1. **Test Dataset: AA500003**

**S‐58 Recommended ENC Validation Checks covered in this section:**

|  |  |
| --- | --- |
| **S‐58 Check** | **Description** |
| 27 | For each subfield which is not formatted in accordance with S-57. |
| 533 | If the UADT subfield of the DSID field is used in an ER file. |
| 560a | For all feature objects with the same FOID where the object class and attribute values are not identical. |
| 560b | For all feature objects with the same FOID where the geometric primitives are Point OR are not of the same geometric primitive. |
| 1522b | If the file extension is not “.000” AND the UADT subfield of the DSID field is notNull. |

**Secondary Errors**

Critical – 1016

Error –

Warnings – 503

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Dataset Name** | | AA500003 | | | **S-58 Check** | | 27 | | | **Type** | | C |
| **S-58 Description** | | For each subfield which is not formatted in accordance with S-57. | | | | | | | | | | |
| **Message** | | Subfield not formatted in accordance with S-57. | | | | | | | | | | |
| **Solution** | | Amend formatting of subfield value. | | | | | **Conformity** | | Part 3 (7.2.2.2) | | | |
| **Test Case No. 1** | | Added invalid format value for subfield of DSID.RCNM | | | | | | | | | | |
| **ASCII** |  | | | | | | | | | | | |
| **Expected Test Results** | | 27: Error “Subfield not formatted in accordance with S-57” must be triggered. | | | | | | | | | | |
| **Secondary Critical Errors** | | None | | | | | | | | | | |
|  | | | | | | | | | | | | |
| **Dataset Name** | | AA500003 | | | **S-58 Check** | | 533 | | | **Type** | | C |
| **S-58 Description** | | If the UADT subfield of the DSID field is used in an ER file. | | | | | | | | | | |
| **Message** | | DSID-UADT subfield populated in an ER file. | | | | | | | | | | |
| **Solution** | | Remove value of DSID-UADT subfield. | | | | | **Conformity** | | 5.7 | | | |
| **Test Case No. 1** | | DSID.UADT not empty in update file (AA500003.001). | | | | | | | | | | |
| **ASCII** | |  | | | | | | | | | | |
| **Expected Test Results** | | 533: An error “DSID-UADT subfield populated in an ER file” must be triggered. | | | | | | | | | | |
| **Secondary Critical Errors** | | 1522b: An additional error “UADT is notNull for an update” must be triggered. | | | | | | | | | | |
|  | | | | | | | | | | | | |
| **Dataset Name** | | AA500003 | | | **S-58 Check** | | 560a | | | **Type** | | C |
| **S-58 Description** | | For all feature objects with the same FOID where the object class and attribute values are not identical. | | | | | | | | | | |
| **Message** | | Objects with the same FOID do not have the same feature encoding. | | | | | | | | | | |
| **Solution** | | Ensure objects with the same FOID have the same object class and attribute values. | | | | | **Conformity** | | 3.1 | | | |
| **Test Case No. 1** | | Assigned same FOIDs for two same objects. | | | | | | | | | | |
| **Location** | | | **Feature** | **Attributes** | | **FRID** | | **FOID** | | | **VRID** | |
| 32°30'20.88"S 60°55'24.98"E | | | DEPCNT (L) | VALDCO= 2;SCAMIN=44999 | | FE-74 | | AA 0001214732 00001 | | | VE-48 | |
| 32°30'36.34"S 60°55'39.59"E | | | DEPCNT (L) | VALDCO= 5;SCAMIN=44999 | | FE-75 | | AA 0001214732 00001 | | | VE-30 | |
| **Screen Capture** | |  | | | | | | | | | | |
| **Expected Test Results** | | 560a: An error “Objects with the same FOID do not have the same feature encoding” must be triggered. | | | | | | | | | | |
| **Secondary Critical Errors** | | None | | | | | | | | | | |
| **Secondary Warning** | | 503: Duplicate FOIDs exist within the dataset. | | | | | | | | | | |
|  | | | | | | | | | | | | |
| **Dataset Name** | | AA500003 | | | **S-58 Check** | | 560b | | | **Type** | | C |
| **S-58 Description** | | For all feature objects with the same FOID where the geometric primitives are Point OR are not of the same geometric primitive. | | | | | | | | | | |
| **Message** | | Objects with the same FOID are of geometric primitive point or have different geometric primitives. | | | | | | | | | | |
| **Solution** | | Ensure point objects do not have the same FOID and that line and area objects which share FOIDs have the same geometric primitive. | | | | | **Conformity** | | 3.1 | | | |
| **Test Case No. 1** | | BUISGL (P & A) objects created with same FOID. | | | | | | | | | | |
| **Location** | | | **Feature** | **Attributes** | | **FRID** | | **FOID** | | | **VRID** | |
| 32°31'20.04"S 60°54'04.09"E | | | BUISGL (A) | SCAMIN=29999 | | FE-14 | | AA 0365234185 12345 | | | VE-146 | |
| 32°31'15.51"S 60°54'02.85"E | | | BUISGL (P) | SCAMIN=29999 | | FE-22 | | AA 0365234185 12345 | | | VI-04 | |
| **Screen Capture** | |  | | | | | | | | | | |
| **Expected Test Results** | | 560b: An error “Objects with the same FOID are of geometric primitive point or have different geometric primitives” must be triggered. | | | | | | | | | | |
| **Secondary Critical Errors** | | None | | | | | | | | | | |
| **Secondary Warning** | | 503: Duplicate FOIDs exist within the dataset. | | | | | | | | | | |
|  | | | | | | | | | | | | |
| **Dataset Name** | | AA500003 | | | **S-58 Check** | | 1522b | | | **Type** | | C |
| **S-58 Description** | | If the file extension is not “.000” AND the UADT subfield of the DSID field is notNull. | | | | | | | | | | |
| **Message** | | UADT is notNull for an update. | | | | | | | | | | |
| **Solution** | | Encode UADT as empty subfield value. | | | | | **Conformity** | | 2.2.2 and Appendix B.1 (5.7 and 6.1.4) | | | |
| **Test Case No. 1** | | UADT value assigned in update file (AA500003.001). | | | | | | | | | | |
| **Screen Capture** | |  | | | | | | | | | | |
| **Expected Test Results** | | 1522b: An error “UADT is notNull for an update” should be triggered. | | | | | | | | | | |
| **Secondary Critical Errors** | | 533: An additional error “DSID-UADT subfield populated in an ER file” must be triggered. | | | | | | | | | | |