

**Bonneville Power Administration  
Geodetic Control Data Sheet**

Station: MJ010 (110)  
 Project: Wallula-Smiths Harbor-McNary  
 Section: NW 1/4 21      Township: 5 North      Range: 28 East      Meridian: Willamette  
 County: Umatilla      State: OR      USGS Quad: Umatilla, Oregon  
 Surveyor: M R Heidecke      Date Surveyed: July, 2001

Instrument:

The horizontal coordinates and orthometric elevation were established by GPS observations using six Trimble 4000 SSI dual frequency receivers with Compact L1/L2 antennae with ground plane.

Adjustment:

The Basis of Coordinates for this survey is the Oregon State Coordinate System, North Zone, NAD 83 (1998). The horizontal component of the least squares adjustment was constrained by holding NGS Stations B 340 (A), B 502 (B), PENDLETON (B), STANFIELD EAST BASE RESET (B), and BURDEN (B). The vertical component of the least squares adjustment was constrained by holding NGS Benchmarks B 340 (First Order Class II), B 502 (First Order Class II), BURDEN (Second Order Class II), V 203 (Second Order Class 0), G 640 (First Order Class I). The elevation for point 106, 201, 249, and 255 were determined by differential leveling from G 640, D 502, E 525 and F 431 respectively and held.

Horizontal Datum: NAD83 (1998)      Linear Unit: International Feet  
 Vertical Datum: NAVD88      Linear Unit: U.S. Survey Feet

Latitude: <u>N 45-54-15.73323</u>	Longitude: <u>W 119-19-11.82881</u>
US State Plane Coordinate System: <u>Oregon North Zone - 3601</u>	
Northing: <u>818,025.838</u>	Easting: <u>8,502,501.221</u>
Orthometric Elevation: <u>399.85</u>	Ellipsoid Height: <u>328.51</u>
Combined Factor: <u>0.99996142</u>	Convergence: <u>- 0-50-13</u>
Confidence: 95% Confidence ("1.96 Sigma") Values	
<u>Northing-0.009</u>	<u>Easting-0.007</u> <u>Elevation-0.106</u>

Monumentation: BPA 3/4-inch Aluminum Cap on 5/8-inch aluminum rod, flush with ground.  
 Stamping: U.S.D.O.E. Bonneville Pwr. Adm., MJ010 RYA 01

To-Reach Description:

Begin at Umatilla Post Office, Umatilla, OR. 97882. Drive west on Highway 730, 0.3 miles to Umatilla River Road, turn left (south) for 0.9 miles to Bonney Lane turn left (east) on Bonney Lane across railroad tracks and turn right (south) at intersection of dirt roads. Proceed south for 250 feet to a dirt road on the left that crosses a cultivated fields. Follow dirt road for 1100 feet to the station. Station lies at a complex of farm buildings at the northwest side. Station lies S73°W, 160 feet from a sprinkler pivot point.  
 Witness post is a yellow carsonite marker inscribed with BPA logo, bearing and distance to station.

**RECEIVED BY**  
**Umatilla County**  
 Date: \_\_\_\_\_  
 Rec'd By: \_\_\_\_\_  
 No. 02-19-9