Bonneville Power Administration Geodetic Control Data Sheet

Station:	WM047 (247)						
Project:	Wallula-Smiths Harbor-M	cNary					
Section:	SE 1/4 27	Township:	5 North	Range:	29 East	Meridian:	Willamette
County:	Umatilla	State:	OR	USGS Quad:	Hat Rock, Ore	on	
Surveyor:	M R Heidecke			Date Surveyed:		, - · ·	
	-				-		

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	-52-54.38948	Longitude	Longitude: W 119-09-41.64265		
US State Plane C		Oregon North Zone - 3601			
Northing: 810,4		Easting	8,542,953.894		
Orthometric Eleva	ation: 568.0	3	Ellipsoid Height:	496.97	
Combined Factor:	0.9999483	8	Convergence: -		
Confidence: 95%	Confidence ("1.96	Sigma") Val	ues	-	
North	ning-0.008	Easting-0.	.006	Elevation-0.111	

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., WM047 - FEC-01 - ATB - GPS

To-Reach Description:

Begin at Umatilla Post Office, Umatilla, OR. 97882. Drive east on Highway 730, 5.3 miles to intersection of Craig Road to the right (south). Drive south on Craig Road 1.9 miles to the intersection of Umatilla County Road Walls Road to the left (east). Drive east on Walls Road 3.0 miles to the intersection of Marks Road to the left (north). Drive north on Marks Road 0.2 miles to the station, 24 feet east of centerline of Marks Road.

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

	RECEIVED BY
Um	atilla County Surveyor
Dat	
	'd By
No.	02-19-9