Bonneville Power Administration Geodetic Control Data Sheet

Station:	_WM036 (236)					
Project:	Wallula-Smiths Harbor-McNary					
Section:	SE 1/4 10	Township: 5 North	Range:	30 East	Meridian:	10/:11
County:	Umatilla	State: OR		_ Juniper, Orego		_Willamette
Surveyor:	M R Heidecke		Date Surveyed:		,,,,	
				_0419, 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: N 45-55	-43.48235	ongitude: W 119-02-46.1	6235	

Latitude: N 45-55-43.48235	Longitude:	W 119-02-46.16235				
US State Plane Coordinate System		Oregon North Zone - 3601				
Northing: 828,048.962		8,572,034.028				
Orthometric Elevation: 1021		Ellipsoid Height: 951.08				
Combined Factor: 0.999937		Convergence: - 1-01-52				
Confidence: 95% Confidence ("1.96 Sigma") Values						
Northing-0.012	Easting-0.0					

Monumentation: BPA 31/4-inch Aluminum Cap on 5/8-inch aluminum rod, flush with ground.

Stamping: U.S.D.O.E. Bonneville Pwr. Adm., WM036 - FEC-01 - ATB - GPS

To-Reach Description:

Begin at Umatilla Post Office, Umatilla, OR. 97882. Drive east on Highway 730, 9.2 miles to intersection of State Highway #37 to right (south). Drive southeasterly on State Highway #37, 1.3 miles to intersect BPA 500kV transmission line crossing Highway #37 northeast to southwest. Drive northeasterly on the transmission line access road 2.9 miles to intersection of a Pacific Power & Light 230kV transmission line at PP&L structure 2/16. Drive north on the PP&L transmission line access road 0.4 miles to PP&L structure 5/16. Drive east on the PP&L line access road 0.6 miles to PP&L structure 2/17. The station is 181 feet north of the PP&L line.

Witness post is a yellow carsonite marker inscribed with BPA logo, bearing and distance to station.

RECEIVED BY Umatilla County Surveyor Date
Sac'd By 02-19-9