

**Project Definition:** The entire collection for a contracted area.

**Work Unit Definition:** A production block of data defined by the National Geospatial Technical Operations Center due to expediency, priority or resource allocation. There can be one or many work units per project.

### Project Information

<b>Lidar Base Specification:</b> 2.1	<b>Primary Contractor:</b> NV5 Geospatial, Inc
<b>Las Version:</b> 1.4	<b>Contract Mechanism:</b> Financial Assistance
<b>P Method:</b> 7 - Linear-Mode Lidar	
<b>Collection Start Date:</b> 11-05-2019	<b>Collection End Date:</b> 08-20-2020
<b>The National Map Email:</b> tnm_help@usgs.gov	

### Vertical Accuracy Results

The U.S. Geological Survey evaluates absolute vertical accuracy of the lidar and lidar-derived bare earth DEM data at the project level

Lidar Point Cloud	Required NVA RMSEz (cm)	Tested NVA RMSEz (cm)	Required NVA at 95% confidence level (cm)	Tested NVA at 95% confidence level (cm)	Required VVA at 95th percentile (cm)	Tested VVA at 95th percentile (cm)
	10.0	<b>4.99</b>	19.6	<b>9.79</b>	N/A	<b>21.12</b>

Digital Elevation Model	Required NVA RMSEz (cm)	Tested NVA RMSEz (cm)	Required NVA at 95% confidence level (cm)	Tested NVA at 95% confidence level (cm)	Required VVA at 95th percentile (cm)	Tested VVA at 95th percentile (cm)
	10.0	<b>5.05</b>	19.6	<b>9.90</b>	30.0	<b>20.12</b>

Please see the vertical\_accuracy folder within the project metadata for more information.

### Classifications Used

Classification verification is limited to the minimum required by applicable Lidar Base Specification. Classifications beyond the minimum are not verified by USGS.

Classification ID	Classification Type
1	Processed, but unclassified
2	Bare earth
7	Low noise
9	Water
17	Bridge deck
18	High noise
20	Ignored ground (typically breaklines proximity)

### Sensor(s) Used

**Sensor**

Riegl VQ-1560ii - Rotating Polygonal Mirror

## Work Unit Information

<a href="#">OR_UpperJohnDay_1_2020</a>	<b>Work Unit ID:</b> 190596	<b>Quality Level:</b> 1
<b>Horizontal EPSG Code:</b> 6557	<b>Vertical EPSG Code:</b> 8228	<b>Geoid Model:</b> GEOID12B
<b>DEM Ground Sample Distance:</b> 3.0	<b>Hydro Treatment:</b> hydro-flattened	
<b>Collection Start Date:</b> 2019-11-05	<b>Collection End Date:</b> 2020-08-20	