## DPH-12 Report on Use of the LAS Withheld Flag

The USGS Lidar Base Specification Version 1.3 states: "Outliers, blunders, geometrically unreliable points near the extreme edge of the swath, and any other points the data producer deems unusable are to be identified using the withheld bit flag, as defined in LAS specification version 1.4-R13 (ASPRS, 2011). The withheld bit flag is primarily used to denote points identified during preprocessing or through automated postprocessing routines as geometric blunders. Noise points subsequently identified during manual classification and quality assurance/quality control (QA/QC) are typically assigned the appropriate standard LAS classification values for noise–class 7 is used for low noise and class 18 is used for high noise. Noise classes are primarily used to denote points that are valid but not earth-bound (for example, birds) or spurious (for example, artificially induced deviations in elevation at or near land/water interfaces)."

The purpose of this section is to list the presence and quantities of points flagged as Withheld for all lidar data files.

<u>Data Source - Y:\Mapping\Projects\65220171 USGS-TX West Texas\Production\Fina L Client Deliverables\Lot10 utm13\point cloud\tilecls</u>

| Total Withheld points in class 1 (all files)   | 39724981 |
|--|----------|
| Total Withheld points (all classes, all files) | 39724981 |

## DPH-12 Report on Use of the LAS Withheld Flag - continued

The purpose of this section is to show the presence and extent of points flagged as Withheld for all lidar data files.

<u>Data Source - Y:\Mapping\Projects\65220171 USGS-TX West Texas\Production\Final Client Deliverables\Lot10 utm13 \point cloud\tilecls</u>

Result Path - Y:\Mapping\Projects\65220171 USGS-TX West Texas\Admin\QA QC\Lot10\DPH 12\Withheld.jpg

