1. **Test Dataset: AA400006**

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

|  |  |
| --- | --- |
| **S‐58 Check** | **Description** |
| 2 | For each edge which does not have a beginning or end node. |
| 12 | For each feature object (excluding C\_AGGR and C\_ASSO collection objects) which does not reference a spatial record. |
| 523 | If the HDAT subfield of the DSPM field is Not equal to 2 (WGS 84). |

**Secondary Errors**

Critical – 22, 25c, 26a

Error – None

Warnings – 571

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Dataset Name** | AA400006 | | | | **S‐58 Check** | | 2 | | | **Type** | | C |
| **S-58 Description** | For each edge which does not have a beginning or end node. | | | | | | | | | | | |
| **Message** | VE edge missing beginning or end node. | | | | | | | | | | | |
| **Solution** | Add nodes as required. | | | | | | **Conformity** | | Part 2 (2.2.1.2) | | | |
| **Test Case No. 1** | Captured SLCONS (L) features have been created which does not have a beginning node. | | | | | | | | | | | |
| **Location** | | **Feature** | **Attributes** | | | **FRID** | | **FOID** | | | **VRID** | |
| 32°28'37.87"S 60°54'00.63"E | | SLCONS | CATSLC=1; WATLEV=2 | | | FE-76 | | AA 1519908281 00001 | | | VE-84 | |
| **ASCII** | 0001: <158>  VRID: <130><84><1><1>  VRPT: <<120><73>><255><255><2><255>  SG2D: <-324809038><608977568> | | | | | | | | | | | |
| **Expected Test Results** | Error “VE edge missing beginning or end node” must be triggered. | | | | | | | | | | | |
| **Secondary Critical Errors** | 22: An additional error “Beginning and end node are not in the correct sequence”  25c: An additional error “ beginning or end nodes not referenced by vector record pointer” | | | | | | | | | | | |
| **Test Case No. 2** | Captured SLCONS (L) features have been created which does not have an end node. | | | | | | | | | | | |
| **Location** | | **Feature** | **Attributes** | | | **FRID** | | **FOID** | | | **VRID** | |
| 32°28'54.89"S 60°53'41.11"E | | SLCONS (L) | CATSLC=4; WATLEV=2 | | | FE-77 | | AA 1519908554 00001 | | | VE-85 | |
| **ASCII** | 0001: <159>  VRID: <130><85><1><1>  VRPT: <<120><74>><255><255><1><255>  SG2D: <-324837285><608961159> | | | | | | | | | | | |
| **Expected Test Results** | An error “Edge does not point to two nodes” must be triggered. | | | | | | | | | | | |
| **Secondary Critical Errors** | None | | | | | | | | | | | |
|  | | | | | | | | | | | | |
| **Dataset Name** | AA400006 | | | | **S‐58 Check** | | 12 | | | **Type** | | C |
| **S-58 Description** | For each feature object (excluding C\_AGGR and C\_ASSO collection objects) which does not reference a spatial record. | | | | | | | | | | | |
| **Message** | Feature object without geometry. | | | | | | | | | | | |
| **Solution** | Remove the feature object or reference the feature object to a spatial record of allowable geometric primitive. | | | | | | **Conformity** | | Part 3 (4.7) | | | |
| **Test Case No. 1** | ADMARE feature has been created without geometry. | | | | | | | | | | | |
| **Location** | | **Feature** | **Attributes** | | | **FRID** | | **FOID** | | | **VRID** | |
| - | | ADMARE (A) | JRSDTN=3 | | | FE-75 | | AA 1523707147 00003 | | | - | |
| **Screen Capture** | - | | | | | | | | | | | |
| **Expected Test Results** | 12: An error “object has no geometry Administration area” must be triggered. | | | | | | | | | | | |
| **Secondary Critical Errors** | None | | | | | | | | | | | |
|  | | | | | | | | | | | | |
| **Dataset Name** | AA400006 | | | | **S-58 Check** | | 523 | | | **Type** | | C |
| **S-58 Description** | If the HDAT subfield of the DSPM field is Not equal to 2 (WGS 84). | | | | | | | | | | | |
| **Message** | HDAT does not equal 2 (WGS 84). | | | | | | | | | | | |
| **Solution** | Set the HDAT subfield to 2 (WGS 84). | | | | | | **Conformity** | | 4.1 | | | |
| **Test Case No. 1** | HDAT subfield changed to WGS72. | | | | | | | | | | | |
| **Record** | | | | **Subfield** | | | | | | | | |
| DSPM - Data set Parameter field | | | | HADT – Horizontal geodetic datum | | | | | | | | |
| **ASCII** | 0001: <2>  DSPM: <20><1><1><17><10><45000><1><1><1><1><10000000><10>! | | | | | | | | | | | |
| **Expected Test Results** | 523: An error “HDAT does not equal 2 (WGS 84)” must be triggered. | | | | | | | | | | | |
| **Secondary Critical Errors** | None | | | | | | | | | | | |