1. **Test Dataset: AA400017**

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

|  |  |
| --- | --- |
| **S‐58 Check** | **Description** |
| 99 | For SG3D that contains > 8250 3D coordinates |
| 100 | For SG2D that contains > 12375 2D coordinates |
| 101 | For FSPT that references > 12375 VRID records |

**Secondary Errors**

Critical – 505, 1726

Error – 81, 549

Warnings – 19, 515, 571

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Dataset Name** | AA400017 | | | **S‐58 Check** | | 99 | | | **Type** | C |
| **S-58 Description** | For SG3D that contains > 8250 3D coordinates | | | | | | | | | |
| **Message** | Sounding bundle contains more than 8250 individual depths | | | | | | | | | |
| **Solution** | Split sounding references SG3D. | | | | | **Conformity** | | Part 3 (2.7). | | |
| **Test Case No. 1** | SOUNDG feature referencing a SG3D record with 8281 3D coordinates. | | | | | | | | | |
| **Location** | | **Feature** | **Attributes** | | **FRID** | | **FOID** | | | **VRID** |
| 32°28'S 61°18'E | | SOUNDG | QUASOU = 1;  TECSOU = 14;  SCAMIN = 59999 | | FE-06 | | AA 0020018805 00002 | | | VI-01 |
| **Screen Capture** |  | | | | | | | | | |
| **Expected Test Results** | 99: 1 errors “Sounding bundle contains more than 8250 individual depths” must be triggered. | | | | | | | | | |
| **Secondary Critical Errors** | None | | | | | | | | | |
|  | | | | | | | | | | |
| **Dataset Name** | AA400017 | | | **S‐58 Check** | | 100 | | | **Type** | C |
| **S-58 Description** | For SG2D that contains > 12375 2D coordinates. | | | | | | | | | |
| **Message** | Edge contains more than 12375 coordinates. | | | | | | | | | |
| **Solution** | Split or optimise geometry. | | | | | **Conformity** | | Part 3 (2.7) . | | |
| **Test Case No. 1** | ROADWY references a SG2D edge with 12385 coordinates. | | | | | | | | | |
| **Location** | | **Feature** | **Attributes** | | **FRID** | | **FOID** | | | **VRID** |
| 32°28'19"S 61°22'11"E | | ROADWY(L) | CATROD = 2;  STATUS = 1;  NATCON = 4; | | FE-03 | | AA 0020018802 00002 | | | VE-12383 |
| **Screen Capture** |  | | | | | | | | | |
| **Expected Test Results** | 100: An error “Edge contains more than 12375 coordinates” must be triggered. | | | | | | | | | |
| **Secondary Critical Errors** | None. | | | | | | | | | |
|  | | | | | | | | | | |
| **Dataset Name** | AA400017 | | | **S‐58 Check** | | 101 | | | **Type** | C |
| **S-58 Description** | For FSPT that references > 12375 VRID records. | | | | | | | | | |
| **Message** | FSPT record contains references to more than 12375 spatial records. | | | | | | | | | |
| **Solution** | Optimise geometry, merging referenced edges where possible . | | | | | **Conformity** | | Part 3 (2.7) | | |
| **Test Case No. 1** | COALNE (L) feature references 12380 edges. | | | | | | | | | |
| **Location** | | **Feature** | **Attributes** | | **FRID** | | **FOID** | | | **VRID** |
| 32°27'30"S 61°18'22"E | | COALNE (L) | CATCOA=5 | | FE-05 | | AA 0020018804 00002 | | | VE-01 to VE-12380; |
| **Screen Capture** |  | | | | | | | | | |
| **Expected Test Results** | 101 : error “FSPT record contains references to more than 12375 spatial records” must be triggered. | | | | | | | | | |
| **Secondary Critical Errors** | None. | | | | | | | | | |
|  | | | | | | | | | | |
| **Test Case No. 2** | LNDARE (A) feature references 12381 edges.. | | | | | | | | | |
| **Location** | | **Feature** | **Attributes** | | **FRID** | | **FOID** | | | **VRID** |
| 32°26'S 61°18'E | | LNDARE (A) |  | | FE-02 | | AA 0020018804 00002 | | | VE-01 to VE-12381; |
| **Screen Capture** |  | | | | | | | | | |
| **Expected Test Results** | 101 : error “FSPT record contains references to more than 12375 spatial records” must be triggered. | | | | | | | | | |
| **Secondary Critical Errors** | None. | | | | | | | | | |
|  | | | | | | | | | | |
| **Test Case No. 3** | DEPARE (A) feature references 12381 edges.. | | | | | | | | | |
| **Location** | | **Feature** | **Attributes** | | **FRID** | | **FOID** | | | **VRID** |
| 32°28'S 61°18'E | | DEPARE (A) | DRVAL1 = 0;  DRVAL2 = 10;  QUASOU = 1; | | FE-04 | | AA 0020018803 00002 | | | VE-01 to VE-12380;  VE-12382; |
| **Screen Capture** |  | | | | | | | | | |
| **Expected Test Results** | 101 : error “FSPT record contains references to more than 12375 spatial records” must be triggered. | | | | | | | | | |
| **Secondary Critical Errors** | None. | | | | | | | | | |