Bonneville Power Administration Geodetic Control Data Sheet

Station:	WM051 (251)					
Project:	Wallula-Smiths Harbor-M	/lcNary				
Section:	SE 1/4 13	Township: 5 North	Range:	28 East	Meridian:	Willamette
County:	Umatilla	State: OR	USGS Quad:	Hat Rock, Ore		_ •••••••••
Surveyor:	M R Heidecke		Date Surveyed:	-	3	

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 (199	8) Linear Unit:	International Feet		
Vertical Datum:	NAVD88	Linear Unit:	U.S. Survey Feet		
Latitude: N 45-					
l atitude: N 45-54-35 05862 Langitude: W 110 14 49 45226					

Northing-0	.009	Easting-0.	006	Elevation-0.103				
Confidence: 95% Confidence ("1.96 Sigma") Values								
Combined Factor:			Convergence: -	0-53-20				
Orthometric Elevation:			Ellipsoid Height:	425.74				
Northing: 820,263.5	93	Easting	8,521,093.588					
US State Plane Coording			Oregon North Zone - 3601					
Latitude: N 45-54-35.05862 Longitude: W 119-14-48.45226								

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., WM051 - FEC-01 - ATB - GPS

To-Reach Description:

Begin at Umatilla Post Office, Umatilla, OR. 97882. Drive east on Highway 730, 3.9 miles to station on left (north) side of road. Station is 49 feet from centerline of Highway 730.

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

RECEIVED BY
Umatilla County Surveyor
Date
Bee'd By