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August 4, 2017

Dennis Lee, P.E.
Program and Project Supervisor
Gas Safety and Reliability Branch – Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

Dear Mr. Lee,

In response to the CPUC – SED's June 26, 2017 closure letter, regarding the October, 2016, **General Order 112 Transmission Integrity Management Program (TIMP) Inspection of Wild Goose Gas Storage (WGS)**, attached please find an update addressing items that had been identified in the SED's report, related to the WGS 30" pipeline High Consequence Area (HCA).

GTS Engineering performed an analysis, on behalf of WGS, on the HCA / class location boundaries. A copy of the "Wild Goose Storage HCA Analysis" report is attached. WGS believes that the information provided will satisfy questions that had been raised by the SED, pertaining to the HCA and Maximum Allowable Operating Pressure (MAOP). The following sections have been updated in the closure report:

4. PHMSA Form 16, Question 5
Pressure Test Results (confirm) Do the test records validate the pressure test?

8. PHMSA Form 16, Question 8
IM High Consequence Areas - Identification Method 1 (Class Locations) (detail) *Do records demonstrate that application of the 192.903 High Consequence Area definition (1) for the identification of HCAs was adequate?*

The additional comments that have been added to the SED's closure report by WGS, were placed beneath the latest *"SED's Conclusion"*, under the heading "*WGS Response (Aug 4/17)*".

The Integrity Management Plan (IMP) and Master Data Sheet (MDS) will be updated following the annual WGS IMP review, which is scheduled for mid-August, 2017. Field verification / validation of ILI data is tentatively scheduled for September – October, 2017.

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Should the SED have any questions, please don't hesitate to contact the undersigned at 403-513-8657, or by email at mathieu.fournier@rockpointgs.com .

Sincerely,

Mathieu Fournier
Vice President, Engineering & Operations
Rockpoint Gas Storage

Attachments

Cc:
Kenneth Bruno, CPUC SED
Terence Eng, CPUC SED
Kelly Dolcini, CPUC SED
Paul Penney, CPUC SED
Pat Baynard, WGS Eng/Ops
Gary Theberge, WGS Eng/Ops

SUMMARY OF INSPECTION FINDINGS

A. Probable Violations

4. PHMSA Form 16, Question 5
   Pressure Test Results (confirm) Do the test records validate the pressure test?
   (AR.PTI.PRESSTESTRESULT.R) (confirm)
   192.517(a) (192.505(a); 192.505(b); 192.505(c); 192.505(d); 192.505(e); 192.507(a); 192.507(b); 192.507(c); 192.513(a); 192.513(b); 192.513(c); 192.513(d); 192.517(b); 192.617; 192.619(a); 192.919(e); 192.921(a)(2))

For the sampling of records reviewed, the test records do validate that the pressure tests were conducted per the requirements of Part 192.

The original hydro-test was done in 2003; it was not an "integrity assessment." WGS did the first ILI assessment in 2007; see the IMP[1], Section 5.12, page 17. The second ILI assessment was done in 2014.

While reviewing data from WGS's Master Data Sheet (MDS), we noted a discrepancy between the "System MAOP", identified as 1050 psig, and the "System MAOP" SED staff calculated as 1022 psig. The calculation was made using Part 192.619(a) referenced above in the protocol question and reproduced here.

WGS's Response:
WGS believes there is an error in the MDS and is in the process of verifying the accuracy of the document. The only segment containing an HCA should be segment #68. The minimum wall thickness of pipe within this segment is 0.625". The MAOP spreadsheet, which had been prepared by the engineering company that designed and managed construction of the 30" pipeline (Rooney Engineering), and was shared with the CPUC during the audit (titled "Wild Goose Storage LLC, 30" Pipeline Specifications"- copy is attached), shows that segment #68 is solely X70 grade 30" OD x 0.625" wall thickness pipe.

The "System MAOP" SED staff calculated as 1022 psi (as detailed below) has assumed that a portion of the HCA was only 0.438" wall thickness:

P= (2 St/D) x F x E x T= (2 x (70,000 psi) x (0.438 inch)/30 inch) x (0.5) x (1) x (1)
P= 1022 psi

The correct design pressure for the HCA segment of the pipeline (#68) equates to 1,458 psig based on the following calculation:

P= (2 St/D) x F x E x T= (2 x (70,000 psi) x (0.625 inch)/30 inch) x (0.5) x (1) x (1)

[1] The IMP is entitled "WGS_IMP_Manual_Aug_2015_rev_2016_01_12 _with_changes_accepted."

P= 1,458 psi

However, since the HCA portion of the 30" pipeline was hydro-tested to 1,839 psig, and applying the Class 3 scaling factor of 1.5, the MAOP equates to 1,226 psig. The remainder of the 30" pipeline is in a Class 1 location and has an MAOP of 1,448 psig, based on minimum hydro-test pressure of 1,811 psig and a scaling factor of 1.25.

Note that under the "Design and Construction" section of the Master Data Sheet (MDS), the term "MAOP (psig)" was incorrectly labeled, and should have been identified as "MOP (psig)" (Maximum Operating Pressure). The 1,050 psig pressure that was referenced in the MDS is not the MOP of the WGS pipeline, but the MOP that WGS can deliver into PG&E's system at the Delevan Meter Station, and therefore should not have been used in the MDS sheet. As mentioned earlier, the 30" pipeline has an MAOP of 1,226 psig (based on hydrotest pressure within the HCA section which has the most stringent scaling factor). Also note in the MDS, that the desired "DP (psig)" (Design Pressure) is indeed 1,200 psig, as indicated, while the hydro-test results actually allow for an MAOP of 1,226 psig. The MDS will be edited with the correct information.

49 CFR §192.619(a) states:
"No person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following:

(1) The design pressure of the weakest element in the segment, determined in accordance with subparts C and D of this part…

(2) The pressure obtained by dividing the pressure to which the segment was tested after construction as follows…
(ii) For steel pipe operated at 100 p.s.i. (689 kPa) gage or more, the test pressure is divided by a factor determined in accordance with the following table…"

Class location	Factors[1], segment—		
	Installed before (Nov. 12, 1970)	Installed after (Nov. 11, 1970)	Converted under §192.14
1	1.1	1.1	1.25
2	1.25	1.25	1.25
3	1.4	1.5	1.5
4	1.4	1.5	1.5

The MAOP must be determined by the lowest value between the design pressure for the weakest element in the Class 3 HCA segments and the hydro-test pressure divided by the appropriate scaling factor.

As noted in the MDS, the class 3 location encompasses four segments (68, 69, 70 and 71). Three of these segments have a wall thickness of 0.438 inches and one has a wall thickness of 0.625 inches. Using the design formula in Part 192.105 for the thinnest pipe wall thickness of 0.438 inches, we have the following:

P= (2 St/D) x F x E x T= (2 x (70,000 psi) x (0.438 inch)/30 inch) x (0.5) x (1) x (1)
P= 1022 psi

The design pressure is 1022 psig. The minimum hydro-test pressure was 1848 psig; using the appropriate scaling factor of 1.5 from the table above, the MAOP by hydro-test is 1232 psig. Per the requirements of 192.619(a), the lower of these two must be chosen. Thus, the "System MAOP" should be 1022 psig.

WGS is therefore in violation of 192.619(a).

WGS's Response:

Please refer to the explanation WGS has respectfully submitted above, which provides details on the MAOP calculation, and should resolve the issue of the MAOP for Class 3 HCA segment #68.

SED's Conclusion:

SED staff agrees that if only Segment #68 is in the HCA, then the "System MAOP" can be a maximum of 1,226 psig based on the hydro-test pressure.

SED staff will leave this item open pending WGS's confirmation that only Segment #68 is in the class 3 location. Please provide an update as soon as practical. Also, during the upcoming TIMP audit, SED staff will look at records verifying that only Segment #68 is within the HCA.

WGS's Response (Aug 4/17):

An assessment of the HCA boundary was performed by GTS Engineering, titled "Wild Goose Storage HCA Analysis", and dated August 2, 2017. The analysis indicates that the HCA location extends beyond Class 3 segment #68 heavy wall piping, including sections of Class 2 and Class 1 piping. MAOP calculations show that the HCA piping sufficiently meets an MAOP of 1,226 psig. Below is an excerpt from the "Wild Goose HCA Analysis" report:

"HCA Pipe Operation:

To verify the acceptable operating pressures of the pipe within the HCA boundaries, calculations were performed to determine the operating SMYS at the MOP of the system. The results are shown in Table 3 below.

Class	*Pipe Diameter*	*Wall Thickness*	*Grade*	*%SMYS at MOP of 1200 psig*	*%SMYS at MAOP of 1226 psig*
3	*30"*	*0.625"*	*X-70*	*41.14%*	*42.03%*
2	*30"*	*0.625"*	*X-70*	*41.14%*	*42.03%*
2	*30"*	*0.438"*	*X-70*	*58.71%*	*59.98%*
1	*30"*	*0.438"*	*X-70*	*58.71%*	*59.98%*

(% SMYS at MOP)

49 CFR §192.111 specifies that pipe in a Class 3 Location must operate under 50% SMYS, Class 2 pipe must operate under 60% of SMYS and Class 1 pipe must operate under 72% of SMYS. Since the pipe meets these requirements for its current MOP of 1200 psig, no changes to the defined Maximum Operating Pressure is required on account of the class location and HCA findings of this report.

Findings:
The class locations and HCA boundaries described in this report were generated by applying the regulations set by 49 CFR §192.5 & §192.903. The boundaries of each class location were determined as shown in Table 1. Boundaries of the HCA are shown in Table 2.
***As the pipe meets requirements set by 49 CFR §192 for operating pressure, no operational changes will be needed to continue operation at the current MOP of 1200 psig.*"**

8. PHMSA Form 16, Question 8
IM High Consequence Areas - Identification Method 1 (Class Locations) (detail) *Do records demonstrate that application of the 192.903 High Consequence Area definition (1) for the identification of HCAs was adequate? (IM.HC.HCAMETHOD1.R) (detail) 192.947(d) (192.903 (1)(i); 192.903(1)(ii); 192.903(1)(iii); 192.903(1)(iv))*

CONCERN #1:
No violations of the code sections cited above for Method 1 have been identified so far. However, there does appear to be a discrepancy between the extents of the HCA based on two documents provided by WGS. These documents are the "Wild Goose Storage Line 400 MAOP Determination" and the MDS. For the MAOP Determination document, the extent of the Class 3 area is from Station 987+46 to Station 997+60. For the MDS, the extent is from 986+89 to 1057+27. Please explain the apparent discrepancy, and identify the true extent of the HCA based on Method 1 consistent with the engineering stationing format.

WGS's Response:
WGS is working with the engineering company that designed and managed construction of the 30" pipeline (Rooney Engineering) to clarify how the extents of the HCA were determined. Once the extents of the HCA are confirmed, WGS will update and/or reconcile the appropriate documents, such as the MDS and/or MAOP Determination document, as necessary.

SED's Conclusion:
This item is related to item 4 (Question 5) above, which discussed the "System MAOP." If the true extent of the HCA only encompasses Segment #68, then this will help define the true extent of the engineering stationing.

WGS's response adequately addresses this concern. However, SED staff will also leave this item open pending WGS's update to SED staff about the true engineering extent of the HCA.

WGS's Response (Aug 4/17):
As discussed in "WGS's Response (Aug 4/17)" to item 4, an analysis was performed by GTS Engineering to confirm the HCA boundary. The assessment resolved that the HCA is between Station 978+51 to Station 1010+68. This was determined using a combination of information that's explained in detail within the HCA Analysis report. Based on the analysis, the HCA encompasses a portion of pipeline Segment's #67, #69

and all of Segment #68. The MDS will be updated following the annual WGS IMP review, which is scheduled for mid-August 2017. The revised HCA boundary does not impact the pipeline MAOP, which is 1,226 psig.

Wild Goose Storage

HCA Analysis

08/02/2017

Prepared by:

GTS
Engineering & Consulting

Overview:

GTS has been tasked with verifying the boundaries of a High Consequence Area (HCA) for Wild Goose Storage (WGS) that's adjacent their 30" sales pipeline near MP 18.80 between Butler Rd and the Diablo Meridian Canal. The HCA verification is being driven by findings from a CPUC audit letter dated June 26, 2017 which outlines item 8 in the letter requesting clarification and a final determination of conflicting HCA stations that were presented in multiple documents provided to the CPUC from WGS. While the majority of 30" pipeline is located within Class 1 location areas, the presence of a plot of land with multiple mobile homes and permanent structures at this particular section of line requires careful consideration to ensure the line is operated in compliance with the Integrity Management requirements outlined in 49 CFR §192 Subpart O. This report provides an analysis of the location in question and determines the HCA station boundaries for Wild Goose Storage's 30" pipeline per regulations set by 49 CFR §192.

Methodology:

To evaluate the HCA location GTS first gathered the following documents:

Title	Date	Description
Line 400 Interconnect Gas Transmission Line As-Built Drawing	10/06/2003	Original As-Built drawings for installation of the 30" line.
Line 400 Interconnect Gas Transmission Line As-Built	05/17/2017	As-Built drawings with updated Class 3 stationing.
2014 Colusa to Butte 438352_30A MFC Pipeline Listing.	12/23/2014	ILI run results from 2014.
Welds.xls	2003	GPS information for welds on the 30" line.

This documentation was used to verify the pipeline location and specifications in the immediate vicinity of the HCA location. Once the documents were gathered, a site visit was performed to verify the conditions of the site to aerial images observed from Google Earth. Copies of the above documents will be attached alongside this report.

Next, a class location analysis was performed which subsequently applied HCA requirements from 49 CFR §192 to provide a final determination of the HCA stations.

GTS used the 2014 ILI run data as well as the weld GPS coordinates to correlate the existing pipeline stationing to the aerial image analysis performed in order to determine stationing to apply it to the class location and HCA analysis findings. This was done by identifying two (2) 13^{o} bends shown in the As-Built documentation in the ILI data and using these as points of reference in the ILI data to provide footage information used to calculate the stations determined in the class location and HCA analysis. See Appendix B below for additional information on how the ILI data was used.

All pipe footages and stationing shown in this report are based on the 2014 ILI run data.

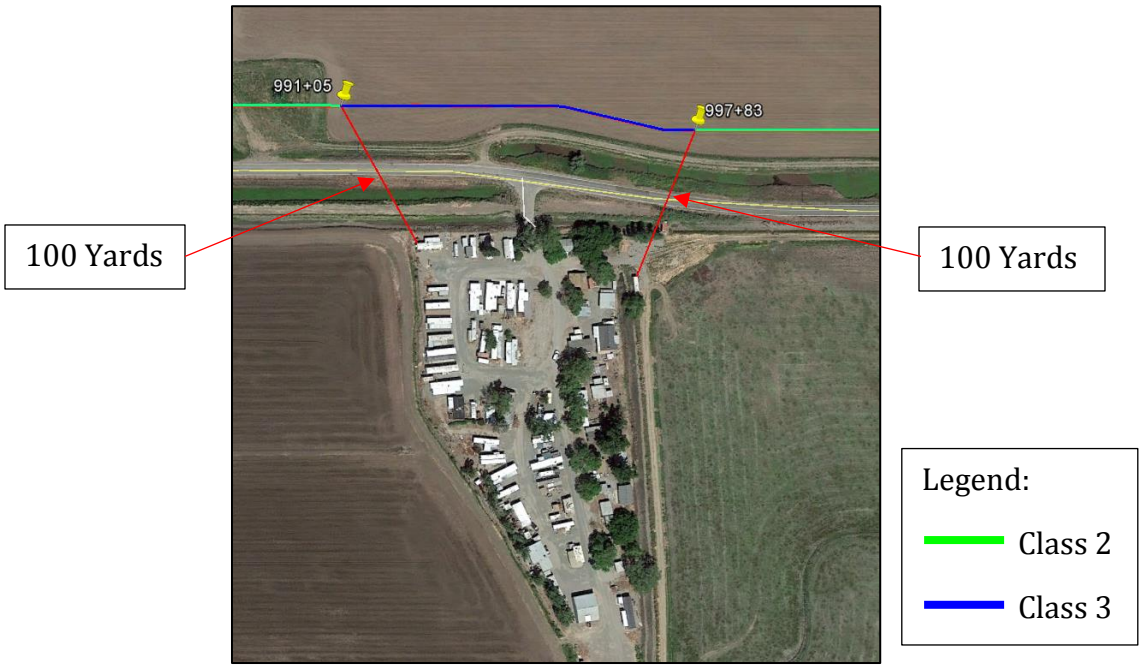
Finally, during the course of this analysis it was concluded that despite aerial images and a site visit, permanent or temporary occupancy of the homes could not be determined. As such, this analysis assumed that all identified buildings were occupied full time for the purposes of determining class location and HCA boundaries.

Class Location Analysis:

Class Location was determined per definitions from 49 CFR §192.5. Section (3)(ii) defines the applicable Class 3 area as:

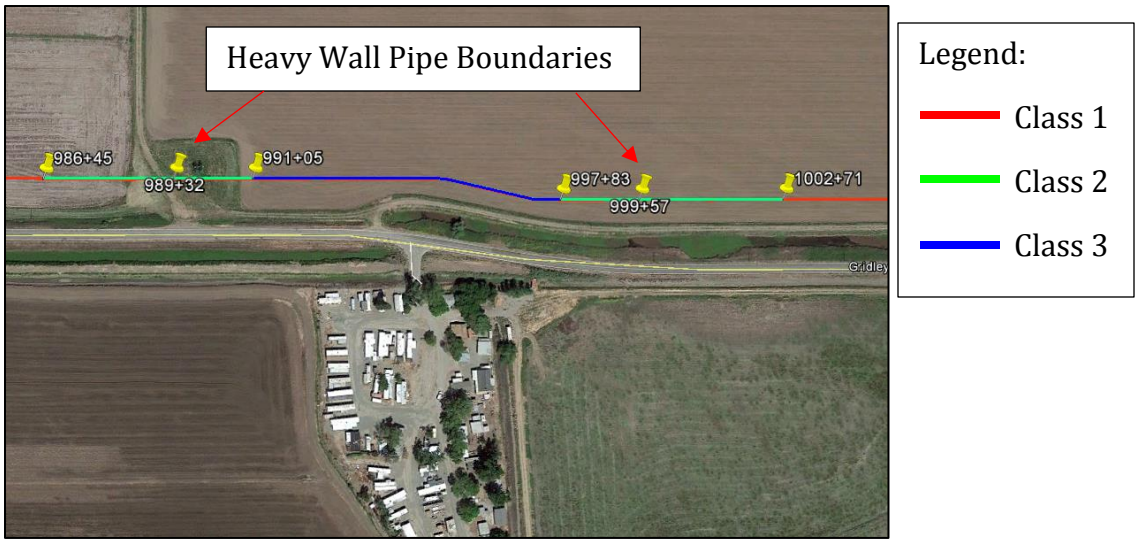
> *"An area where the pipeline lies within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days and weeks need not be consecutive.)"*

Note that application of (3)(i) pertaining to 46 or more buildings within 220 yards of the pipeline was not used as only 44 buildings were identified within 220 yards of the line. The Class 3 boundaries are shown in figure 1 below.



(Fig 1: 100 yard Distance Used to Define Class 3 Location)

After establishing the boundaries of the Class 3 pipe, the extent of the 30" OD x 0.625" WT X-70 pipe was examined to confirm that the Class 3 pipe was encompassed by the heavier wall pipe. As the stationing for the heavier wall pipe is from 989+32 to 999+57 it completely covers the Class 3 pipe which is from station 991+05 to 997+83. This is illustrated in figure 2 below.

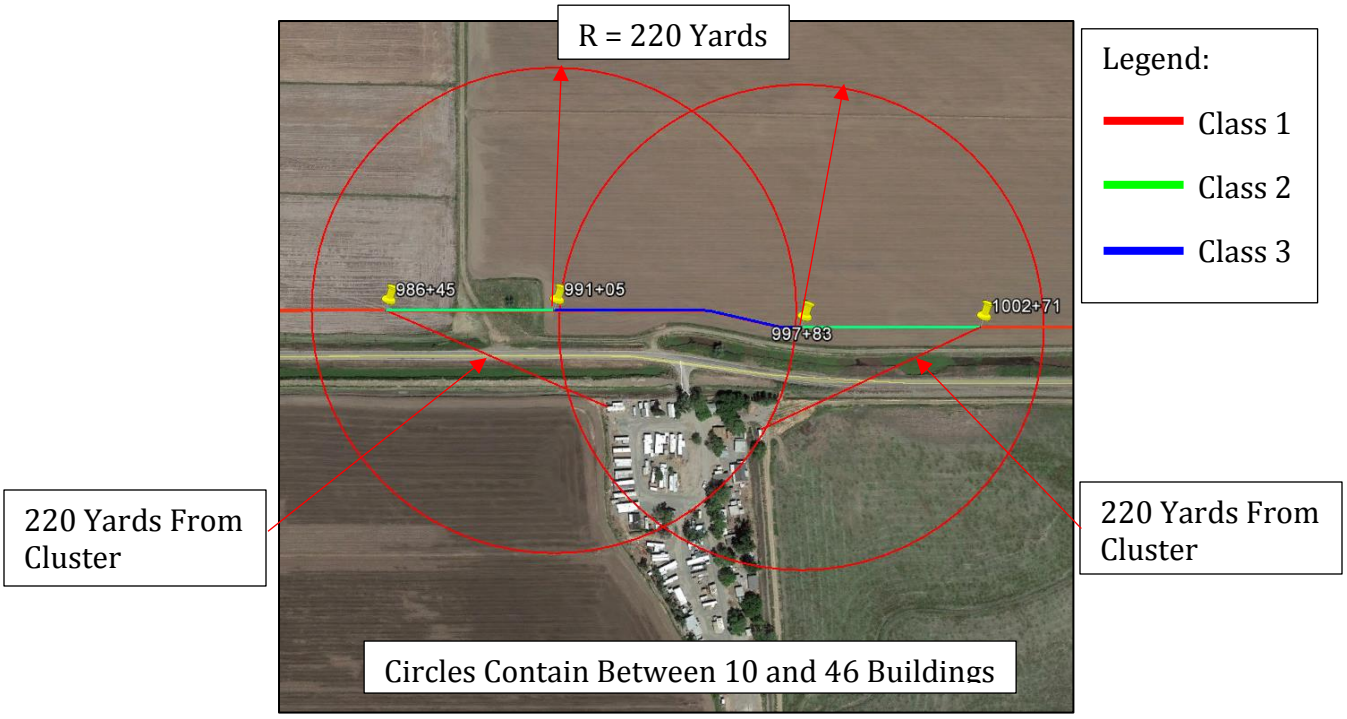


(Fig 2: Heavy Wall Pipe Boundaries)

Once the Class Location 3 area was outlined, an analysis of the adjacent pipe was performed and paragraphs (1) and (2) presented below were applied.

> *"(1) A "class location unit" is an onshore area that extends 220 yards (200 meters) on either side of the centerline of any continuous 1- mile (1.6 kilometers) length of pipeline.*
>
> *(2) A Class 2 location is any class location unit that has more than 10 but fewer than 46 buildings intended for human occupancy."*

As there is a cluster of more than 10 structures, but less than 46 structures centered on the endpoints of the Class 3 pipe, a distance of 220 yards was measured from the nearest building in the cluster on either side of the site to the pipeline to establish the extent of the Class 2 pipe which is presented in figure 3 below.



(Fig 3: CLU Used to Define Class 2 Pipe and 220 Yard Measurement from Cluster)

As there are no other structures within 220 yards along of the centerline of the pipeline along the sliding mile outlined in 49 CFR §192.5 paragraph (1) above, the upstream and downstream pipe adjacent to the ends of the Class 2 was classified as Class 1. The beginning and end pipe stations for the Class 2 and Class 3 sections of pipeline are defined in Table 1 below.

Class	Begin Station*	End Station*
2	**986+45**	**991+05**
3	**991+05**	**997+83**
2	**997+83**	**1002+71**

(Table 1: Class Location Boundaries)

**All stationing is based on footages from the 2014 ILI data provided by Wild Goose Storage.*

HCA Analysis:

To establish the extent of the HCA at the identified location, Method 1 from 49 CFR §192.903 (1) was used. Method 1 is defined as follows:

> *"(1) An area defined as—*
>
> *(i) A Class 3 location under §192.5; or*
>
> *(ii) A Class 4 location under §192.5; or*
>
> *(iii) Any area in a Class 1 or Class 2 location where the potential impact radius is greater than 660 feet (200 meters), and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or*
>
> *(iv) Any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site."*

Additionally, when using item (iii) or item (iv) to define the boundaries of an HCA the following must be considered:

> *"(3) Where a potential impact circle is calculated under either method (1) or (2) to establish a high consequence area, the length of the high consequence area extends axially along the length of the pipeline from the outermost edge of the first potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy to the outermost edge of the last contiguous potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy. (See figure E.I.A. in appendix E.)"*

An identified site as stated in item (iv) is defined as follows:

> *"(a) An outside area or open structure that is occupied by twenty (20) or more persons on at least 50 days in any twelve (12)-month period. (The days need not be consecutive.) Examples include but are not limited to, beaches, playgrounds, recreational facilities, camping grounds, outdoor theaters, stadiums, recreational areas near a body of water, or areas outside a rural building such as a religious facility; or*
>
> *(b) A building that is occupied by twenty (20) or more persons on at least five (5) days a week for ten (10) weeks in any twelve (12)-month period. (The days and weeks need not be consecutive.) Examples include, but are not limited to, religious facilities, office buildings, community centers, general stores, 4-H facilities, or roller skating rinks; or"*

For this analysis, the Potential Impact Circle (PIC) was calculated as follows:

$$PIC = 0.69\sqrt{PD^2}$$

Where P = 1226 psig (MAOP of pipeline),

D=30" OD

Therefore:

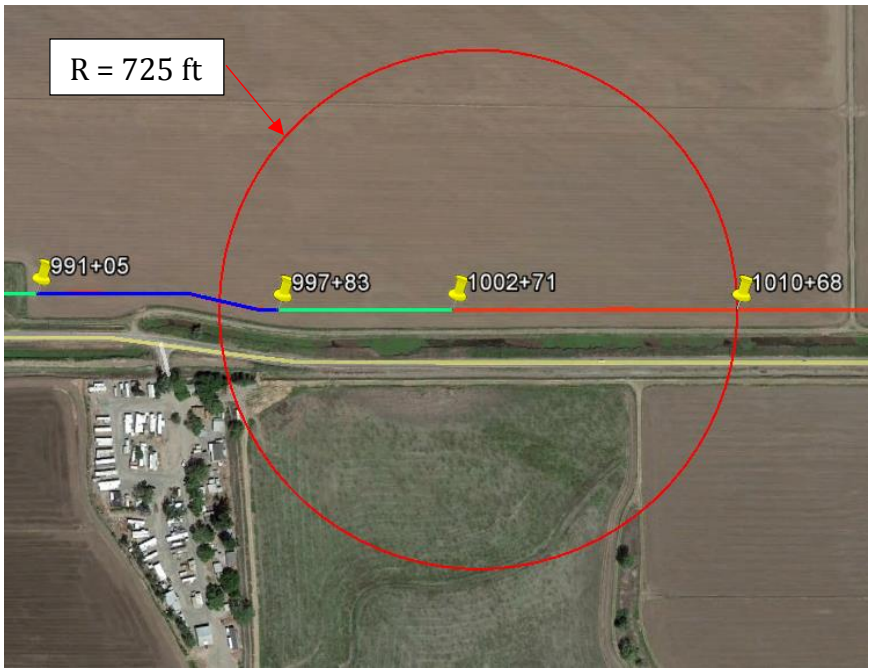
$$PIC = 0.69\sqrt{1226(30^2)} = 725\ ft$$

For the purposes of this analysis, HCA was defined using items (i) and (iv) from Method 1 to establish the most conservative boundaries of the HCA. As such, all of the Class 3 pipe established in the section above was included in the HCA and specified by item (i) above. Additionally, this report assumed the homes may serve as a gathering point for 20 or more occupants; therefore, the stipulation from item (iv) was applied to the surrounding Class 1 and Class 2 pipe. The PIC was measured from the nearest point of the site to the pipeline on either side to the Class 3 pipe and extends axially along the pipe as stated in item (3) above to determine the boundaries of the HCA. See Table 2 below for the boundaries of the HCA in pipeline stationing. See figure 4 and figure 5 below for visuals showing the PIC used to define the upstream and downstream HCA boundaries. See figure 6 in Appendix A for comparison between previous class and HCA determinations to the findings presented in this report.

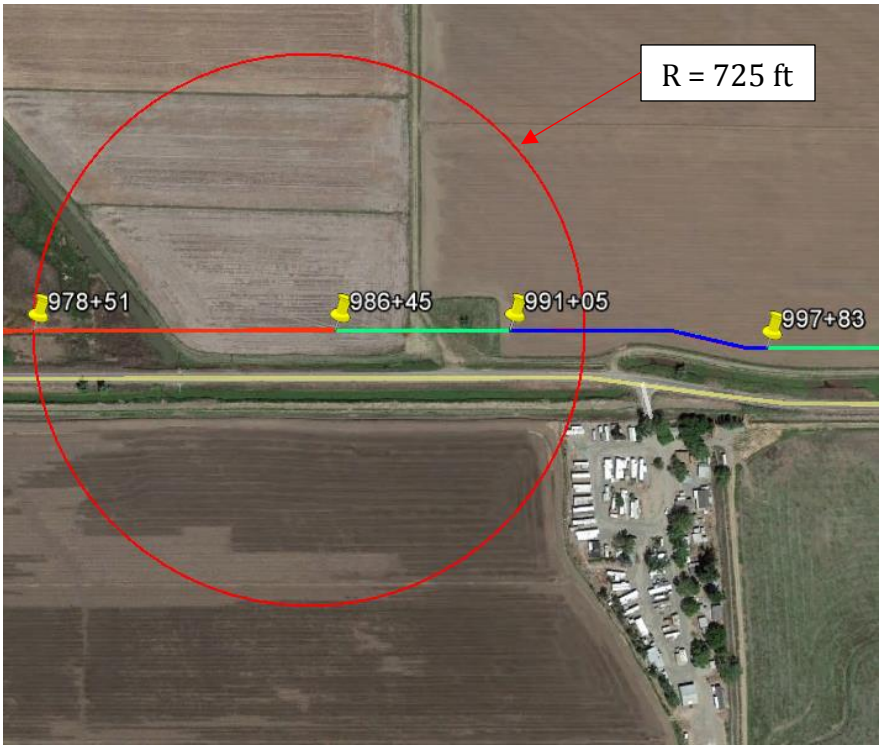
	Begin Station*	**End Station***
HCA	**978+51**	**1010+68**

(Table 2: HCA Boundaries)

**All stationing is based on footages from the 2014 ILI data provided by Wild Goose Storage.*



(Fig 4: Downstream HCA Boundary)



(Fig 5: Upstream HCA Boundary)

HCA Pipe Operation:

To verify the acceptable operating pressures of the pipe within the HCA boundaries, calculations were performed to determine the operating SMYS at the MOP of the system. The results are shown in Table 3 below.

Class	Pipe Diameter	Wall Thickness	Grade	%SMYS at MOP of 1200 psig	%SMYS at MAOP of 1226 psig
3	30”	0.625”	X-70	41.14%	42.03%
2	30”	0.625”	X-70	41.14%	42.03%
2	30”	0.438”	X-70	58.71%	59.98%
1	30”	0.438”	X-70	58.71%	59.98%

(Table 3: %SMYS at MOP)

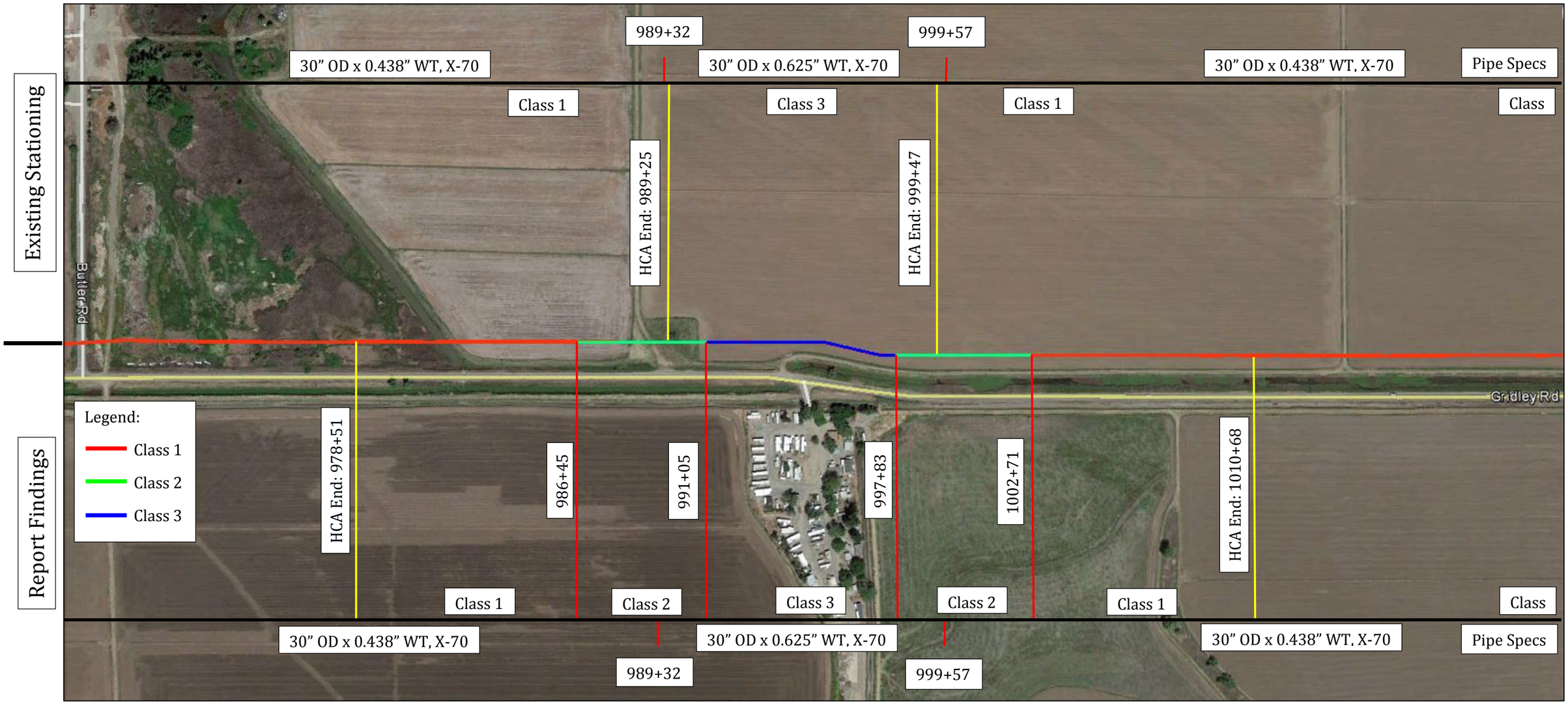
49 CFR §192.111 specifies that pipe in a Class 3 Location must operate under 50% SMYS, Class 2 pipe must operate under 60% of SMYS and Class 1 pipe must operate under 72% of SMYS. Since the pipe meets these requirements for its current MOP of 1200 psig, no changes to the defined Maximum Operating Pressure is required on account of the class location and HCA findings of this report.

Findings:

The class locations and HCA boundaries described in this report were generated by applying the regulations set by 49 CFR §192.5 & §192.903. The boundaries of each class location were determined as shown in Table 1. Boundaries of the HCA are shown in Table 2.

As the pipe meets requirements set by 49 CFR §192 for operating pressure, no operational changes will be needed to continue operation at the current MOP of 1200 psig.

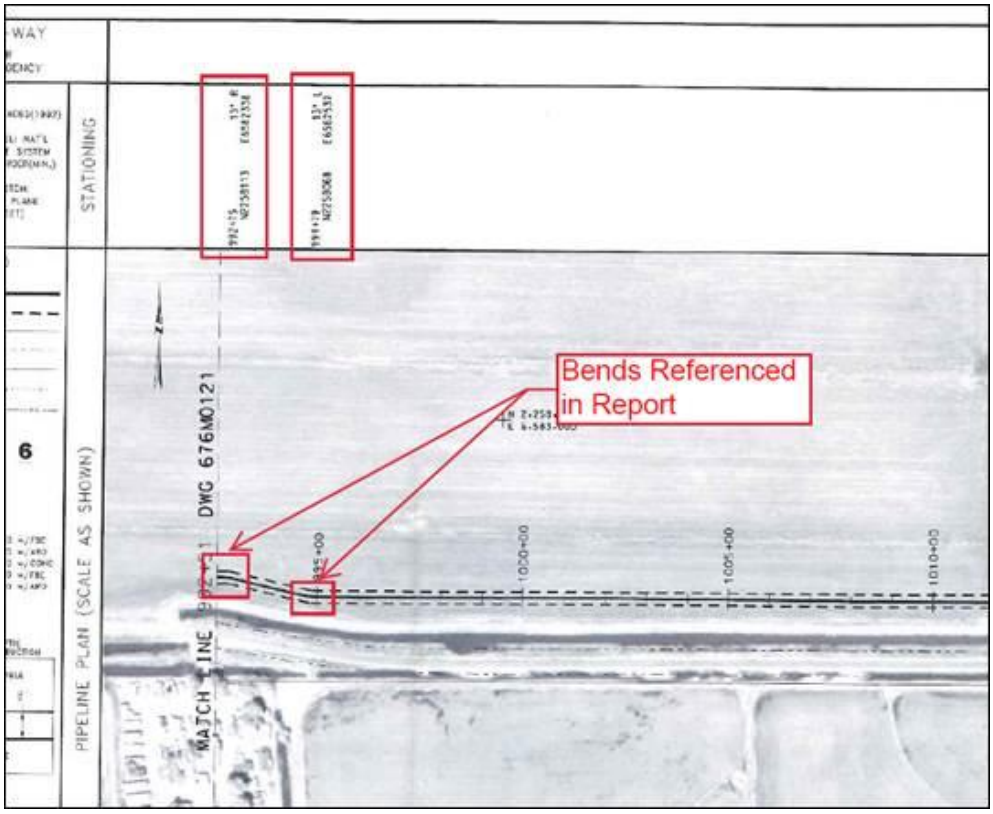
Appendix A: Summary of Existing Stationing and of New Findings



(Figure 6: Class and HCA Comparison)

Appendix B: 2014 ILI Data Feature Identification

As stated in the **Methodology** section above, two (2) 13° bends were identified in the As-Built drawings to use as points of reference for determining the Class and HCA boundaries as shown below in Figure 7. These bends were then identified in the 2014 ILI run data by locating the start and end of the heavy wall pipe since the As-Built drawings show that these are the only bends located within the heavy wall pipe section at this location, as shown in Figure 8 below. In figure 8, the heavy wall pipe is shown highlighted in blue while two bends are highlighted in orange. The highlighted bends in figure 8 were used as points of reference to determine the stationing of the Class and HCA boundaries outlined in the report above.



(Figure 7: As-Built Alignment, Sheet 22 of 30)

6	Girth Weld Number	Relative Distance (metres)	Absolute Distance (metres)	Comment	Peak Depth	Length (mm)	Width (mm)	ERF	Orientation (hrs:mins)	Min ID (mm)	Upstream Reference	Distance U/S Ref. to Girth Weld (metres)	Downstream Reference	Distance D/S Ref. to Girth Weld (metres)		
2817	26040	12.166	30131.580						02:15		AGM 19	1.916	AGM 20	1526.347		
2818	26050	12.260	30143.840						01:15		AGM 19	14.176	AGM 20	1514.087		
2819	26060	10.757	30154.597	NWT 11.13/15.88MM (0.438" WT/0.625" WT)					10:30		AGM 19	24.933	AGM 20	1503.330	Begin Heavy Wall Pipe	
2820	26070	12.290	30166.887						09:30		AGM 19	37.223	AGM 20	1491.040		
2821	26080	12.060	30178.947						02:15		AGM 19	49.283	AGM 20	1478.980		
2822	26090	12.147	30191.094						01:15		AGM 19	61.430	AGM 20	1466.833		
2823	26100	12.187	30203.280						10:15		AGM 19	73.616	AGM 20	1454.647		
2824	26110	11.637	30214.917						09:15		AGM 19	85.253	AGM 20	1443.010		
2825	26120	12.123	30227.040						01:30		AGM 19	97.376	AGM 20	1430.887		
2826	26130	12.117	30239.157						12:45		AGM 19	109.493	AGM 20	1418.770		
2827	26140	11.666	30250.824						10:30		AGM 19	121.160	AGM 20	1407.103		
2828	26150	11.643	30262.467						09:45		AGM 19	132.803	AGM 20	1395.460		
2829	26160	12.277	30274.744						01:30		AGM 19	145.080	AGM 20	1383.183		
2830	26170	11.646	30286.390						01:00		AGM 19	156.726	AGM 20	1371.537		
2831	26180	12.150	30298.541						10:45		AGM 19	168.877	AGM 20	1359.386		
2832	26190	11.643	30310.184						09:45		AGM 19	180.520	AGM 20	1347.743		
2833	26200	12.283	30322.467						12:45		AGM 19	192.803	AGM 20	1335.460		
2834	26200	9.128	30331.595	5 DEG BEND-COLD RIGHT						728.02					Bend 1	
2835	26210	12.280	30334.747						11:45		AGM 19	205.083	AGM 20	1323.180		
2836	26210	2.769	30337.515	10 DEG BEND-COLD RIGHT						728.60						
2837	26220	12.320	30347.067						10:30		AGM 19	217.403	AGM 20	1310.860		
2838	26230	12.270	30359.337						09:45		AGM 19	229.673	AGM 20	1298.590		
2839	26240	11.660	30370.997						02:00		AGM 19	241.333	AGM 20	1286.930		
2840	26250	12.263	30383.261						01:30		AGM 19	253.597	AGM 20	1274.666		
2841	26250	6.757	30390.018	5 DEG BEND-COLD LEFT						728.25					Bend 2	
2842	26260	12.330	30395.590						10:45		AGM 19	265.926	AGM 20	1262.337		
2843	26260	4.363	30399.953	5 DEG BEND-COLD LEFT						727.91						
2844	26270	12.100	30407.690						10:00		AGM 19	278.026	AGM 20	1250.237		
2845	26280	11.380	30419.071						02:00		AGM 19	289.407	AGM 20	1238.856		
2846	26290	11.873	30430.944						01:00		AGM 19	301.280	AGM 20	1226.983		
2847	26300	12.133	30443.077						10:45		AGM 19	313.413	AGM 20	1214.850		
2848	26310	11.450	30454.527						09:45		AGM 19	324.863	AGM 20	1203.400		
2849	26320	12.283	30466.810	NWT 15.88/11.13MM (0.438" WT/0.625" WT)					02:45		AGM 19	337.146	AGM 20	1191.117	End Heavy Wall Pipe	
2850	26330	10.953	30477.764						01:45		AGM 19	348.100	AGM 20	1180.163		

(Figure 8: 2014 ILI Data of Heavy Wall Pipe Section)