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# ***ROAD LOG OF MONUMENT VALLEY NAVAJO TRIBAL PARK, UTAH AND ARIZONA***

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*Editors Note: The stratigraphic section from the guidebook paper is in an appendix at the end of the road log.*

## **INTRODUCTION**

On July 11, 1958, the Navajo Tribal Council created the Monument Valley Tribal Park by withdrawing 29,817 acres for protection and the development of tourism. The park contains the most spectacular mesas, buttes and pinnacles that rise above the high desert floor in the region. The park is located east of U.S. Highway 163. It is triangular-shaped with the north corner at Saddleback Butte, the southeast corner is 4.5 miles southeast of Rooster Rock and the south corner is 8 miles south of Wetherill Mesa (figure 1).

The oldest rocks exposed in the area of this log are the reddish-brown mudstones and siltstones of the Permian Organ Rock Shale. The upper half of this 600 foot thick unit is exposed around the base of the mesas and buttes. Above the Organ Rock is the Permian DeChelly Sandstone that forms the massive cliffs of the mesas, buttes and the pinnacles. It is a fine-grained, quartzose sandstone that has a reddish color due to hematitic coatings on the sand grains. This eolian unit is 400 feet thick in the park. Unconformably overlying the DeChelly is the Triassic Moenkopi Formation which is a thin redbed sequence capping many of the buttes. This sandstone and siltstone sequence is less than 200 feet thick in the Park. The thickness can vary due to channeling at the base of the overlying Shinarump. The Shinarump Conglomerate Member of the Triassic Chinle Formation unconformably overlies the Moenkopi. It consists of tan, cross-stratified sandstone and conglomerate averaging 50 feet thick. This resistant unit caps the large mesas and buttes (figure 2).

From the Visitor Center, a 17 mile unpaved, sometimes rough, valley loop drive takes one through the center of the park. The drive passes the spectacular mesas and buttes and pinnacles such as The Three Sisters, The Thumb, Totem Pole, and The Yei-Bi-Chei. To protect the privacy of Navajo families living in area and archeological sites, access to other parts of the park is by commercial guides only.

Information on commercial tours is available at the Visitor Center, as well as road conditions of the valley drive. Portions of the road log have been modified from Baars and others (1973).

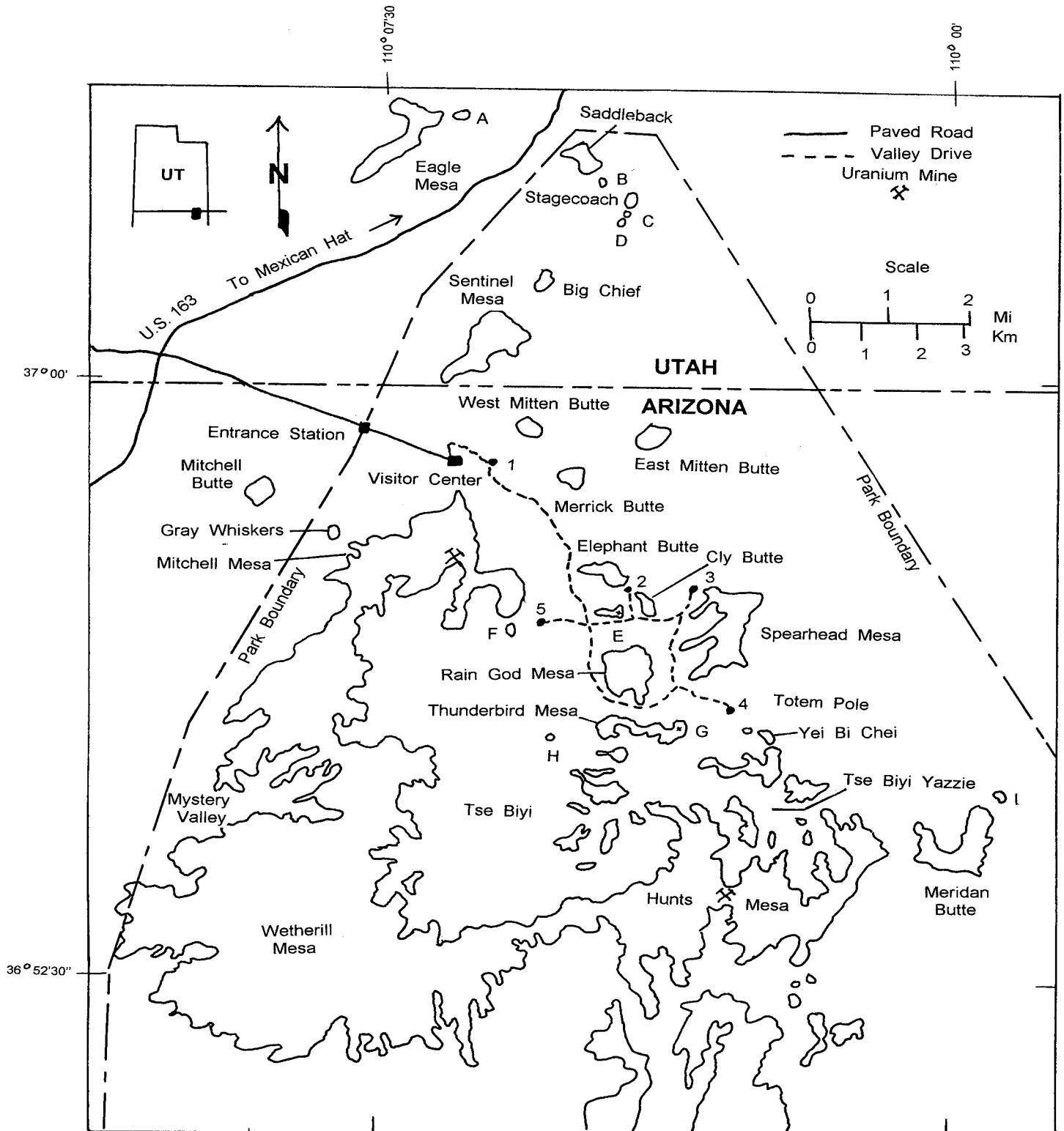


Figure 1. Index map of the northern part of Monument Valley Navajo Tribal Park showing prominent features, points of interest and stops in road log (1) Mitten Buttes; (2) North Window; (3) Artist Point; (4) Sand Springs; (5) John Ford's Point. Smaller features (A) Setting Hen; (B) King On His Throne; (C) Bear and Rabbit; (D) Castle Rock; (E) Thumb on Camel Butte; (F) Three Sisters; (G) Big Chair; (H) The Hub; (I) Rooster Rock. Map from Navajo Recreational Resources Department.

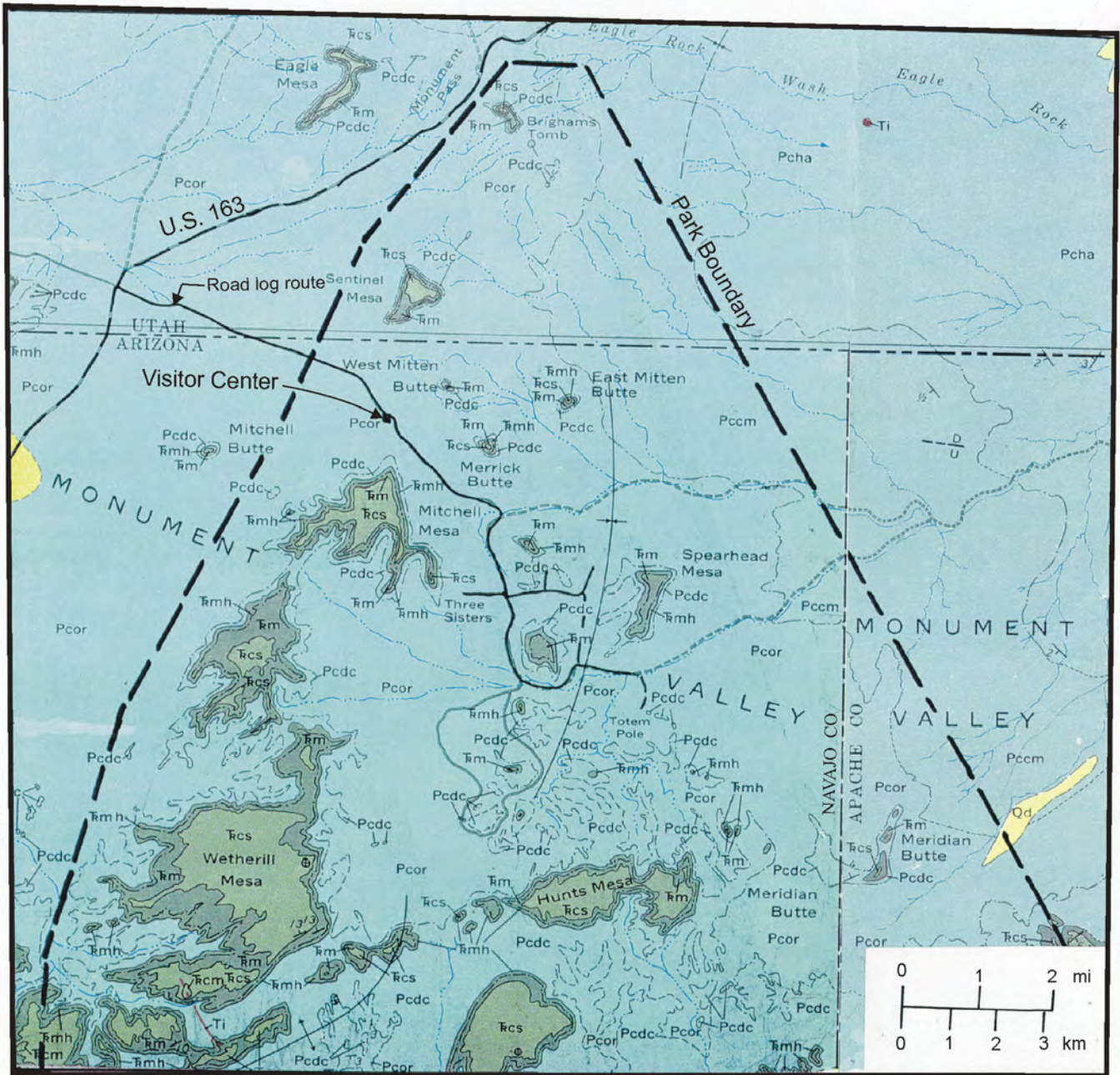


Figure 2. Geologic map of the northern part of Monument Valley Navajo Tribal Park. Geologic symbols: Pcha Halgaito Shale; Pcm Cedar Mesa Sandstone; Pcor Organ Rock Shale, Pcdc DeChelly Sandstone; Trmh Hoskinnini Member of Moenkopi Formation; Trm upper members of Moenkopi Formation; Trcs Shinarump Conglomerate Member of Chinle Formation; Trcm Monitor Butte Member of Chinle Formation; Qd dune sand; Ti intrusive igneous rocks. The alignment of U.S. Highway 163 has been changed since this map was published. Also, Sanddleback Butte is called Brighams Tomb on this map. From Cooley and others (1969).

## ROAD LOG

This log begins at a point on U.S. Highway 163 (figure 1), 19 miles south of the bridge over the San Juan River.

MILEAGE INTERVAL/CUMULATIVE	DESCRIPTION
0.0 0.0	<b>BEGIN - MONUMENT VALLEY JUNCTION, UTAH, TURN LEFT</b> on to park entrance road. Setting Hen at 9:00; Saddleback Butte at 9:45-10:00; between 10:00-10:30 is the two pinnacled King on His Throne, followed by Stagecoach, the narrow-pinnacled Bear and Rabbit, and Castle Rock. Big Chief is at 10:30. The long mesa from 10:30-11:00 is Sentinel Mesa. The East Mitten Butte lies over the ridge in the distance beyond the West Mitten Butte; Merrick Butte is at 12:00, Mitchell Mesa is from 1:00-2:30 behind Gray Whiskers Butte at 1:30 and the larger Mitchell Butte is at 3:00; the volcanic neck, Agathla Peak is at 3:00. The road is on the sand-covered Organ Rock Shale, near the top of the formation. The massive red cliffs forming the buttes and pinnacles is the DeChelly Sandstone. The larger buttes and mesas are capped by the resistant Shinarump Conglomerate Member of the Chinle Formation which is underlain by the thin, slope-forming Moenkopi Formation.
1.1 1.1	Approximate location of the Utah-Arizona State line. <b>ENTER ARIZONA.</b>
0.6 1.7	<b>STOP, ENTRANCE STATION.</b> Pay fees; \$2.50 per person between 8 and 59, Seniors are \$1.00, children seven and under are free. Park hours: May through September, 7 a.m. to 7 p.m. October through April, 8 a.m. to 5 p.m.; closed Christmas and Thanksgiving. National Park passes are not accepted at tribal parks.  Mitchell Butte is at 3:00; Gray Whiskers Butte at 2:00 with Mitchell Mesa in the background. Gray Whiskers is named for a Navajo medicine man. Hearndon Mitchell and Robert Merrick were prospectors. According to legend, in the 1879 the two men were repeatedly warned to keep out of the Monument Valley area where Chief Hoskininni had a rich silver mine. The story has it that they were both shot by irate Utes, the next year, at their campfire at the butte now called Mitchell. Mitchell was killed immediately, but Merrick lived to reach another butte three miles away where he died; Merrick Butte. The silver mine has never been found.
2.1 3.8	<b>RANGER STATION, VISITOR INFORMATION CENTER, HASKENEINI RESTAURANT. BEAR LEFT</b> for entrance to Valley Loop road.
0.2 4.0	<b>END OF BLACKTOP, SHARP RIGHT TURN, ROUGH ROAD.</b> Descend Observation Ridge, road cuts in the Organ Rock Shale.
0.2 4.2	Good view of the Mitten Buttes and Merrick Mitten Butte ahead and to the left.

- 0.2 4.4 **STOP-1. MITTEN OVERLOOK.** The Mitten Buttes are the most photographed features in Monument Valley (figure 3). They are almost east-west from each other and are about 1 1/4 miles apart, the Utah-Arizona State line is located approximately one half mile north of the buttes. The geologic section is well exposed on Merrick Butte - ascending - Organ Rock, DeChelly, Moenkopi, and Shinarump. Only a small remnant of Shinarump remains on the East Mitten and none is present on the West Mitten, only a small capping of Moenkopi.



Figure 3. West Mitten, East Mitten, and Merrick Buttes, Arizona. View from Stop 1 in road log. Steven Semken photo.

- 0.6 5.0 Road cuts in the Organ Rock Shale. Cross Merrick Wash, a dry tributary of West Gypsum Creek. West Mitten at 9:00; Merrick Butte at 10:30. Merrick Wash was dammed a few hundred feet downstream to form a pond used in several movies.
- 0.1 5.1 East Mitten is at 10:00, straight ahead the large mesa is Elephant Butte; flat-topped Camel Butte is at 12:30 behind Elephant Butte; Mitchell Mesa at 2:00-3:30.
- 0.8 5.9 Ute Mountains are visible at 9:00, the Carrizo Mountains on the skyline at 10:00; Three Sisters pinnacle at 2:00 on the east side of Mitchell Mesa.
- 0.7 6.6 Cross Mitchell Wash, another ephemeral drainage to West Gypsum Creek. Road is near the base of the Organ Rock Shale as it crosses wash.
- 0.1 6.7 Ascending ridge cut on the Organ Rock Shale. Good view of the Three Sisters ahead.

- 0.2 6.9 Three Sisters on the right; Elephant Butte on the left.
- 0.8 7.7 **THREE SISTERS JUNCTION, TURN LEFT** on Valley Loop road. Camel Butte on the left between 10:00 and 11:00; Spearhead Mesa at 12:00; Rain God Mesa from 1:00 to 2:30; Thunderbird Mesa at 3:30; the large mesa at 2:30, on the skyline, is Hunts Mesa.
- 0.5 8.2 The Thumb on the left is a pinnacle at the base of the east end of Camel Butte.
- 0.5 8.7 **NORTH WINDOW JUNCTION TURN LEFT AHEAD.**
- 0.5 9.2 **PARKING AREA, NORTH WINDOW, STOP 2.** A panoramic view of the Mitten Buttes from between Elephant Butte on the left and Cly Butte (named for a Navajo Medicine Man) on the right. A short walking trail leads around the tip of Cly Butte. **RETURN TO LOOP ROAD.**
- 0.4 9.6 **TURN LEFT ON TO LOOP ROAD.** Ahead is Spearhead Mesa; Rain God Mesa at 3:00.
- 0.4 10.0 The Abajo Mountains are visible on the skyline at 9:00. Cedar Mesa is to the left.
- 0.4 10.4 **ARTIST POINT JUNCTION, CONTINUE STRAIGHT AHEAD.** This road to Artist Point is the approximate northward trace of the Mitten Butte syncline.
- 0.3 10.7 **PARKING AREA, ARTIST POINT, STOP-3.** A vast panoramic view of the north part of the Park. West Gypsum Creek is visible in the valley floor ahead. Beyond the East Mitten are the North Buttes in Utah (figure 4): Stagecoach, Bear and Rabbit, Castle Rock and Big Chief. **RETURN TO LOOP ROAD AND CONTINUE STRAIGHT AHEAD.**
- 1.0 11.7 Large mesa on the left is Spearhead Mesa, on the right is Rain God Mesa.
- 0.3 12.0 **TOTEM POLE JUNCTION, BEAR LEFT TO SAND SPRINGS** (should be attempted only by high clearance, four-wheel drive vehicles due to drifting sand). Yei-Bi-Chei pinnacles with the Totem Pole are visible ahead (figure 5).
- 0.6 12.6 Cross Gypsum Creek.
- 0.1 12.7 Cross Sand Springs Wash.
- 0.2 12.9 **SAND SPRINGS STOP-4.** This is the famous photographed location for shepherding scenes on sand dunes that have symbolized Monument Valley. Sand Springs provides the best supply of scarce water in the valley (figure 6). The Totem Pole is the prominent pinnacle in front; the Yei-Bi-Chei pinnacles are to the left and

behind (figure 5). These pinnacles are named for their resemblance to the real dancers who appear on the ninth and last night of the Navajo winter religious ceremony called the Night Way. **RETRACE ROUTE TO TOTEM POLE JUNCTION.**

0.9 13.8 TOTEM POLE JUNCTION, **TURN LEFT.**



Figure 4. Storm over North Buttes, left to right, Saddleback, King On His Throne, Stagecoach, Bear and Rabbit, Castle Rock and Big Chief. View north into Utah. Chenoweth photo.



Figure 5. Totem Pole, right, and Yei-Bi-Chei pinnacles, left. Chenoweth photo.



Figure 6. Sand Springs, Stop 4 in the road log. Chenoweth photo.

- 0.2    14.0    **JUNCTION, TURN RIGHT**, Thunderbird Mesa is at 9:00. The east end of the mesa terminates in the Big Chair.
- 0.2    14.2    Gypsum Creek to the left. Good view of the Big Chair at 10:00.
- 0.4    14.6    Small Navajo settlement at 2:00.
- 0.3    14.9    **HUB JUNCTION, CONTINUE STRAIGHT AHEAD**. Small, dome-shaped butte of Organ Rock, in the middle distance, at 9:00 is called The Hub. The large mesa beyond is Wetherill Mesa, one of the largest mesas in Monument Valley and named for an early trader John Wetherill. The Three Sisters are at 1:00, in front of Mitchell Mesa.
- 1.3    16.2    **THREE SISTERS JUNCTION, TURN LEFT**.
- 0.4    16.6    **PARKING AREA, THREE SISTERS, STOP-5**. At the tip of Mitchell Mesa are the Three Sisters pinnacles. This tip of Mitchell Mesa has been named John Ford's Point for the Hollywood director John Ford who directed Stagecoach and other movies in Monument Valley. **RETRACE ROUTE TO THREE SISTERS JUNCTION**.
- 0.4    17.0    **THREE SISTERS JUNCTION. TURN LEFT TO RETURN TO VISITOR CENTER**.

**END OF LOG**



## **REFERENCES**

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