action and deposited in this spot by the same agent.

Between points 8400 feet south and 11,250 feet south, the boundary lies on a south slope broken by ridges and ravines running in a direction slightly east of south.

At the last mentioned point, the boundary enters a swampy meadow running north and south, about 250 feet wide, with bare granite slopes rising on east and west.

At a point 12,000 feet south on the boundary, and 180 feet west thereof, King Creek descends over ledges from the west and northwest and enters the meadow.

At about this point on the boundary, the trail along King Creek runs northwest and southeast across the meadow. The trail is indistinct across this swampy area, but distinct along the foot of the slope to the southeast.

The boundary crosses King Creek four times between this point and the southwest corner of the Monument. In addition to these complete crossings, the boundary enters the river from the east at 13,367 feet south and emerges from the same left bank at 13,458 feet south. This last point is only 15 feet north of the southwest corner of the Monument, on the flat river bottom existing there.

EASTWARD ON SOUTH BOUNDARY

From the southwest corner (No. 1), the south boundary follows over flat river-bottom land. At 362 feet the trail from the Middle Fork of the San Joaquin River up King Creek bears north and south.

From 462 feet, the line ascends a southwest slope of a granite ridge, and continues over bare granite. The highest point of this ridge, which slopes abruptly south to the Middle Fork, is 1079 feet from corner No. 1.

At 1210 feet occurs the top of a steep east slope, 25 feet above the river; at 1247 feet is the right bank of the Middle Fork of the San Joaquin River, flowing south; at 1312 feet the left bank; at 1344 feet the top of a 40-foot cliff on the east side of the river. Thence, ascend a broken west slope; at 1428 feet, the trail up and down the Middle Fork bears north and south.

The southeast corner of the Monument, as set during the 1934 survey, is situated in a small hollow draining south on a general west slope to the Middle Fork. The trail from Reds Meadow to Fish Creek runs north and south, about 200 feet east of the corner, outside the Monument.

NORTHWARD ON THE EAST BOUNDARY

Over a broken west slope. At 1790 feet is the point whence a tie was made to what appears to be a section corner in this unsurveyed township. The contradiction here implied has not yet been explained; we did not use this tie to place or orient our survey, but made it only for possible future reference.

At 1947 feet northward, the Middle Fork trail bears east and west.

At 2100 feet there is the top of a steep northwest slope to the Middle Fork. From this point on the boundary, the south edge of the crest of Rainbow Falls bears N 87° 21' W, 260 feet distant. These falls are the second most noted feature of the Monument. The northern half of the fall has a clear drop of 140 feet (Le Conte), but at low water the southern half strikes a dome-shaped rock formation and cascades to the bottom.

At 2142 feet north, enter an alder flat along the river, which turns west about 50 feet west of this point. At 2418 feet, the line intersects the left bank of the Middle Fork of the San Joaquin River, which flows S 10° W at this point. The boundary line is in the river until it leaves the right bank at 2,555 feet, the river flowing to this point from the east.

Thence, the boundary continues over broken east slopes. At 3,566 feet, the top of the west bank of the river is only 25 feet east of line, outside the Monument.

The boundary crosses the river again as it flows N 50° E out of the Monument; the right bank at 4,660 feet; the left at 4,714 feet.

Thence, the boundary continues over flat land; at 6,253 feet north, the river is about 125 feet west from the boundary, flowing south inside the Monument.

At 6,620 feet, the old trail from Reds Meadow to Fresno Flats bears NE and SW. At 6,636 feet north, and 6 feet east of the boundary, there is a fork of trails; to NW and SE, the trail along the Middle Fork; to SW, the old trail mentioned above.

At 6,670 feet, the trail along the Middle Fork crosses line NW and SE; at 6,893 feet, the same trail crosses again, N 20° E and S 20° W.

At 7,184 feet the top of 70-foot cliffs on east bank of the Middle Fork is but 15 feet west of line.

The same trail is crossed at 7,920 north, bearing N 20° W and S 20° E, and again at 8,160 feet, bearing N 30° E and S 30° W.

At 8,603 feet north, the boundary line crosses Reds Creek, 6 feet wide, four inches deep in August, 1934, flowing southwest. The cascades of Reds Creek as it enters the Middle Fork are nearby to the southwest. This beautiful cascade is another point in the Monument which should not be missed by the visitor. At the present time there is no definite trail leading to these falls, and no sign indicating their existence, although they are within easy walking distance from Reds Meadow and Soda Springs Meadow, and close to the main trails.

At 9,385 feet north, the boundary ascends a south slope becoming progressively steeper; at 9509 feet north the same Middle Fork trail crosses again, N 25° W and S 25° E.

At 10,331 feet north is the top of a steep south slope of ledges and boulders; the boundary continues along a west slope. The top of the Devil Postpile is about 500 feet west of this section of the boundary.

The east boundary descends a northwest slope to a point about 500 feet south of the northeast corner of the Monument, then ascends a broken south slope to the corner. The only road entering the Monument bears northwest and southwest about 375 feet south of this corner. This road forks at a point about one-eighth mile east of this corner, the southeast branch going to Reds Meadow, and the north branch to Pumice Flat and over the pass to Mammoth.

Respectfully submitted,



Theodore Cronyn,
Transitman.

tc:eg

DEVIL POSTPILE NATIONAL MONUMENT

CALIFORNIA

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A P R O C L A M A T I O N

WHEREAS the natural formations known as the Devil Postpile and Rainbow Falls, within the Sierra National Forest, in the State of California, are of scientific interest, and it appears that the public interests will be promoted by reserving said formations as a National Monument;

Now, therefore, I, WILLIAM H. TAFT, President of the United States of America, by virtue of the power in me vested by section two of the Act of Congress approved June eighth, nineteen hundred and six, entitled "An Act For the preservation of American antiquities," do proclaim that there are hereby reserved from all forms of appropriation under the public land laws, subject to all prior valid adverse claims, and set apart as a National Monument, all the tracts of land in the State of California shown as the Devil Postpile National Monument on the diagram forming a part hereof.

The reservation made by this proclamation is not intended to prevent the use of the lands for Forest purposes under the proclamation establishing the Sierra National Forest. The two reservations shall both be effective on the land withdrawn, but the National Monument hereby established shall be the dominant reservation and any use of the land which interferes with its preservation or protection as a National Monument is hereby forbidden.

Warning is hereby given to all unauthorized persons not to appropriate, injure, remove, or destroy any feature of this National Monument, or to locate or settle upon any of the lands reserved by this proclamation.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington this sixth day of July, in the year of our Lord one thousand nine hundred and eleven, and of the Independence of the United States the one hundred and thirty-sixth.

(SEAL)

WM H TAFT

By the President

P C Knox

Secretary of State

(No. 1166)

FOREST SERVICE, U. S. DEPT. OF AGRICULTURE
1911

DEVIL POSTPILE NATIONAL MONUMENT

INCLUDING

RAINBOW FALLS

CALIFORNIA

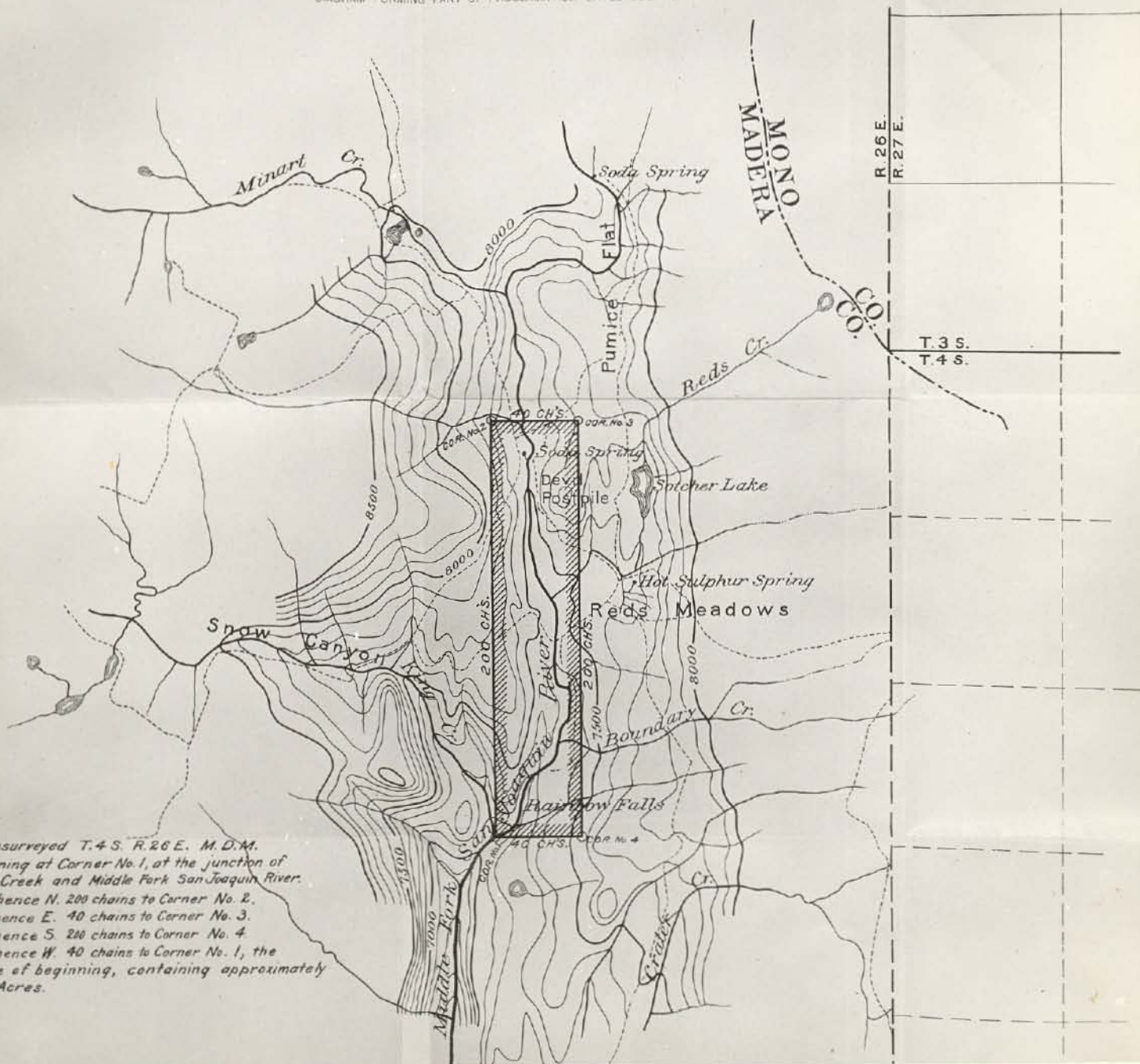
MT. DIABLO MERIDIAN

AREA APPROXIMATELY 800 ACRES



NATIONAL MONUMENT BOUNDARY

DIAGRAM FORMING PART OF PROCLAMATION DATED JULY 6, 1911



APPENDIX TO DISTRICT ENGINEER'S REPORT OF SEPTEMBER 12, 1911

ON SURVEY OF DEVIL'S POST PILE NATIONAL MONUMENT

Notes of Survey

Party: W. L. Huber
H. J. Tompkins and
R. J. Beard

July 25, 1911

A lodgepole pine 16" in diameter on point at exact Junction of King Creek and Middle Fork of San Joaquin River taken as Corner No. 1. From Corner No. 1 a 12" lodgepole pine on south bank of Middle Fork of San Joaquin River blazed on north face bears due south 85 feet.

Set up on Station 0+00 determined true north by solar observations. Found magnetic variation 16° -30' E. Corner No. 1 as described above bears N 2° 28' E approximately 75 feet. From station 0+00 proceeded with survey as follows:

Station	Angle	Distance	Vertical angle	Horizontal distance	Magnetic bearing	True Bearing
0+00	*R 159° 5'		+1° 24'			
		218		218	**S 37° 0' E	S 20° 55' E
1	L 17° 10'	580	+5° 53'	577	S 55° 0' E	S 38° 05' E
2	L 2° 6'	215	+10° 40'	211	S 57° 30' E	S 40° 11' E
3	L 15° 38'	118	+9° 30'	116	S 73° 0' E	S 55° 49' E
4	L 26° 46'	480	-2° 35'	480	N 80° 30' E FS	S 82° 35' E
5	L 86° 16'	486	-0° 10'	486	N 78° 45' E BS	N 11° 09' E
6	R 61° 56'	158	+7° 53'	157	N 53° 30' E	N 73° 05' E
7	R 27° 17'	464	+0° 15'	464	N 81° 30' E	S 79° 38' E
8	L 69° 14'	237	+10° 29'	233	N 12° 45' E	N 31° 08' E

* From true north

** Where fore sight and back sight agree but one is recorded.

Station	Angle	Distance	Vertical angle	Horizontal distance	Magnetic bearing	True Bearing
9	L 16° 53'		-1° 29'		N 3° 30' W	N 14° 15' E
		159		159		
10	R 35° 18'		+5° 30'		(N 32° 15' E FS	N 49° 33' E
		324		323	(N 32° 45' E BS	
11	R 2° 32'		+5° 53'		(N 35° 15' E FS	N 52° 05' E
		440		438	(N 36° 0' E BS	
12	L 47° 19'		+0° 57'		N 11° 30' W	N 4° 46' E
		425		425		
13	R 17° 56'		+2° 30'		N 6° 0' E	N 22° 42' E
		375		375		
14	L 25° 21'		+0° 0'		N 18° 30' W	N 2° 39' E
		246		246		
15	L 13° 01'		-1° 04'		N 31° 45' W	N 15° 40' W
		149		149		
16	R 34° 57'		-1° 14'		(N 3° 15' E FS	N 19° 17' E
		796		796	(N 4° 30' E BS	
17	R 0° 3'		+3° 29'		N 4° 30' E	N 19° 20' E
		137		137		
18	L 21° 02'		+0° 34'		(N 16° 30' W FS	N 1° 42' W
		331		331	(N 17° 30' W BS	
19	R 58° 53'		-6° 05'		(N 41° 45' E FS	N 57° 11' E
		200		199	(N 41° 15' E BS	
20	L 57° 17'		-0° 55'		N 16° 15' W	N 0° 06' W
		271		271		
21	R 24° 15'		+2° 5'		(N 7° 30' E FS	N 24° 09' E
		399		399	(N 6° 15' E BS	
22	L 43° 47'		+3° 43'		(N 37° 30' W FS	N 19° 38' W
		360		359	(N 38° 45' W BS	
23	L 0° 15'		-2° 55'		N 38° 45' W	N 19° 53' W
		295		295		
24	R 32° 03'		+1° 30'		(N 6° 30' W FS	N 12° 10' E
		495		495	(N 6° 0' W BS	
25	L 46° 30'		-2° 35'		(N 52° 30' W FS	N 34° 20' W
		497		496	(N 53° 15' W BS	
26	R 21° 48'		-0		(N 31° 15' W FS	N 12° 32' W
		331		331	(N 30° 15' W BS	

7/26/11

Station	Angle	Distance	Vertical angle	Horizontal distance	Magnetic bearing	True Bearing
27	R 8° 32'	581	+ 1° 38'	581	(N 22° 0' W FS	N 4° 0' W
28	R 7° 38'	545	+ 3° 26'	544	(N 22° 15' W BS N 14° 45' W	N 3° 38' E
29	R 4° 3'	318	+ 5° 52'	316	(N 10° 45' W FS	N 7° 41' E
30	L 36° 43'	470	- 2° 5'	470	(N 12° 15' W BS N 49° 0' W FS	N 29° 02' W
31	R 39° 10'	454	+ 3° 22'	453	(N 48° 10' W BS N 9° 0' W FS	N 10° 08' E
32	L 8° 40'	437	+ 5° 42'	435	(N 8° 45' W BS N 17° 15' W FS	N 1° 28' E
33	L 12° 05'	388	- 3° 24'	387	(N 16° 10' W BS N 28° 15' W FS	N 10° 37' W
34	R 50° 33'	173	+ 1° 10'	173	(N 27° 0' W BS N 23° 30' E FS	N 39° 56' E
35	L 60° 35'	710	+ 9° 35'	700	(N 22° 30' E BS N 38° 0' W FS	N 20° 39' W
36	R 3° 17'	239	- 1° 43'	239	(N 34° 0' W BS N 30° 45' W FS	N 17° 22' W
37	L 54° 10'	355	- 0° 5'	355	(N 35° 0' W BS N 89° 15' W FS	N 71° 32' W
38	L 43° 16'	339	-12° 01'	332	(S 86° 15' W BS N 50° 30' W FS	N 28° 16' W
39	R 7° 51'	184	- 6° 10'	183	(N 50° 0' W BS N 42° 0' W FS	N 20° 25' W
40	R 11° 25'	260	+ 0° 47'	260	(N 38° 50' W BS N 27° 15' W FS	N 9° 0' W
41	R 10° 27'	706	- 0° 24'	706	(N 25° 30' W BS N 15° 0' W FS	N 1° 27' E
42	R 19° 34'		- 0° 50'	808	(N 13° 0' W BS N 6° 30' E FS	N 21° 01' E
					(N 3° 0' E BS	

From Station 43, Station 44 A was set by turning to the left $64^{\circ} 27'$ (magnetic bearing $N 61^{\circ} 30' W$). The true bearing of course 43 - 44A as computed is $N 40^{\circ} 26' W$. On July 27, 1911 at 7: A.M. when occupying station 43, I determined true north by a solar observation and found the bearing of course 43 - 44 A to be $N 43^{\circ} 25' W$. I then took a foresight on Station 44A and turned to the right $43^{\circ} 26'$ to true north and proceeded as follows:

Station	Angle	Distance	Vertical angle	Horizontal distance	Magnetic bearing	True Bearing
43			$\mp 1^{\circ} 28'$		$(N 18^{\circ} 0' W FS$	North
44	L $9^{\circ} 15'$	535	$\mp 7^{\circ} 07'$	535	$(N 17^{\circ} 0' W BS$	
		214		212.35	$N 26^{\circ} 15' W$	$N 9^{\circ} 15' W$
45	L $10^{\circ} 28'$	382	$\mp 2^{\circ} 39'$	381.59	$(N 37^{\circ} 0' W FS$	$N 19^{\circ} 43' W$
46	R $19^{\circ} 43'$	210	$\mp 16^{\circ} 55'$	200.9	$(N 43^{\circ} 30' W BS$	North
47	R $34^{\circ} 17'$	212	$\mp 18^{\circ} 21'$	201.2	$(N 23^{\circ} 30' W FS$	$N 34^{\circ} 17' E$
48	R $34^{\circ} 14'$	530	$\mp 1^{\circ} 45'$	530	$(N 19^{\circ} 15' W BS$	$N 68^{\circ} 31' E$
					$(N 25^{\circ} 0' E FS$	
					$(N 23^{\circ} 0' E BS$	
					$(N 57^{\circ} 15' E FS$	
					$(N 62^{\circ} 0' E BS$	

Side shot to base of vertical face of Devil's Post Pile R $61^{\circ} 10' - 193$ ft. Vertical angle $17^{\circ} 44'$. Vertical angle to top $30^{\circ} 30'$.

49	R $80^{\circ} 03'$	312	$-16^{\circ} 55'$	298	$(S 38^{\circ} 0' E FS$	$S 31^{\circ} 26' E$
50	R $176^{\circ} 23'$	164		164	$(S 37^{\circ} 45' E BS$	$N 35^{\circ} 03' W$

Cor. 3

Established Corner 3 by setting a 4" x 4" red fir post scribed "F.S. - D.P.N.M. - Cor. 3". This corner falls about 75 feet northwest of the trail from the Devil's Post Pile to Pumice Flat and can easily be seen from the trail.

To set Corner No. 2, I occupied Station 48, took a back sight on Station 47 and proceeded as follows:

Station	Angle	Distance	Vertical Angle	Horizontal distance	Magnetic bearing	True Bearing
48	L 132° 23'		-4° 13'		S 70° 30' W FS	S 81° 54' W
		935		932	(S 71° 15' W BS	
48 A	R 32° 32'		+3° 55'		(N 78° 30' W FS	N 65° 34' W
		261		260	(N 75° 0' W BS	
48 B	R 10° 56'		+2° 36'		(N 64° 0' W FS	N 54° 38' W
		323		322.66	(N 63° 0' W BS	
48 C	L 48° 44'		+0° 14'		(S 68° 15' W FS	S 76° 38' W
		168		168	(S 66° 0' W BS	
48 D	R 2° 53'		+7° 54'		(S 68° 45' W FS	S 79° 31' W
		385		366	(S 71° 45' W BS	
48 E	R 14° 58'		†		S 86° 45' W	N 85° 31' W
		141				

Cor. 2

Established Corner No. 2 by setting a 4" x 4" red fir post scribed "F.S. - D.P.N.M. - Cor. 2". From the corner a red fir tree three feet in diameter blazed and scribed "W 1 COR. 2" bears S 87° -30' W (true bearing) twenty feet distant (S 77° -0' W magnetic bearing); a red fir tree eighteen inches in diameter blazed and scribed "W 2 COR. 2" bears N 36° -0' E (true bearing) seventeen feet distant (N 25° 30' E magnetic bearing); a red fir tree fourteen inches in diameter blazed and scribed "W 3 COR. 2" bears S 64° -0' E (true bearing) eleven feet distant (S 74° -30' E magnetic bearing). The magnetic variation at this corner was found to be 10° 30' E. Corner No. 4 was not located.

APPENDIX
TO REPORT ON RESURVEY
DEVIL POSTPILE NATIONAL MONUMENT
1934

NOTES ON THE 1934 SURVEYS

Party: Theodore Cronyn, Transitman.
George Barth, Chainman.
James Warford, Chainman.

Surveys started July 12, 1934.
Surveys completed August 17, 1934.
Weiss Transit No. 560, two days.
K & E Transit No. 62145 thereafter.
Slope chained with 300-foot tape.

BOUNDARY SURVEY.

Station.	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
1	0 - 00			20,000.00	20,000.00
2	21 - 50 R	197.40	N 1 - 19 E		(assumed)
3	2 - 09 L	401.80	N 23 - 09 E		
4	8 - 35 L	301.75	N 21 - 00 E		
5	62 - 18½ R	257.84	N 12 - 25 E		
6	62 - 42 L	230.70	N 74 - 43½ E		
7	7 - 16 R	203.98	N 12 - 01½ E	21,360.80	20,591.68
		3.84	N 19 - 17½ E		

Corner No. 3 of the Monument. This point not occupied. 21,364.42 20,592.95

Cor. No. 3

	180 - 00 R	3.84	S 19 - 17½ W
7	90 - 16L from B.S. on Sta. 6	215.67	N 78 - 14½ W
8	2 - 52 L	225.20	N 81 - 06½ W
9	3 - 57½ L	93.30	N 85 - 04 W
10	2 - 48 L	123.02	N 87 - 52 W
11	3 - 17 R	100.15	N 84 - 35 W
12	4 - 14 R	164.83	N 80 - 21 W
13	0 - 21½ R	290.26	N 79 - 59½ W
14	2 - 49 L	113.55	N 82 - 48½ W
15	0 - 09 R	256.47	N 82 - 39½ W

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
16	4 - 17 R				
		98.56	N 78 - 22 $\frac{1}{2}$ W		
17	2 - 07 $\frac{1}{2}$ R	294.23	N 76 - 14 W		
18	14 - 52 L	226.55	S 88 - 54 W		
19	5 - 45 R	98.64	N 85 - 21 W		
20	13 - 37 $\frac{1}{2}$ R	180.20	N 71 - 43 $\frac{1}{2}$ W		
21	7 - 10 R	154.68	N 64 - 33 $\frac{1}{2}$ W		
22	125 - 56 R	7.15	N 61 - 22 $\frac{1}{2}$ E		

Corner No. 2 of the Monument. This point not occupied. 21,806.65 18,017.99

Cor. # 3	180 - 00 R				
		7.15	S 61 - 22 $\frac{1}{2}$ W		
22	105 - 04 L From B.S. on Sta. 21	123.57	S 10 - 22 $\frac{1}{2}$ W		
23	1 - 08 R	206.61	S 11 - 30 $\frac{1}{2}$ W		
24	4 - 08 $\frac{1}{2}$ L	213.26	S 7 - 22 W		
25	13 - 17 L	250.40	S 5 - 55 E		
26	3 - 47 $\frac{1}{2}$ R	242.58	S 2 - 07 $\frac{1}{2}$ E		
27	0 - 00	51.76	S 2 - 07 $\frac{1}{2}$ E		
28	0 - 00	170.22	S 2 - 07 $\frac{1}{2}$ E		
29	1 - 48 $\frac{1}{2}$ R	153.58	S 0 - 19 E		
30	0 - 00	209.40	S 0 - 19 E		
31	4 - 01 R	325.77	S 3 - 42 W		
32	0 - 00	163.20	S 3 - 42 W		
33	0 - 57 L	211.46	S 2 - 45 W		
34	0 - 00	77.98	S 2 - 45 W		
35	1 - 30 R	255.12	S 4 - 15 W		
36	3 - 40 R	297.82	S 7 - 55 W		
37	8 - 21 L	157.34	S 0 - 25 E		

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
38	13 - 16 $\frac{1}{2}$ L	229.96	S 13 - 41 $\frac{1}{2}$ E		
39	21 - 01 R	361.47	S 7 - 19 $\frac{1}{2}$ W		
40	3 - 17 L	197.26	S 4 - 02 $\frac{1}{2}$ W		
41	2 - 58 L	237.41	S 1 - 04 $\frac{1}{2}$ W		
42	1 - 27 R	118.62	S 2 - 31 $\frac{1}{2}$ W		
43	0 - 03 L	176.39	S 2 - 28 $\frac{1}{2}$ W		
44	0 - 18 R	243.45	S 2 - 46 $\frac{1}{2}$ W		
45	1 - 28 $\frac{1}{2}$ R	262.17	S 4 - 15 W		
46	3 - 58 $\frac{1}{2}$ R	290.83	S 8 - 13 $\frac{1}{2}$ W		
47	7 - 30 L	99.94	S 0 - 43 $\frac{1}{2}$ W		
48	5 - 22 L	150.68	S 4 - 38 $\frac{1}{2}$ E		
49	7 - 00 R	253.55	S 2 - 21 $\frac{1}{2}$ W		
50	8 - 20 L	230.69	S 5 - 58 $\frac{1}{2}$ E		
51	3 - 52 R	290.83	S 2 - 06 $\frac{1}{2}$ E		
52	3 - 34 $\frac{1}{2}$ R	285.44	S 1 - 28 W		
53	2 - 45 R	107.00	S 4 - 13 W		
54	1 - 26 $\frac{1}{2}$ R	185.74	S 5 - 39 $\frac{1}{2}$ W		
55	0 - 47 $\frac{1}{2}$ L	139.85	S 4 - 52 W		
56	4 - 07 $\frac{1}{2}$ L	295.72	S 0 - 44 $\frac{1}{2}$ W		
57	2 - 33 R	298.13	S 3 - 17 $\frac{1}{2}$ W		
58	0 - 47 $\frac{1}{2}$ R	314.89	S 4 - 05 W		
59	4 - 44 L	392.22	S 0 - 39 E		
60	0 - 13 L	139.20	S 0 - 52 E		
61	1 - 50 $\frac{1}{2}$ R	286.04	S 0 - 58 $\frac{1}{2}$ W		
62	5 - 29 R	214.01	S 6 - 27 $\frac{1}{2}$ W		
63	2 - 17 L	272.33	S 4 - 10 $\frac{1}{2}$ W		

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
64	9 - 45 L	172.33	S 5 - 34½ E		
65	9 - 18½ R	309.28	S 3 - 44 W		
66	0 - 51 L	167.38	S 2 - 53 W		
67	0 - 06½ R	125.11	S 2 - 59½ W		
68	7 - 00 L	195.03	S 4 - 00½ E		
69	0 - 57½ R	254.83	S 3 - 03 E		
70	5 - 31 R	217.84	S 2 - 28 W		
71	0 - 18 L	326.73	S 2 - 10 W		
72	6 - 59 R	91.84	S 9 - 09 W		
73	11 - 11½ R	148.39	S 20 - 20½ W		
74	23 - 37½ L	289.12	S 3 - 17 E		
75	49 - 53½ L	273.78	S 53 - 09½ E		
76	50 - 31½ R	243.98	S 2 - 38 E		
77	30 - 56½ L	297.25	S 33 - 34½ E		
78	25 - 22½ R	248.69	S 8 - 12 E		
79	16 - 22½ R	399.38	S 8 - 10½ W		
80	13 - 54½ L	295.85	S 5 - 44 E		
81	15 - 55 L	300.00	S 21 - 39 E		
82	66 - 14 R	193.84	S 44 - 35 W		
83	39 - 32 R	157.95	S 84 - 07 W		
84	36 - 40 L	22.60	S 47 - 27 W		
Corner # 1 of the Monument. This point not occupied.				8,334.39	17,813.20
Cor. #1	180 - 00 R	22.60	N 47 - 27 E		
84	164 - 34 L from	228.20	S 80 - 27 E		
85	0 - 59 L	134.22	S 81 - 26 E		
86	0 - 49 R	171.20	S 80 - 37 E		

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
87	0 - 50 $\frac{1}{2}$ R	249.14	S 79 - 46 $\frac{1}{2}$ E		
88	0 - 07 $\frac{1}{2}$ L	296.30	S 79 - 54 E		
89	0 - 00	20.38	S 79 - 54 E		
90	5 - 03 L	110.31	S 84 - 57 E		
91	7 - 43 R	248.92	S 77 - 14 E		
92	4 - 15 $\frac{1}{2}$ L	221.84	S 81 - 29 $\frac{1}{2}$ E		
93	1 - 54 R	137.89	S 79 - 35 $\frac{1}{2}$ E		
94	0 - 40 L	285.33	S 80 - 15 $\frac{1}{2}$ E		
95	1 - 48 $\frac{1}{2}$ R	224.12	S 78 - 27 E		
96	0 - 01 R	189.70	S 78 - 26 E		
97	0 - 14 R	88.48	S 78 - 12 E		
98	101 - 24 L	239.62	N 0 - 24 E		
99	0 - 28 $\frac{1}{2}$ L	295.58	N 0 - 04 $\frac{1}{2}$ W		
100	0 - 30 R	561.78	N 0 - 25 $\frac{1}{2}$ E		
101	4 - 17 $\frac{1}{2}$ R	173.48	N 4 - 43 E		
102	3 - 13 L	279.36	N 1 - 30 E		
103	3 - 17 R	92.20	N 4 - 47 E		
104	4 - 25 $\frac{1}{2}$ L	147.93	N 0 - 21 $\frac{1}{2}$ E		
105	1 - 44 $\frac{1}{2}$ R	157.84	N 2 - 06 E		
106	3 - 57 $\frac{1}{2}$ L	129.70	N 1 - 51 $\frac{1}{2}$ W		
107	0 - 00	24.55	N 1 - 51 $\frac{1}{2}$ W		
108	2 - 49 $\frac{1}{2}$	255.31	N 0 - 58 E		
109	0 - 00	297.88	N 0 - 58 E		
110	0 - 00	284.31	N 0 - 58 E		
111	0 - 13 $\frac{1}{2}$ L	150.22	N 0 - 44 $\frac{1}{2}$ E		
112	2 - 18 R	216.07	N 3 - 03 $\frac{1}{2}$ E		
113	6 - 00 $\frac{1}{2}$ L	261.16	N 2 - 57 W		

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
114	5 - 07 R	259.82	N 2 - 10 E		
115	0 - 47½ R	202.00	N 2 - 57½ E		
116	1 - 27 L	202.06	N 1 - 30½ E		
117	0 - 00	293.78	N 1 - 30½ E		
118	0 - 44 L	131.91	N 0 - 46½ E		
119	2 - 20 L	112.14	N 1 - 33½ W		
120	1 - 19 R	123.39	N 0 - 14½ W		
121	2 - 21 R	424.08	N 2 - 06½ E		
122	1 - 41 L	486.21	N 0 - 25½ E		
123	1 - 41 L	452.62	N 1 - 15½ W		
124	2 - 23 R	382.74	N 1 - 07½ E		
125	0 - 19½ R	862.32	N 1 - 27 E		
126	1 - 15 R	515.68	N 2 - 42 E		
127	2 - 22 L	213.35	N 0 - 20 E		
128	0 - 00	292.81	N 0 - 20 E		
129	5 - 04 L	292.32	N 4 - 44 W		
130	7 - 12½ R	127.70	N 2 - 28½ E		
131	2 - 15½ R	276.67	N 4 - 44 E		
132	4 - 46 L	170.94	N 0 - 02 W		
133	1 - 31 R	186.58	N 1 - 29 E		
134	6 - 18½ R	140.22	N 7 - 47½ E		
135	3 - 06 R	291.55	N 10 - 53½ E		
136	2 - 50 L	87.90	N 8 - 03½ E		
137	15 - 36 L	249.02	N 7 - 32½ W		
138	3 - 07 L	296.65	N 10 - 39½ W		
139	14 - 21 R	204.15	N 3 - 41½ E		
140	2 - 33 L	201.34	N 1 - 08½ E		

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
141	0 - 00				
		138.84	N 1 - 08 $\frac{1}{2}$ E		
142	0 - 42 $\frac{1}{2}$ L				
		194.98	N 0 - 26 E		
143	2 - 00 R				
		190.20	N 2 - 26 E		
144	0 - 14 L				
		409.44	N 2 - 12 E		
145	0 - 00				
		182.08	N 2 - 12 E		
146	91 - 32 $\frac{1}{2}$ L				
		430.93	N 89 - 20 $\frac{1}{2}$ W		
147	14 - 19 L				
		169.80	S 76 - 20 $\frac{1}{2}$ W		
1	104 - 53 $\frac{1}{2}$ R				
			N 1 - 19 E		
2					

Note: Corner No. 4 of the Monument was set at a point 0.38 feet south and 1.23 feet east from Station 98. The coordinates of this corner are:
N 7,892.16 ; E 20, 388.16

NOTES OF TRAVERSE FROM NORTHEAST CORNER OF D. P. N. M. TO
TRIANGULATION BASE ON PUMICE FLAT.

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
*6			N 12 - 01½ E	21,360.80	20,591.68
*7	24 - 57½ R	287.88	N 36 - 59 E		
B1	12 - 00 L	326.98	N 24 - 59 E		
B2	12 - 12 L	133.31	N 12 - 47 E		
B3	12 - 55½ R	219.61	N 25 - 42½ E		
B4	0 - 59 R	224.70	N 26 - 41½ E		
B5	10 - 56 L	239.18	N 15 - 44½ E		
B6	10 - 38½ R	329.92	N 26 - 23 E		
B7	14 - 32½ R	271.65	N 40 - 55½ E		
B8	9 - 25½ L	317.29	N 31 - 30 E		
B9	3 - 04 L	356.07	N 28 - 26 E		
Pumice S.	3 - 37½ L	2511.52	N 24 - 47½ E	23,730.78	21,853.03
Pumice N.	179 - 58½ R	903.86	S 24 - 46 W		
B10	0 - 02½ R	720.70	S 24 - 48½ W		
B11	0 - 01 L	886.96	S 24 - 47½ W		
B12	6 - 07 R	375.19	S 30 - 54½ W		
B13	5 - 15½ L	254.05	S 25 - 38 W		
B14	16 - 24½ R	305.31	S 42 - 02½ W		
B15	15 - 42 L	363.35	S 26 - 20½ W		
B16	9 - 12½ L	209.98	S 17 - 08 W		
B17	1 - 20 R	253.64	S 18 - 28 W		
B18	5 - 11½ R	218.13	S 23 - 38½ W		
B19	2 - 40 L	150.28	S 20 - 58½ W		
B20	7 - 12½ R	284.74	S 28 - 11 W		
B21	8 - 32 R	292.57	S 36 - 43 W		

* Station 6 and 7 are stations of Monument Boundary traverse, near Northeast corner of D.P.N.M. 33

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
Sta. 7	24 - 41 1				
Sta. 6			S 12 - 01 $\frac{1}{2}$ W		

NOTES OF TRIANGULATION FROM BASE ON PUMICE
FLAT TO STATION A - 19 NEAR SIERRA CREST.

Angle at " Pumice South " between " Pumice North " and " A -19 " =
50° 02.8958'

Angle at " Pumice North " between " Pumice South " and " A -19 " =
97° 51.83333'

Angle at " A - 19 " between " Pumice North " and " Pumice South " =
32° 05.2708'

These angular values are the adjusted means of at least four repetitions of the angles.

The base for triangulation, as included in the B-line traverse, was 2511.5233 feet, this value being the mean of three measurements. Length of the side (Pumice S - A-19), by calculation, was 4683.42 feet, and its bearing N 74° 51' E.

NOTES OF TRAVERSE CONNECTING TRIANGULATION
POINT "A-19" WITH GOVERNMENT SURVEY CORNER

The U. S. General Land Office survey corner is the corner of
Sections 30 and 31, T 38, R 27 E, and sections 25 and 36, T 38, R 26 E.
The traverse is initiated at this point.

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
A 1	0 -00			28,009.51	31,262.50
A 2	6 -28 L	204.63	S 76 - 27½ W		
A 3	11 -13 L	294.66	S 70 - 00 W		
A 4	4 -07½ R	204.50	S 58 - 47 W		
A 5	7 -28½ L	511.85	S 62 - 54½ W		
A 6	9 -57½ R	416.26	S 55 - 26 W		
A 7	9 -24 L	246.38	S 65 - 23½ W		
A 8	16 -11 R	289.13	S 55 - 59½ W		
A 9	14 - 56½ R	406.18	S 72 - 10½ W		
A 10	57 -30 R	156.60	S 87 - 07 W		
A 11	24 -32 L	242.58	N 35 - 23 W		
A 12	12 -45½ R	157.73	N 59 - 54½ W		
A 13	86 -39 L	410.74	N 47 - 09 W		
A 14	40 -25 R	544.71	S 46 - 12 W		
A 15	40 - 34 L	223.53	S 86 - 37 W		
A 16	31 -52 L	718.82	S 46 - 03 W		
A 17	18 -55 R	580.01	S 14 - 11 W		
A 18	9 -06 L	676.23	S 33 - 06 W		
A 19	178 -50 R	515.54	S 24 - 00 W		
A 20	13 -30½ L	511.08	N 22 - 52 E	24,954.79	26,373.65
A 21	48 -14 R	759.66	N 9 - 21½ E		
A 22	27 -27 L	458.45	N 57 - 35½ E		
		841.96	N 30 - 08½ E		

Station	Deflection Angle	Horizontal Distance	True Bearing	COORDINATES	
				NORTH	EAST
A23	5 - $44\frac{1}{2}$ R	269.46	N 35 - 53 E		
A24	1 - 16 R	493.35	N 37 - 09 E		
A25	12 - 07 L	289.29	N 25 - 02 E		
A26	40 - $38\frac{1}{2}$ R	291.75	N 65 - $40\frac{1}{2}$ E		
A27	22 - 16 R	248.94	N 87 - $56\frac{1}{2}$ E		
A28	18 - $03\frac{1}{2}$ L	281.55	N 69 - $53\frac{1}{2}$ E		
A29	31 - 06 R	402.78	S 79 - $00\frac{1}{2}$ E		
A30	18 - $38\frac{1}{2}$ L	196.52	N 82 - 21 E		
A31	32 - 04 R	412.39	S 65 - 35 E		
A32	7 - 26 R	463.37	S 58 - 09 E		
A33	38 - $23\frac{1}{2}$ L	390.10	N 83 - $27\frac{1}{2}$ E		
A34	19 - 55 R	403.43	S 76 - $37\frac{1}{2}$ E		
A35	60 - $09\frac{1}{2}$ L	380.03	N 43 - 13 E		
A 1	146 - $45\frac{1}{2}$ L		S 76 - $27\frac{1}{2}$ W		
A 2					

ROAD LOG

From Devil Postpile to Mammoth Post Office

Distances from automobile speedometer.

Elevations from aneroid barometer, taken at every profile break.

Mileage	Elevation	Remarks
0.00	7600	Ranger Tent, Soda Springs Meadow.
0.05	7610	North end of Soda Springs Meadow.
0.15	7640	
0.25	7690	
0.35	7710	Fork of roads, to Reds Meadow and Pumice Flat.
0.60	7740	
0.80	7760	
0.95	7740	
1.10	7700	South end Pumice Flat.
1.25	7680	Fork of road to W. to "The Islands".
1.35	7680	
1.50	7670	Creek, flows NW.
1.75	7670	Forest Guard's tent.
1.90	7685	
2.15	7730	
2.20	7770	
2.50	7840	
2.80	7945	
3.00	8025	Bend of road opposite Starkweather Lake.
3.15	8065	
3.45	8145	
3.60	8205	
3.70	8235	
3.75	8260	
3.80	8275	
3.85	8300	
3.90	8320	
3.95	8330	
4.25	8470	Creek, W.
4.60	8555	Side road to Agnew Meadow.
4.75	8655	
5.35	8860	Mine dump.
5.55	8950	
5.70	9000	
6.00	9080	Top of Pass, Sierra Nevada
6.55	8915	
6.75	8955	
7.05	8890	
7.35	8800	
7.60	8750	
8.00	8700	
8.25	8635	
8.45	8695	
8.55	8685	Dry Creek, N.E.

Mileage	Elevation	Remarks
8.60	8700	
8.75	8675	
8.85	8705	Low summit.
9.15	8635	
9.35	8595	
9.55	8540	Trail along dry creek, N.E.
9.75	8520	
10.10	8450	
10.20	8415	Earthquake fault.
10.25	8400	
10.55	8280	
10.85	8195	
11.05	8130	
11.30	8060	
11.45	8000	
11.65	7955	Junction of road to L.A. County Camp.
11.95	7900	
12.15	7860	
12.35	7800	
12.45	7800	
12.65	7795	
12.85	7790	
13.15	7775	
13.25	7765	Junction of road to N.E. to main highway;
13.55	7855	S. to Mammoth
14.05	7915	
14.35	7885	Cross roads: to N, long road to main highway;
		to E., short road to main highway; S, to
		Mammoth; W, to L.A. County Camp.
14.45	7875	Bridge over stream, runs E.
14.85	7895	Mammoth Post Office.



MAP

Showing Location of
Devil Postpile National Monument
with respect to
Yosemite National Park; Tie to
U. S. G. L. O. Survey Corner
and location of present road 1934.