Woodard, Marina (UTC)

From:

Beach, Tina <Tina.Beach@cngc.com> Wednesday, February 29, 2012 10:04 PM

Sent: To:

Woodard, Marina (UTC)

Cc:

Eutsey, Mike; Kessie, Steve; Martuscelli, Eric

Subject:

Response to Docket PG 110006

Attachments:

Kennewick & Walla Walla 2011 audit response .pdf

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MAR 0 1 2012

State of Washington UTC Pipeline Safety Program

Marina;

Please forward the attached response to Mr. Subsits and Mr. Lykken regarding the audit completed by Mr. Scott Rukke and Mr. Dennis Ritter on November 29-December 2 2011, in Kennewick WA, and December 13-16 2011 at our facilities in Walla Walla. As you are aware, we are working to implement several key programs through this audit along with the Settlement Agreement-110443. We appreciate your oversight and support of us moving in the right direction to continue to keep our system and communities safe. If you have any further questions feel free to contact me. The hard copy will soon follow in the mail.

Sincerely;

Tina R. Beach

Manager of Standards and Compliance



8113 Grandridge Blvd.
Kennewick, WA 99336
(509) 734-4576 Kennewick office
(206) 445-4121 Work cell
(509) 737-9803 Fax
(406) 939-2240 Home cell
tina.beach@cngc.com





8113 W. GRANDRIDGE BLVD., KENNEWICK, WASHINGTON 99336-7166 TELEPHONE 509-734-4500 FACSIMILE 509-737-9803 www.cngc.com

February 29, 2012

David Lykken- Director of Pipeline Safety Program State of Washington Utilities and Transportation Commission 1300 S. Evergreen Park Dr. SW P.O. Box 47250 Olympia, WA 98504-7250 RECEIVED
FEB 29 2012
State of Washington
UTC
Pipeline Safety Program

Subject: Response to Docket PG-110006

Dear Mr. Lykken,

This letter is intended to address all probable state and federal safety code violations and noted areas of concern. We specifically are addressing how and when we plan to bring the probable violations into full compliance. We also are covering our plan to address the areas of concern noted by your inspectors, Mr. Rukke, Mr. Ritter and expressed in Docket PG-110006. The inspection was conducted on November 29-December 2 2011, in Kennewick WA, and December 13-16 2011 at our facilities in Walla Walla, 2011.

The following is in response to the thirteen citations noted as probable violations and five areas of concern:

1. WAC 480-93-110 Corrosion control.

- (5) Each gas pipeline company must conduct inspections or tests for electrical isolation between metallic pipeline casings and metallic pipelines at least once annually, but not to exceed fifteen months between inspections or tests. The test or inspection must also determine whether the pipeline has adequate levels of cathodic protection at the casing to pipeline interface. These requirements do not apply to unprotected copper inserted in ferrous pipe.
 - (b) Whenever electrical isolation tests or inspections indicate that a possible shorted condition exists between a casing and a pipeline, the gas pipeline company must conduct a follow-up test within ninety days to determine whether an actual short exists. The gas pipeline company's procedures manual must have a level or threshold that would indicate a potential shorted condition and must also detail the method of determining whether the casing is actually shorted to the pipeline.

Finding(s):

To meet the requirements of WAC 480-93-11 0(5) (b), CNG procedure 755.063 requires any casing pipe-to-soil potential that is more negative than -0.73v to be investigated for a potential short to the carrier pipe. Records indicate that the following casings had pipe to soil potentials (PSP) that were more negative than -0.73v but CNG was unable to provide records indicating that the potentially shorted conditions were investigated within 90 days as required:

- a. Pasco, casing no. 3, Lewis E. of Rd 28. PSP of -0.751v recorded on 04/2112009. No record was provided indicating that a shorted casing test was performed.
- b. Burbank, casing no. 2, 2nd Ave (RR). PSP of -1.301 v recorded on 03/18/2010. The next survey was on 03/28/2011 (between 3/28-3/31/2011) and a shorted casing test was performed at this time which indicated that the casing was not shorted to the carrier pipe.
- c. Finley, casing no. 3, Cochrane and Finley Rd #7. PSP of -1.170v recorded on 03/18/2010. Records indicate that a shorted casing test was not performed until 10/29/2010 and that the casing was shorted to the carrier pipe. (Replaced in 2011)
- d. Finley, Casing no. 7, Main St & Finley Rd #3. PSP of -1.185v recorded on 03/18/2010. Records indicate that a shorted casing test was not performed until 10/29/2010 and that the casing was shorted to the carrier pipe.

Cascade Response

Cascade Natural Gas Corporation (CNGC) concurs, we believe the surveys referenced in both (a) and (b) were completed within the allotted time frame documentation was lacking to indicate the Tinker Rasor had been conducted as required. Furthermore the casings identified in (c) and (d) are documented properly but they were outside the 90 day follow up time frame. Please see the attached Casing Survey Report Summary of a-d. (Exhibit A) It is important to note on (c) that Casing no.3 located at Cochrane and Finely Rd#7 has been removed and Casing no.7 located at Main St. and Finley Rd #3 which qualifies as a shorted casing is scheduled for removal no later than August 2012. Cascade has most recently provided more depth to the Corrosion Control Department with 5 Corrosion Technologists who will report directly to a Manager of Corrosion , formerly the 2 Corrosion Technologists reported directly to the Manager of Operations. See (Exhibit B). Furthermore these types of issues will be addressed through the settlement agreement DOCKET PG-110443 Action Item #2 Improved Maintenance Management and Action Item #3 Quality Assurance/Quality Control Program which will assure that there is accountability of operations work being completed according to company procedures.

2. WAC 480-93-110 Corrosion control.

(5) Each gas pipeline company must conduct inspections or tests for electrical isolation between metallic pipeline casings and metallic pipelines at/east once annually, but no/to exceed fifteen months between inspections or tests. The test or inspection must also determine whether the pipeline has adequate levels of cathodic protection at the casing to pipeline interface. These requirements do not apply to unprotected copper inserted in ferrous pipe.

Finding(s):

Records indicate that electrical isolation tests were not conducted annually, not to exceed 15 months, on the following two casings as required:

a. Walla Walla, casing no. 43, Wash. St. Pen. - N 13th Ave. During the 03/12/2010 casing survey this casing was listed as "removed" even though it was still in service.

- b. Walla Walla, casing no. 43, Wash. St. Pen. -N 13th Ave. During the 03/11/2011 casing survey this casing was listed as "gone" even though it was still in service.
- c. Walla Walla, casing no. 53, Woodland 600' N of Abadie. During the 03/12/2010 casing survey this casing was listed as "removed" even though it was still service. This casing was Tinker Rasor tested during the 03/11/2011 survey.

Cascade Response

3.

Cascade concurs that CNGC staff denoted the casings referenced in a-c as gone or removed. Since the audit CNGC has made needed repairs to the casing no.53 and found that casing no.43 was indeed a retired vault lid and not a casing. Please attached photos and as built in (Exhibit C). As indicated above CNGC has increased the number of employees in the Corrosion Control Department see (Exhibit B). Furthermore these types of issues will be addressed through the settlement agreement DOCKET PG-110443 Action Item #2 Improved Maintenance Management and Action Item #3 Quality Assurance/Quality Control Program which will assure that there is accountability of operations work being completed according to company procedures.

WAC 480-93-110 Corrosion control.

(2) Each gas pipeline company must complete remedial action within ninety days to correct any cathodic protection deficiencies known and indicated by any test, survey, or inspection. An additional thirty days may be allowed for remedial Action if due to circumstances beyond the gas pipeline company's control/he company cannot complete remedial action within ninety days. Each gas pipeline company must be able to provide documentation to the commission indicating that remedial action was started in a timely manner and that all efforts were made to complete remedial action within ninety days. (Examples of circumstances allowing each gas pipeline company to exceed the ninety-day time frame include right of way permitting issues, availability of repair materials, or unusually long investigation or repair requirements).

Finding(s):

Records indicate that cathodic protection reads were found to be below the minimum required levels during the March 2009 annual survey and CNG was unable to provide any records indicating that remedial action was completed within 90 days as required. Documentation indicates that the following low CP reads found during the March 2009 annual survey were not remediated until March 2010:

Less than -0.850v:

- a. Walla Walla, test site no. 35, 1036 Pamona. March 2009 read -0.742v.
- b. Walla Walla, test site no. 49, 404 Boyer Ave. March 2009 read -0.820v.
- c. Walla Walla, test site no. 50, 171 SPark Apt A. March 2009 read -0.775v.
- d. Walla Walla, test site no. 105, 980 Reser Rd. March 2009 read -0.849v.
- e. Walla Walla, test site no. 106, 2419 Kendall Rd. March 2009 read -0.848v.
- f. Walla Walla, test site no. III, 1650 School. March 2009 read -0.816v.
- g. Walla Walla, test site no. 112, 1456 Tawny Lane. March 2009 read -0.835v.
- h. Walla Walla, test site no. 114, 1453 Durant. March 2009 read -0.843v.
- i. Walla Walla, test site no. 115, 1348 Stmm. March 2009 read -0.839v.
- J. Walla Walla, test site no. 116, 1006 Chestnut. March 2009 read -0.823v.
- k. Walla Walla, test site no. 130, 1259 Pleasant. March 2009 read -0.782v.
- 1. Walla Walla, test site no. 131, 1111 Strum. March 2009 read -0.820v.
- m. Walla Walla, test site no. 132, 1411 Monroe. March 2009 read -0.780v.

3. WAC 480-93-110 Corrosion control (cont.)

- n. Walla Walla, test site no. 133, 1456 Tull Drive. March 2009 read -0.80lv.
- o. Walla Walla, test site no. 134, 1131 School. March 2009 read -0.799v.
- p. Walla Walla, test site no. 135, 817 School Ave. March 2009 read -0.736v.
- q. Walla Walla, test site no. 136, 1935 Carl. March 2009 read -0.760v.
- r. Walla Walla, test site no. 137, 725 Gladys. March 2009 read -0.760v.
- s. Walla Walla, test site no. 138,2013 Delmont. March 2009 read -0.764v.
- t. Walla Walla, test site no. 139, 506 Ankeny. March 2009 read -0.658v.
- u. Walla Walla, test site no. 141, 1830 E Alder. March 2009 read -0.790v.
- v. Walla Walla, test site no. 142, 118 Green. March 2009 read -O.v.
- w. Walla Walla, test site no. 143, 142 Commercial. March 2009 read -0.786v.
- x. Walla Walla, test site no. 144,253 Merrill. March 2009 read -0.785v.

The following reads did not meet the minimum level of -0.90v as detailed in CNG procedure 755.06l (d). This is CNG's method of taking IR drop into account as required. Any read less than -0.90v is assumed to not meet the minimum level of -0.85v once IR drop is taken into account.

- a. Walla Walla, test site no. 42, 227 Cascade Dr. March 2009 read -0.886v
- b. Walla Walla, test site no. 44, 322 Blue. March 2009 read -0.886v
- c. Walla Walla, test site no. 46, 217 N Madison. March 2009 read -0.860v
- d. Walla Walla, test site no. 47, 232 Stanton. March 2009 read -0.897v
- e. Walla Walla, test site no. 97, 921 Woodlawn. March 2009 read -0.892v
- f. Walla Walla, test site no. 98, 855 Bryant. March 2009 read -0.866v
- g. Walla Walla, test site no. 99, 1609 Fern. March 2009 read -0.869v
- h. Walla Walla, test site no. 103, Walla Walla HS Abbot Rd. March 2009 read- 0.856v
- Walla Walla, test site no. 104, 2231 Walt Lane. March 2009 read -0.871 v
- j. Walla Walla, test site no. 107, 2339 S Wilbur. March 2009 read -0.862v
- k. Walla Walla, test site no. 108, 1457 Kannisku Loop. March 2009 read -0.856v
- Walla Walla, test site no. 109, 2198 Depping Rd. March 2009 read -0.866v
- m. Walla Walla, test site no. 110, 1853 Pike Pl. March 2009 read -0.857v
- n. Walla Walla, test site no. 113, 1884 Crestline. March 2009 read -0.853v
- o. Walla Walla, test site no. 125, 1703 Evergreen. March 2009 read -0.894v
- p. Walla Walla, test site no. 127, 1409 Boyer. March 2009 read -0.885v
- q. Walla Walla, test site no. 128, 1305 E Alder. March 2009 read -0.870v
- r. Walla Walla, test site no. 129, 521 Bridge. March 2009 read -0.887v
- s. Walla Walla, test site no. 140, 335 Wilber. March 2009 read -0.870v
- t. Walla Walla, test site no. 145, 1433 Hobson. March 2009 read -0.890v

Cascade Response

CNGC concurs documentation reflecting mediation for the above reads had not occurred within the 90 day requirement. To remedy this situation Cascade has added additional Corrosion Technologist to cover the Walla Walla/Kennewick areas. (See Exhibit B) Furthermore CNGC replaced and repaired the rectifier's #4 Rainer St in Walla Walla, on 8/5/11 and #3 at Dalles Military & SR 125, on 8/4/2011 as well as adding another Ground Bed and Rectifier #7 06/23/2011 on Fern St in Walla Walla. See attached (Exhibit D). The strengthening of the system has allowed the reads to improve and they are well within compliance.

In the Community to Serve^{*}

Cascade Response

CNGC agrees that the above action was taken by CNGC staff in the field and is unacceptable. Settlement Agreement Plan, Action Item #6- O & M Manual Revisions and Action Item #3 Quality Assurance/Quality Control Program which will assure that there is accountability of operations work being completed according to company procedures. Lastly see the attached action plan developed by the Kennewick District addressing the current means of dealing with 0-7 until tanks can be replaced (Exhibit E).

6. WAC 480-93-180 Plans and procedures.

(1) Each gas pipeline company must have and follow a gas pipeline plan and procedure manual (manual) for operation, maintenance, inspection, and emergency response activities that is specific to the gas pipeline company's system. The manual must include plans and procedures for meeting all applicable requirements of 49 CFR §§ 191, 192 and chapter 480-93 WAC, and any plans or procedures used by a gas pipeline company's associated contractors.

Finding(s):

The following CNG procedures were not followed or are not adequate to meet the requirements of WAC 480-93-180(1).

- a. CNG procedure 747.012.056 requires that a special odorometer test be performed within 48 hours of an odorant rate change or remedial action of low reads to ensure that odorant levels are within the acceptable range. The odorant tank cited in no. 5 above was found to be empty on 1/5/2011. It was refilled on January 6, 2011, but a special odorometer test was not performed. A sniff test was not conducted until the next regularly scheduled monthly survey on 2/2/2011.
- b. CNG procedure 925.072 does not include the *unintentional estimated gas loss of three million cubic feet or more* under the definition of an incident. CNG should revise this procedure to meet the definition of incident under CFR 191.3.
- c. 49 CFR Part 192.383, defines a replaced service line as follows:
 - (a) Definitions. As used in this section:
 Replaced service line means a gas service line where the fitting that connects the service line to the main is replaced or the piping connected to this fitting is replaced.

The language in CNG procedure CP #647.021 and in the Scope of CP #647 states that services must be "completely replaced" before an excess flow valve would be required. This does not meet the requirement CFR Part 192.383. CNG should review and revise this procedure to ensure it meets the intent of Part 192.383.

d. CNG procedure 665.037 requires the use of a pressure recorder for pressure tests longer than 2 hours in duration. CNG installed a new construction plat, W.O. no. 184695 and two tests were performed at 4 hours each. No records were produced that indicated a pressure recorder was used during these tests.

The use of pressure recorders for short duration pressure tests does not appear to be CNG's practice and this procedure should be revised or removed.

In the Community to Serve^{*}

Cascade Response

CNGC agrees that the WAC code and the Company Procedure 665.037 requires the above stated action and/or was not followed. CNGC furthermore agrees about the statement regarding pressure recorders and the additional Company Procedures in (a-c), are important issues and have been added to our CP discrepancy list. CNGC also believes these issues are being addressed under Settlement Agreement Action Item#6- O & M Manual Revisions. CNGC is addressing the issue of not following our current Company Procedures through Settlement Agreement Action Item #3 Quality Assurance/Quality Control Program which will assure that there is accountability of operations work being completed according to company procedures.

7. WAC 480-93-170 Tests and reports for pipelines.

(9) When a gas pipeline company performs multiple pressure tests on a single installation. The gas pipeline company must maintain a record of each test. An example of a single installation with multiple tests would be any continuous ongoing job or installation such as a new plat or long main installation where more than one pressure test was conducted during construction.

Finding(s):

In October 2011, CNG installed a new construction plat consisting of approximately 4,128' of 2-inch polyethylene main. Records indicate that the main was pressure tested in two sections but individual pressure test records were not recorded as required. This plat is W.O. no. 184695, Copperleaf Phase-2, located in Richland, WA.

Cascade Response

CNGC agrees that the WAC code and the Company Procedure 665 requires the above stated action and/or was not followed. CNGC agrees that these observations made regarding the Company Procedures are accurate; these important issues have been added to our CP discrepancy list and are being addressed under Settlement Agreement under Action Item #6- O & M Manual Revisions. CNGC is addressing the issue of not following our current CP through Settlement Agreement Action Item #3 Quality Assurance/Quality Control Program which will assure that there is accountability of operations work being completed according to company procedures as stated. In addition CNGC has taken action to retest this line see attached locate tickets (Exhibit F) with completion date set for 2/28/2012.

8. **WAC 480-93-188 Gas leak surveys.**

- (3) Each gas pipeline company must conduct gas leak surveys according to the following minimum frequencies:
 - (b) High occupancy structures or areas at least once annually, but no/to exceed fifteen months between surveys;

Finding(s):

CNG was unable to provide records indicating that a church located at 301 S. Washington in Kennewick was leak surveyed as a High Occupancy Structure (HOS) annually as required. This church does not have a gas service but does have main in the right of way adjoining the church property. WAC 480-93-188(b) does not distinguish between a HOS with a gas service and those without.

Note:

We asked CNG personnel if leak surveys are conducted for HOS's where no service line exists but where main is in the adjoining RW. CNG personnel stated that leak surveys would only be conducted where a service line exists. This is not consistent with the intent of WAC 480-93-188. In fact WAC 480-93-188 requires that operators take an additional step and survey up to the building wall "where a service line exists." This opinion is supported by the WA State AG's office.

We also asked CNG personnel if CNG procedures distinguish between different size churches when it comes to the definition of a HOS. CNG personnel stated that there is no differentiation between the size or capacity of a church, and that all churches regardless of size are surveyed where a service line exists.

Cascade Response

CNGC agrees that the WUTC notes are correct CNGC's does regular leak survey's in our business district Right of Ways (ROW) annually; however oversight of this was to not to include possible HOS's in non business district leak surveys if they did not have a service line. Cascade is currently changing this policy to incorporate all HOS's with gas in the right of way regardless if there is a gas service to the building or not. This issue has been added to our list of CP Discrepancies and will be addressed in the Settlement under Action Item#6- O & M Manual Revisions. Furthermore CNGC did a special leak survey on 301 S. Washington see attached (Exhibit G).

9. WAC 480-93-110 Corrosion control.

(6) Each gas pipeline company must record the condition of all underground metallic farcicalities each time the facilities are exposed.

CNG did not record the condition of the following underground metallic pipelines when they were exposed during the repair of third party damage.

- a. College Place, 6 N College Ave, W.O. no. 186615. This WO notes that a 3/4-inch coated steel service was damaged and repaired on 9/12/2011.
- b. Walla Walla, N Clinton St/Bonsella St., W.O. no 184718. This WO notes that this 2-inch coated steel main was damaged and repaired on 6/23/2010.

Note:

For third party damage, CNG records the condition of underground steel on their leak investigation (293B) form. If no leak results from third party damage then there is no location or form to use to record pipe condition.

WAC 480-93-11 0(6) requires that the condition of all metallic pipe be recorded when it is exposed. This includes all third party damage, construction, maintenance or other activities where metallic pipe is exposed.

Cascade Response

Cascade agrees that this was the observation made by the WUTC, we do believe this is an isolated issue only seen in this district and additional training was scheduled on (Dec 2011) to address these issues related to the process of noting pipe condition during a damage. See attached training attendance sheet (Exhibit H). Also you please refer to (Exhibit I) for an example of the electronic work order that is currently used by the Service Mechanics in the field.

10. WAC 480-93-185 Gas leak investigation.

(1) Each gas pipeline company must investigate any odor, leak, explosion, or fire, which may involve its gas pipelines, promptly after receiving notification. Where the investigation reveals a leak, the gas pipeline company must grade the leak in accordance with WAC 480-93-186, and take appropriate action. The gas pipeline company must retain the leak investigation record for the life of the pipeline.

Finding(s):

Documents indicate that the following leaks were not assigned grades as required.

- a. Leak W.O.180801; No legible address Pasco 1/3/2011
- b. Leak W.O. 187246 4504 Cathedral Dr. Pasco 10/11/11
- c. Leak W.O. 187783 4207 Sahara Dr. Pasco 10/06/2011
- d. Leak W.O. 172626 1st and Einstein Richland 1/19/2010. This was a broken and blowing 2-inch PE main. Documents indicate that it was graded as a grade 3 leak, the lowest priority. Any broken and blowing pipeline is a grade 1 leak.
- e. Unknown leak W.O. number at W Court St and 10th Ave, Pasco. This leak was first reported and investigated on 11/9/2009. At this time no leak grade was assigned due to the belief that it may not be natural gas. At the time of this inspection this leak was still active, ungraded and no ethane test has been conducted to determine if it is natural gas. All leaks indicated on a CGI should be graded until it is determined that natural gas is not involved.

Cascade Response

CNGC Leak Training was held the summer of 2010 on the new company procedure which requires the leak grading to be done in the field, see attached training sheet (Exhibit J). Kennewick District Managers have held further training on the correct use of the 293 form (Leak Investigation) with Kennewick district staff on 12/5/2011, 12/12/2011, and 02/06/2012. See attached training attendance sheets (Exhibit K). CNGC is also addressing the issue of not following our current CP in the Settlement Agreement Action Item #3 Quality Assurance/Quality Control Program.

11. WAC 480-93-187 Gas leak records.

Each gas pipeline company must prepare and maintain permanent gas leak records. The leak records must contain sufficient data and information to permit the commission to assess the adequacy of the gas pipeline company's leakage program. Gas leak records must contain, at a minimum, the following information:

(12) Magnitude and location of CGI readings left;

Finding(s):

Leak W.O. 184966, Newcomer and Catskill, Richland, was reported and investigated on 7/12/11. On CNG's leak investigation form for this address, there are no CGI reads recorded for 7/12/2011. There are reads recorded for a reevaluation conducted on 10/3/2011 and follow-up on 10/7/2011.

Cascade Response

CNGC Leak Training was held the summer of 2010 on the new company procedure which requires the leak grading to be done in the field taking CGI is part of that procedure, see attached training sheet (Exhibit J). Kennewick District Managers have held further training on the correct use of the 293 form (Leak Investigation) with Kennewick district staff on 12/5/2011, 12/12/2011, and 02/06/2012 see attached training attendance sheets (Exhibit K). Leak W.O. 184966 is a grade 3 leak and continues to be monitored (Exhibit L).CNGC is also addressing the issue of not following our current CP in the Settlement Agreement Action Item #3 Quality Assurance/Quality Control Program.

12. 49 CFR Part 192.475 Internal corrosion control: General.

(b) Whenever any pipe is removed from a pipeline for any reason, the internal surface must be inspected for evidence of corrosion.....

Finding(s):

In 2011, CNG replaced a section of 4-inch high pressure pipeline located at Cochrane and Finley Rd in Finley. The pipeline was replaced due to a shorted casing and external corrosion. CNG was unable to produce any documentation indicating that the internal pipe surface was inspected for internal corrosion.

Note:

CNG procedures also require inspection of internal pipe surfaces.

CP 755.033- Internal pipe surfaces must be examined if exposed as a result of damage, repair, replacement, etc. Check for any evidence of corrosion on steel pipe. Check for any signs of scratches or gouges in PE pipe.

Cascade Response

Kennewick District Managers have held further training on the correct use of the 293 form (Leak Investigation) and CNG 625 form with Kennewick district staff on 12/5/2011, 12/12/2011, and 02/06/2012. See attached training attendance sheets (Exhibit K). CNGC is also addressing the issue of not following our current CP in the Settlement Agreement Action Item #3 Quality Assurance/Quality Control Program.

13. **WAC 480-93-100 Valves.**

(3) All service valves selected for inspection in the program required in subsection (2) of this section must be operated and maintained at least once annually, but not to exceed fifteen months between operation and maintenance.

Finding(s):

The following service valves were not operated annually as required.

- a. Kennewick V-61, not operated in 2011
- b. Kennewick V-65, not operated in 2011
- c. Kennewick V-66, not operated in 2011
- d. Kennewick V-67, not operated in 2010
- e. Kennewick V-82, not operated since 2008
- f. Kennewick V-83, not operated since 2008
- g. Kennewick V-130, not operated in 2010

Cascade Response

Kennewick District Managers have held training specific to CP 740 with Kennewick district staff on 12/12/2011. CNGC is also addressing the issue of not following our current CP in the Settlement Agreement Action Item #3 Quality Assurance/Quality Control Program. Furthermore maintenance was completed on all valves noted (Exhibit M).

AREAS OF CONCERN AND RECOMMENDATIONS

1. CNG procedure CP 747.012 (2) and (3) both reference .046 but should reference .056 for follow up unacceptable reads.

Cascade Response

This section has been added to the CP discrepancy list and will be addressed as we update CNGC CP's.

2. CNG's policy is to connect polyethylene tracer wire to their steel pipelines. We reviewed documentation that indicated reads taken on some wires indicated cathodic protection may be below that required for proper cathodic protection of CNG's steel pipelines. CNG does not have a requirement to follow up when a low read is indicated on a tracer wire as tracer wire are not a required to be cathodically protected. But since low reads on wires may be indicative of inadequate CP on the steel lines they are attached to, CNG should initiate a process or procedure to follow up on low tracer wire reads.

Cascade Response

CNG connects tracer wire to their steel pipeline infrastructure when extending a PE service or main. A pipe-to-soil potential is taken at the steel infrastructure and if the potential is more positive than -.900 Volts DC than the low CP read process is initiated. This process was developed to comply with WAC 480-93-110 sub 8.

There are areas in CNG's PE system that is not connected to CNG's cathodically protected steel infrastructure. There are also many PE systems that were added to the extremities of the steel system where CP current is adequate to protect the intended steel system but due to the resistive qualities of the PE tracer wire mechanical splices, the PE tracer wire system's voltage potentials are below the criteria for protected steel. Voltage potentials read on these systems are meant for continuity purposes only. The distance from the tracer wire potentials to the steel system varies dramatically as does the linier resistance of the tracer wire to the steel system.

CNG is in the process of electrically separating their systems to aid in trouble-shooting and to better control their application of cathodic protection. As part of this process to develop isolation districts, CNG is electrically separating many of their PE systems from their steel systems. This process will also ensure that cathodic protection currents will remain on the steel infrastructure as initially intended.

CNG routinely reads "remote potentials" on all systems on a bi-monthly basis to help ensure their cathodic protection systems are performing properly and adequate current is reaching their steel infrastructure. These reads are in addition to any cathodic protection potential reads mandated by State and Federal codes. CNG has also increased the number of full time corrosion positions to five, to support the district personnel performing corrosion related duties in each region.

3. CNG is using a laser for leak surveys but no procedures are in CNG's manual. Many of the same existing leak survey procedures may also apply to the use of a laser but CNG should address the unique characteristics of using laser leak detection such as coverage, distance, line of sight issues, calibration etc.

Cascade Response

This issue has been added to our list of CP Discrepancies and is being addressed in the Settlement Agreement under Action Item#6- O & M Manual Revisions.

4. CNG procedure CP 925.073 need to be changed to 5 days from 45 days to meet the requirements of the WAC480-93-200(6).

Cascade Response

This issue had been added to our list of CP Discrepancies and is being addressed in the Settlement Agreement under Action Item#6- O & M Manual Revisions.

1. CNG procedure 760.02 mentions appendix C qualified welders. CNG does not use appendix C welders and should consider removing this reference,

<u>Cascade Response</u>
This issue had been added to our list of CP Discrepancies and is being addressed in the Settlement Agreement under Action Item #6-O & M Manual Revisions.

Please contact Tina Beach at 206-445-4121 with questions or comments. Thank you.

Sincerely,

Cascade Natural Gas Corporation

Eric Martuscelli,

Vice President, Operations

ANNUAL CASING SURVEY REPORT SUMMARY Exhibit (A) 4 casings resurveyed

Kennewick District

PV#1 Finding #1

Report Date:

Survey Conducted By:

Signature:

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Feb 24, 2012

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Mike Cons. 1 4 Danie Justin Horn How Date.

Total Casings Shorted:

Total Casings with Vents:

Instructions:

Rasor survey is performed and the test fails indicating a shorted casing take the following action: 1) Leak survey the casing and indicated whether gas was detected; 2) If gas was carrier pipe to soil potential reading and record; 2) Perform a Tinker Rasor survey of the casing and record whether it passes (P - no short) or fails (F - shorted casing). If a Tinker Take a casing pipe to soil potential reading at each casing location and record. If the casing pipe to soil potential is more negative than -0.73, take the following additional action (if there is no casing vent and no casing pipe to soil can be taken, continue with this procedure as if the casing pipe to soil potential was more negative than -0.73): 1) Take a detected measure the % gas and record.

10g Location Town Grid Vents Diameter Casing Carrier Rasor (P/F) Gas Detected (YN) % Gas Ave (RR) Burbank Dr.5 Yes 2" -/. 24¢ -/. 227 P N/o 0% St.& Finley Rd #7 Finley 4-F Yes 4" HP NETIRED N/p N/p N/p N/p St.& Finley Rd #3 Finley 4-G Yes 4" HP -0.405 -0.406 F 0% 0% S.E. of Rd 28 Pasco 7-H Yes 2" -1.09f -1.492 P N/o 0%	Γ				1		J	1	
Rd #7 Finley 4-F Yes 2" -/. 240 -/. 227 P 8 urbank Dr 5 Yes 2" -/. 240 -/. 227 P 8 urbank Dr 5 Yes 4" HP RETIRED N/A N/A N/A 6 #3 Finley 4-G Yes 4" HP -0.405 -0.406 F 0 Pasco 7-H Yes 2" -/. 492 P N			% Gas		1/2	0	50	2	
Nain Pipe to Soil Potentials Main Pipe to Soil Potentials		Leak Survey	Gas Detected (Y/N)	10	M/M	0% No	No		
Nain Pipe to Soil Pot Nain Pipe to Soil Pot		Ē	Rasor (P/F)	q			a		
Rd #7 Finley 4-F Yes 2" Pasco 7-H Yes 4" HP		l Potentials	Carrier	-1.227	M/M	-0,906	-1. 492		
Main Town Grid Vents Diamete		Pipe to Soi		-1.240		-0.905	1607-		
Town Grid		Main	Diameter	111	4" HP	4" HP			
Town Burbank Rd #7 Finley this pasco Pasco				Yes	Yes	Yes	Yes		
Rd #7			Grid	Dr 5	4-F	4-G	7 - H		
Ne (RR) rane & Finley Rd #7 St & Finley Rd #3 s E. of Rd 28			Town	Burbank	Finley	Finley	Pasco		
Casii 2nd / Coch Main Lewii			No Casing Location	2nd Ave (RR)	Cochrane & Finley Rd #7	Main St & Finley Rd #3	Lewis E. of Rd 28		
No No 2 2 3 3 7 7 7 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9		-	No		3	7	3		



In the Community to Serve^{*}

EXHIBIT (B)

Corrosion Control Manager:

Currently Steve Kessie Operations Manager is responsible for CNGC
 Corrosion Technicians. However a newly appointed position is expected to be in place within 6 months.

Corrosion Control Technicians

- Dustin Knowles responsible for Bellingham and Mt. Vernon districts. Hired 2003
- Morgan Gray responsible for Bremerton, Aberdeen and Longview districts. Hired 02/2011
- Patrick Clark responsible for Yakima, Wenatchee districts. Hired 03/2011
- Daniel Hamilton responsible for Kennewick and Walla Walla, Pendleton districts. Hired 11/2010 replaced Greg Miller.
- Mark Carlile responsible for Bend, Ontario districts. Hired 01/2011

EXHIBIT (B) continued

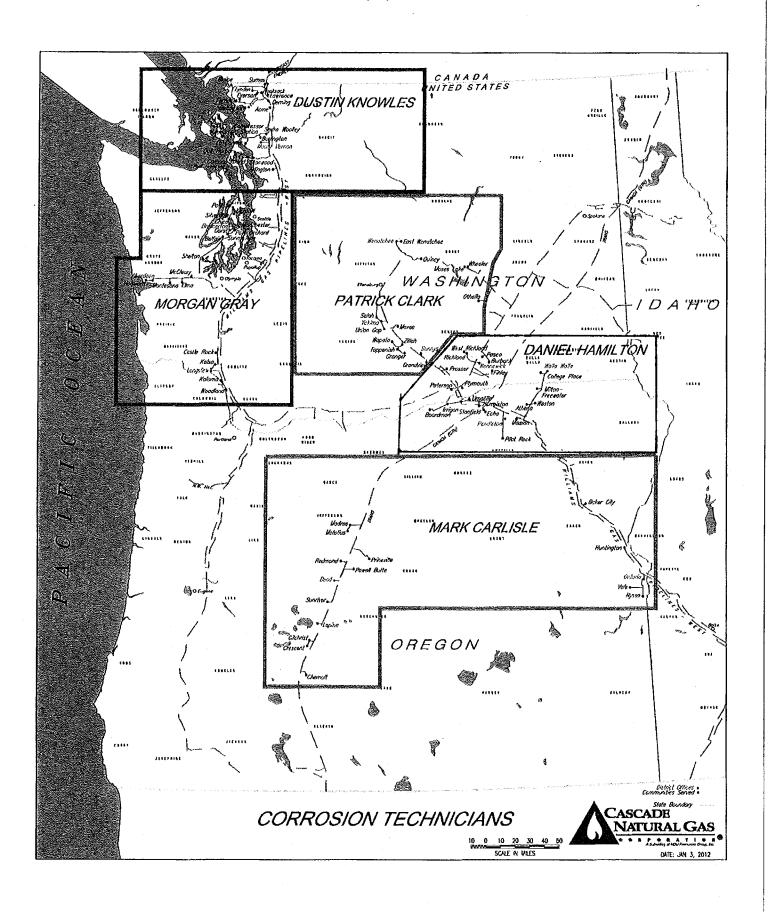


EXHIBIT (C)

Casing #43, N 13th Ave.

There was never a casing here, this was a valve box with a vent. The valve (V-02) was retired after 6/24/05.

The photo below is the vent which was attached to the vault lid.

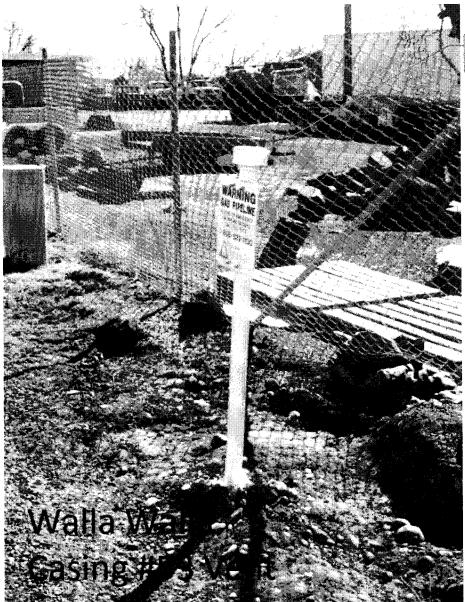


EXHIBIT (C) Continued

CASING # 53

Larger & W. O. Pag PROJECT AUTHORIZATION y selencia 189760 s.Highnation Cersa Clanese RP CASING VENTS WALLA WALLA postprag Placent Start FERC Subjet **WOODLAND AVE AT RR TRACKS** Plantend Complete 62(1971) Ena Alancagang \$ CARDENAR OSM tobbing(184) Non Capital CNGC VP Operations NON CAPITAL PROJECT PERC Serveri Utility O&M Exp. - Norshitable Phoesis Type Progest Status Authorization Approved COMPLETE PROJECT DESCRIPTION & JUSTIFICATION Vent Casing installed and extraded A THOMPS THE PROJECT DESCRIPTION & JUSTIFICATION VENT CASING INSTALLED AND Extraded CLOSED 2-10-/2 21008 Walto Waile Foundry 405 OIL BRTD. H xing Abadic

EXHIBIT (C) Continued



CASING #53 at its new location.

EXHIBIT (D)

Parent W.O. No. 184665 184665 W.O. Number B033376R Cost Center FERC Subplit 3760 Est. Amount \$ 0

PROJECT AUTHORIZATION

REPL RECTIFIER WALLA WALLA

Page Number

06/17/11

Origination Planned Start

06/20/11

RAINIER ST WEST OF OLYMPIA DR

Planned Complete 06/30/11

Originator

Level 3 Rosp No. Project Type

CARDENAR **CNGC VP Operations** Blanket Utility Capital WO

Project Class FFRC Subplant Project Status

CAPITAL REPL/RELOCTE - FORCED

Mains - Gas Distribution Authorization Approved

COMPLETE PROJECT DESCRIPTION & JUSTIFICATION CLOSED 9-20-11

NO DOC

A Description & Justification REPL RECTIFIER WALLA WALLA

DONE 8-5-11

		ORIGINAT	ING DIVI	SION APPROVAL	S		*****
Cogestor	Oate	Dept How	Data	Office Manager	Diste	Region Manager	faceter
		GENERAL O	FFICE TE	CHNICAL REV	I E W S		
Edvirantoernali keeleva by	Date	Regulatory Afford Review By	Direc	Lagu Revien By	Date	Point Asset According Review by	ÜXX
			L OFFIC	E APPROVALS			Tablide Samuelia de Tarques
Manager	* Date	Voe Presiden	Date	President and/or GEO	Dara	MOUR - President and/or CEC-	3859

EXHIBIT (D) Continued

Parent W.O. No. W.O. Number

185869 185869 B033376R

PROJECT AUTHORIZATION

Page Number

08/04/11

Cost Center

3760

REPL RECTIFIER WALLA WALLA

Origination Planned Start

08/04/11

Originator

0

DALLES MILITARY RD AT R-1

CAPITAL REPL/RELOCTE FORCED

Level 3 Resp No.

FERC Subpit

Est. Amount \$

CARDENAR **CNGC VP Operations**

FERC Subplant

Project Class

Mains - Gas Distribution

Project Type

Blanket Utility Capital WO

Project Status

Authorization Approved

COMPLETE PROJECT DESCRIPTION & JUSTIFICATION

CLOSED 9-20-11

NoJoc

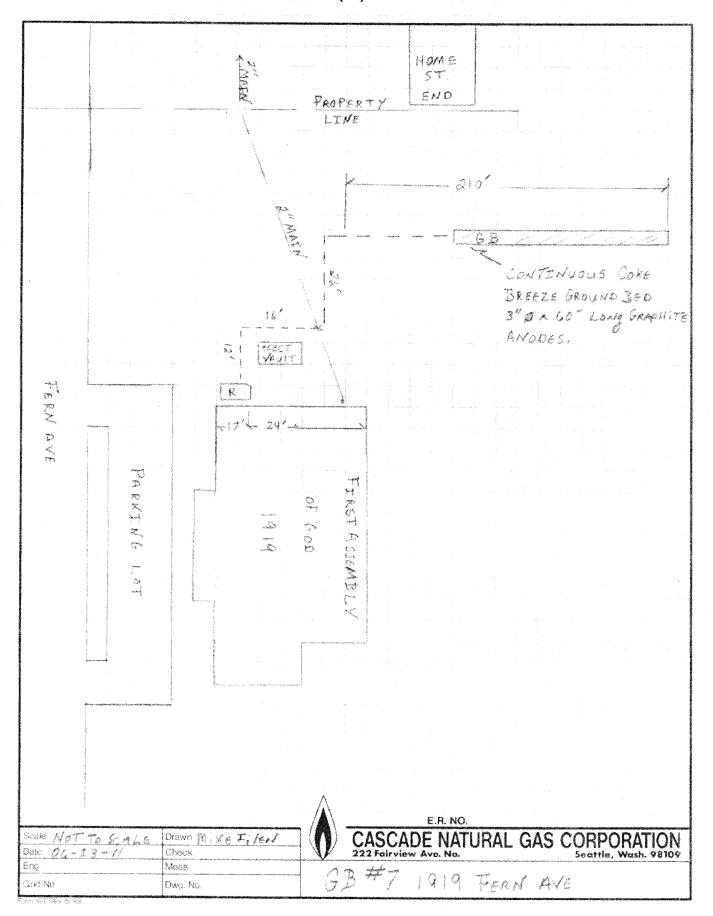
Planned Complete 08/19/11

A Description & Justification REPL RECTIFIER WALLA WALLA

DONE 8-4-11

िन वर्ष्णा कराव	Date	Dept Read	uate Office Manager	Date	Rogian Marager	Paster
	N /WW /	GENERAL	OFFICE TECHNICAL RE	V 3 E W S		entere est anno est
Fayers prope Rosely By	Diste	Regulatury Affairs Review N	Sy Delle Lugal Review By	Date	round Asset Accounting Reserve	Est San
	***************************************	GENE	BAL OFFICE APPROVAL	<u> </u>		
				w		

EXHIBIT (D) Continued



PV#5 Finding #EXHIBIT (E) 0-7 DISTRICT PLAN

CASCADE NATURAL GAS CORPORTATION CORRECTIVE ACTION PLAN

District: Kennewick, WA.

ODORIZERS: O-6, Hwy. 221, Patterson, WA.

O-7, Hwy, 14, Plymouth, WA.

Per Cascade Natural Gas Corporation procedure # 747, it is required to check the Odorant level at all Odorizer Stations on or within three working days after the first day of the month.

The two odorizers listed above experience a greater use during the agriculture harvest and production times of the year. This variation in consumption has led to instances of nearly emptying the odorant tank. To keep this condition from occurring, Cascade's Kennewick District has adopted the policy of checking the odorant levels weekly during the peak activity levels listed below.

Odorizer 6: Experiences peak usage from June through December. Consumption the rest of the year is of a more limited nature. January through May revert back to monthly reads as per Cascade Natural Gas procedures.

Odorizer 7: Experiences peak usage from October through January, every year. Consumption the rest of the year is limited to none. February through September revert back to monthly reads as per Cascade Natural Gas procedures.

millem

EXHIBIT (F)





Search & Status - Washington

WASHINGTON ONE CALL Ticket No: 12031635

2 FULL BUSINESS DAYS NEW TICKET

Transmit Date: 02/23/2012 Original Call Date: 02/23/2012 Time: Time:

Time:

orlinda Op: Op:

Work to Begin Date: 02/28/2012

00:00

webusr3

Caller Information

06:58

05:19

(509) 735-7334

Company: **Contact Name:** CASCADE NATURAL GAS **RON MILLER**

Fax Phone: **Contact Phone:**

(509) 783-7361 Ext:

Address:

200 N UNION

Best Time:

KENNEWICK, WA 99336

Alt. Contact Name: BRUCE YAMAUCHI

Contact Email:

RMILLER@CNGC.COM

Alt. Contact Phone: (509) 460-6687

Dig Site Information

Type of Work:

PRESURE TEST GAS MAIN LINE

Work Being Done For: CASCADE NATURAL GAS

Dig Site Location

RICHLAND

State: WA

County: BENTON

Place:

Address:

2360

Street: Nearest Intersecting Street: COPPERLEAF ST COPPERBUTE ST

Location of Work:

PLEASE MARK FROM S EDGE OF 2360 COPPERLEAF 75 FT S ON E SIDE OF ST

Remarks:

Twp: 10N

Rng: 28E

Sect-Qtr: 28-NE,28-SE,28-NW,28-SW

Twp: 10N

Rng: 28E

Sect-Qtr: 28-SW

ExCoord NW Lat: 46.3196064

Lon: -119.3221851

SE Lat: 46.3168907

Lon: -119.3203276

		Members		
District Code	Company Name	Marking Concernstd>>	Damage/Repair	Customer Servicetd>
CHRTER03	CHARTER COMMUNICATIONS	(425)392-6412	(866)761-5420	(866)761-5420
CNG18	CASCADE NATURAL GAS- KENNEWICK	(888)522-1130	(888)522-1130	(888)522-1130
GTE08	FRONTIER COMMUNICATIONS NW INC	(407)539-0445	(877)462-8188	(407)539-0644
RICHE01	RICHLAND WTR & ELEC	(509)942-7429	(509)942-7429	(509)942-7429
Home Locator 1	licket Management Excavator Ticket Ma © 2011 National Ticke	nagement Damage Manager I Management System: All Rigt	Ticket Check Search & Statu its Reserved	s About Contact

EXHIBIT (F) Continued



PV #7 Finding #1

Search & Status - Washington

WASHINGTON ONE CALL

Ticket No:

12031636 02/23/2012

2 FULL BUSINESS DAYS 07:02 05:24

Op:

NEW TICKET orlinda

Transmit Date: Original Call Date:

02/23/2012

Time: Time:

Op:

webusr3

Work to Begin Date: 02/28/2012

00:00 Time:

Caller Information

Company: Contact Name: CASCADE NATURAL GAS

Fax Phone: Contact Phone:

(509) 735-7334 (509) 783-7361 Ext:

Address:

RON MILLER 200 N UNION

Best Time:

KENNEWICK, WA 99336

Contact Email:

RMILLER@CNGC.COM

Alt. Contact Name: BRUCE YAMAUCHI Alt. Contact Phone: (509) 460-6687

Place:

Dig Site Information

Type of Work:

PRESURE TEST GAS MAIN LINE

CASCADE NATURAL GAS Work Being Done For:

Dig Site Location

RICHLAND

WA State: Address:

County: BENTON

2367 COPPERHILL ST

Street: Nearest Intersecting Street:

COPPERBUTE ST

Location of Work:

PLEASE MARK FROM S EDGE OF 2367 COPPERHILL 75 FT S ON W SIDE OF ST

Remarks:

Twp: 10N

Rng: 28E

Sect-Qtr: 28-NE,28-SE,28-NW,28-SW

Twp: 10N

Rng: 28E

Sect-Qtr: 29-SE,28-SW

ExCoord NW Lat: 46.3189858

Lon: -119.3249193

SE Lat: 46.3167997

Lon: -119.3239726

Members Customer Marking Concerns</B< District Damage/Repair</B< td> Service</B< Company Name</B< td> td> Code</B< td> td> CASCADE NATURAL GAS-(888)522-1130 (888)522-1130 (888)522-1130 **CNG18** KENNEWICK FRONTIER COMMUNICATIONS (407)539-0644 (877)462-8188 (407)539-0445 GTE08 **NW INC** (509)942-7429 (509)942-7429 (509)942-7429 RICHLAND WTR & ELEC RICHE01 Ticket Management | Excavator Ticket Management | Damage Manager | Ticket Check © 2011 National Ticket Management System. All Rights Reserved. Ticket Check | Search & Status | About | Contact

EXHIBIT(G) SPECIAL SURVEY FOR 301 WASH. AVE

CNG 286 Rev. 9/10

CASCADE NATURAL GAS SYSTEM SURVEILLANCE RECORD

PV#8	Finding#1
------	-----------

DISTRICT	TOWN ,	
Kennewid	Langewich	•
PATROL: QUARTER: 1 st Z nd 3 rd 4 th ATTACH PATROL LOG		
SPECIAL LEAK SURVEY DESCRIBE 30/ 5.	WAShington	
LEAK SURVEY INSIDE BUSINESS AREA (SECTION 1)	WAS TO THE TOTAL OF THE TOTAL O	
LEAK SURVEY OUTSIDE PRINCIPAL BUSINESS AREA SECTION: 2 3 4 5 6 AII		
TRANSMISSION OR HP LINE LEAK SURVEY		
LINE LINE NO. NAME		
LEAKS ATTACH LEAK LOCATIONS ON CNG 295 LEAK SURVEY DETECTION LOG	NO LEAKS LEAKS DETECT	ED
INSPECTIONS LEAK SURVEY – ATTACH AOC LOCATIONS ON PATROL – SPECIFY FINDINGS ON PATRO	CNG 297 LEAK SURVEY AOC LO OL LOG	OG
CONSTRUCTION ACTIVITY EXPOSED PIPE CONDITIONS PIPELINE SIGNS/MARKERS EROSION RIGHT-OF-WAY CONDITION NEW HIGH OCCUPANCY STRUCTURES OTHER NO AOC NO AOC	☐ AOC ☐ AOC ☐ AOC ☐ AOC ☐ AOC	
INSTRUMENT ACCURACY TESTS ATTACH CNG 353 LEAK SURVEY TEST LOGS FOR EACH INSTRUMENT USEL	D. OR WRITE TEST DATES AND SERI	AL NUMBER IN COMMENTS.
COMMENTS:		
See CNG F	orm 295	
See CNG F	orm 297	
·		***************************************
Surveyed By	Start Date	End Date
M. (ajill)	2-23-12	2-23-12
Manager (Date 2/24/	/2-

EXHIBIT (H)

PV#9

In the instances sited in PV#9 crew did not use 293B Leak Record form since pipe repaired was only damaged and there was no leak. The 293B Leak Record is the form which with the pipe condition check-off on it. We always use this form now to document our repairs.

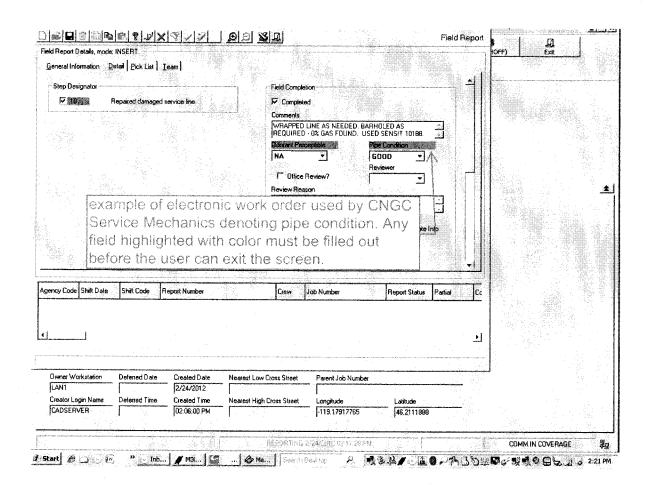
Following the audit in Dec 2011, I reviewed with the crew that we need to always document interior and exterior pipe condition when applicable.

John Brand

District Manager - Walla Walla

Bill Bloom William Brigni

EXHIBIT (I)



Kennewick District

1610DOT Leak Investigation

7/1/2010 through 2/26/2012

• CANTU, DAVID

Activity during 07/01/2010 - 02/26/2012

						* = 3rd. Party E	valuator
Title - ID	Туре	Date	Status	Score	Certificate	Evaluator / Proctor	Test Sheet
1610DOT - Leak Investigation - 6307	P/E	8/26/2010	Passed	100		SCHRIER, JOHN	N/A
1610DOT - Leak Investigation - 6307	P/E	2/22/2012	Passed	100		SCHRIER, JOHN	N/A

• CARGILL, MICHAEL

Activity during 07/01/2010 - 02/26/2012

Title - ID	Type	Date	Status	Score	Certificate	Evaluator / Proctor	Test Sheet
1610DOT - Leak Investigation - 6307	P/E	8/26/2010	Passed	100	国	SCHRIER, JOHN	N/A
1610DOT - Leak Investigation - 6307	P/E	2/22/2012	Passed	100	₽	SCHRIER, JOHN	N/A

* = 3rd. Party Evaluator

• CONRADS, STEVEN

Activity during 07/01/2010 - 02/26/2012

						* = 3rd. Party Evaluator
Title - ID	Type	Date	Status	Score	Certificate	Evaluator / Test Proctor Sheet
1610DOT - Leak Investigation - 6307	P/E	8/26/2010	Passed	100	E	SCHRIER, N/A JOHN

HAMILTON, SAM

Activity during 07/01/2010 - 02/26/2012

* = 3rd. Party Evaluator

Title - ID

Type

Date Status Score

Evaluator / Certificate

1610DOT - Leak Investigation - 6307

P/E 11/16/2011 Passed 100

EE.

NELSON, KEN

N/A

JOHNSON, ROGER

Activity during 07/01/2010 - 02/26/2012

* = 3rd. Party Evaluator

Title - ID

Type

Date

Status Score

Certificate

Evaluator /

1610DOT - Leak Investigation - 6307

P/E 8/26/2010 Passed 100

國

SCHRIER, N/A **JOHN**

MONK, WILLIAM

Activity during 07/01/2010 - 02/26/2012

ື = 3rd. Party Evaluator

Title - ID

Туре

Date

Status Score

Certificate

1610DOT - Leak Investigation - 6307

P/E 2/22/2012 Passed 100

SCHRIER, JOHN

RAMOS, TIM

Activity during 07/01/2010 - 02/26/2012

* = 3rd. Party Evaluator

Title - ID

Type

Date

Status

Score Certificate

N/A

1610DOT - Leak Investigation - 6307

P/E 7/21/2010 Passed 100

ĒŦ.

SCHRIER, **JOHN**

• SMITH, ZACHARY

Activity during 07/01/2010 - 02/26/2012

-	= 3rc	I. Pai	ty Ev	aluator
EV	aШ	ator	7	Test

Title - ID	Type	Date	Status	Score	Certificate	Evaluator / Proctor	Test Sheet
1610DOT - Leak Investigation - 6307	P/E	8/26/2010	Passed	100	₽	SCHRIER, JOHN	N/A
1610DOT - Leak Investigation - 6307	P/E	2/22/2012	Passed	100		SCHRIER, JOHN	N/A

TOWNE, KEITH

Activity during 07/01/2010 - 02/26/2012

* = 3rd. Party Evaluator

Title - ID	Туре	Date	Status	Score	Certificate	Evaluator / Proctor	Test Sheet
1610DOT - Leak Investigation - 6307	P/E	9/9/2011	Passed	100	₽	SCHRIER, JOHN	N/A
1610DOT - Leak Investigation - 6307	P/E	11/16/2011	Passed	100		NELSON, KEN	N/A

• WEBB, HEATH

Activity during 07/01/2010 - 02/26/2012

						≈ 3rd. Party E	valuator
Title - ID	Туре	Date	Status	Score	Certificate	Evaluator / Proctor	Test Sheet
1610DOT - Leak Investigation - 6307	P/E	11/16/2011	Passed	100		NELSON, KEN	N/A

YOUNGBLOOD, KENDALL

Activity during 07/01/2010 - 02/26/2012

* = 3rd. Party Evaluator

Type Date Status Score Certificate Evaluator / Proctor Sheet

1610DOT - Leak
Investigation - 6307

* = 3rd. Party Evaluator / Test Sheet

1715/2010 Passed 100

* = 3rd. Party Evaluator / Test Sheet

NELSON, N/A

• ZOLLINGER, WYATT

Activity during 07/01/2010 - 02/26/2012

* = 3rd. Party Evaluator

Type Date Status Score Certificate Evaluator / Proctor Sheet

1610DOT - Leak
Investigation - 6307

Type B/18/2010 Passed 100

* = 3rd. Party Evaluator / Test Sheet

NELSON, N/A

Topics of Discussion

- ➤ Locates: Remember again, don't assume GIS mapping is current, if in doubt contact clerks to assist you; and report errors from the field. Do not assume another CNG personnel's markings (if still visible are correct) re-locate.
- Meter exchanges: (Family meter tests), have a time frame, if need assistance contacting customer for arrangements; contact Mari.
- ➤ REMINDER: All maintenance and compliance paperwork needs to be turned in to Teresa or Kendall for review first. UTC issues, JDE work order must be closed in a timely manner, or the District shows red on the maintenance reminder, which is an ugly color to all involved, especially Kendall & Teresa- when our boss sees it.
- > REMINDER: NO WHITE OUT on any form, if error, will need to redo the form.
- > CHARTS: Anything over 60 MAOP is UTC notifiable, management must know immediately.
- > FC300: Still need to go to meter and verify reads, ERT and meter numbers; only way we will catch errors.
- > PBI: No meter, still need to perform PBI at riser

OTHER TOPICS

GIS mapping training - Kendall

SharePoint reviewed

<u>Leak Grading – FOUND & LEFT must be documented CP# 750 handed out (2nd training on this topic, 1st training 12-5-2011)</u>

ATTENDEES

Tachony mith	
(want and	
St. Coll	
Hamilton	
W. Zollinger WESSES	· · · · · · · · · · · · · · · · · · ·
Tim Namos	
Diresa Espana	
Musac Spana	
TRaining	
harepoint Dour-	
ts mapping Jour	
eak Grading	

EXHIBIT(K) CONT. ADDITIONAL DIST. TRAINING HELD BY LOCAL MANAGERS

PV# 10 Finding #1

	LEAK GRADING TRAINING	KENNEWICK DISTRICT
Date	Training Description	Attendees
12/5/11	Leak grading, Reviewed & Handed out CP #720, 724, 750	Conrads, Hamilton, Ramos, Cargill, Esparza
12/12/11	12/12/11 Leak grading, Reviewed & Handed out CP #510, 720, 724, 740, & 750	Bushmaker, Esparza, Paez, Ramos, Zollinger, Vaidez, Miller, Youngblood, Clapp
02/06/12	Leak grading, Reviewed & Handed out CP #720, 724, 750	Cantu, Cargull, Conrads, Esparza, Hamilton, Ramos, Smith, Zollinger, Youngblood
		

EXHIBIT (L) SHOWS FOLLOW-UP CHECK WAS GRADED C CASCADE NATURAL GAS CORPORATION LEAK INVESTIGATION after audit and Cats Killy ISTATE ADDRESS Plw Come LEAK LOCATION additional training NAME REPORTED BY leak investigation ADDRESS IF NOT was completed ADDRESS CITY STATE √RTED AN EMPLOYEE correctly DERGROUND PROBE READINGS - IF YOU NEED MORE THAN 10 PROBES DRAW TABLE ON BACK. ASP = USED ASPIRATOR **ACTION CODES:** IN = INITIAL RV = RE-EVALUATION FOL = FOLLOW-UP (SHOW LOCATION ON SKETCH) **ACTION TAKEN** 10-7-11 DATE 10-3-11 00 1308 TIME Canhi PERFORMED BY Dovid John Sor 1874 INST. SER. NOS. 1874 1874 -28 -11 9-28 INST. CALIB, DATES ٥٧, 0% В 3.8 % 0% (READINGS % GAS UNLESS NOTED DIFFERENT) С 2% % D % Е % 0 F % 22% G 90 0

SKETCH – DRAW BAR HOLE LOCATIONS, PIPE, AND STREET BOUNDARIES. INCLUDE ALL INFORMATION USED IN THE GRADING OF THE LEAK, I.E., LOCATION OF PAVED AREAS AND BUILDINGS IF WITHIN THE AREA OF INFLUENCE OF THE GAS. ADD COMMENTS TO SKETCH.

3

EMAIL - COMPLIANCE MGR

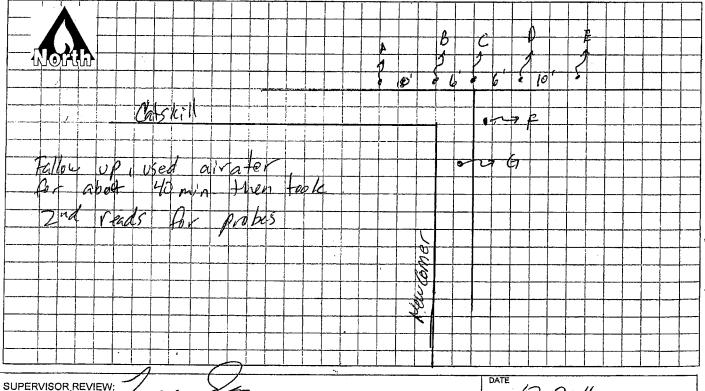
PROBE IDENTIFICATION

Н

J

LEAK GRADE (1,2,3)

ORIGINAL - DISTRICT



SCAN - G:\SHAREDUDE\DE_DOCS\DISTRICT\OPEN LEAK REPORTS\OPEN WO#@ADDRESS.TIF

EXHIBIT (M) CNG VALVE MAINT. INDACATING OPERATION OF VALVE CNG 287B REV 8/11 CASCADE NATURAL GAS FACILITY NO. 26 (

FACILITY MAINTENANCE & INSPECTION RECORD **OPERATIONAL VALVE**

FACILITY LOCATION SNYDER CAST OF ROBERTSON AVE			
TOWN RICHLAND DISTRICT KENNEVICK STATE WA.			
☐ ANNUAL ☐ REBUILD ☐ NEW ☐ RETIRE	☑ SPECIAL		
	· · · · · · · · · · · · · · · · · · ·		
SIZE 2" MAKE Muller	MODEL 14-17800		
VALVES OPERATE FREELY ☑ YES □ NO □ N/A VALVE POSITION CHECKED ☑ OPEN □ CLOSED VALVES LUBE □ YES □ NO ☑ N/A VALVE BOX ☑ GOOD □ BAD □ N/A VALVE BOX LID ☑ GOOD □ BAD ☑ N/A VAULT LID □ GOOD □ BAD ☑ N/A VAULT □ GOOD □ BAD ☑ N/A	SIGNS GOOD BAD N/A GROUNDS GOOD BAD N/A FENCE GOOD BAD N/A WRAP GOOD BAD N/A PAINT GOOD NEEDS PAINT N/A		
CHECKED VALVE LOCKS ☐ IN-PLACE ☑ N/A			
REMARKS: WHEN BAD IS MARKED AN EXPLANATION IS REQUIRE REGULATOR, RELIEF VALVE, OR VALVES – LIST MAKE, MODEL, PILO MAINTENANCE WORK REQUEST NUMBERS FOR NECESSARY REPAIR PARTS CHARGED: YES NO	TS, MARKERS OR SIGNS. INCLUDE OPERATION AND		

FOLLOW-UP REQUIRED: YES NO			
WORK ORDER NUMBER			
INSPECTED BY M. LAYILL DATE 2/28/12 GENERAL	MANAGER JINULU MUN DATE 2/28/12		

EXHIBIT (M) CNG VALVE MAINT. INDACATING OPERATION OF VALVE CNG 287B CASCADE NATURAL GAS FACILITY NO. V - 6.5

CNG 287B REV 8/11

FACILITY MAINTENANCE & INSPECTION RECORD OPERATIONAL VALVE

REGULATOR, RELIEF VALVE, OR VALVES – LIST MAKE, MODEL, PILOTS, MARKERS OR SIGNS. INCLUDE OPERATION AN MAINTENANCE WORK REQUEST NUMBERS FOR NECESSARY REPAIRS).
SIZE
VALVES OPERATE FREELY YES NO N/A SIGNS GOOD BAD N/A VALVE POSITION CHECKED OPEN CLOSED GROUNDS GOOD BAD N/A VALVES LUBE YES NO N/A FENCE GOOD BAD N/A VALVE BOX GOOD BAD N/A WRAP GOOD BAD N/A VALVE BOX GOOD BAD N/A VALVE BOX LID GOOD BAD N/A VAULT LID GOOD BAD N/A VAULT LID GOOD BAD N/A VAULT GOOD BAD N/A VAULT GOOD BAD N/A VAULT GOOD BAD N/A VAULT GOOD BAD N/A CHECKED VALVE LOCKS N/A REMARKS: WHEN BAD IS MARKED AN EXPLANATION IS REQUIRED. (WHEN REPLACEMENT IS MADE OF REGULATOR, RELIEF VALVE, OR VALVES - LIST MAKE, MODEL, PILOTS, MARKERS OR SIGNS. INCLUDE OPERATION AN MAINTENANCE WORK REQUEST NUMBERS FOR NECESSARY REPAIRS).
VALVE POSITION CHECKED POPEN CLOSED GROUNDS GOOD BAD N/A VALVES LUBE YES NO N/A FENCE GOOD BAD N/A VALVE BOX GOOD BAD N/A WRAP GOOD BAD N/A VALVE BOX LID GOOD BAD N/A VAULT LID GOOD BAD N/A VAULT LID GOOD BAD N/A VAULT GOOD BAD N/A CHECKED VALVE LOCKS IN-PLACE REMARKS: WHEN BAD IS MARKED AN EXPLANATION IS REQUIRED. (WHEN REPLACEMENT IS MADE OF REGULATOR, RELIEF VALVE, OR VALVES - LIST MAKE, MODEL, PILOTS, MARKERS OR SIGNS. INCLUDE OPERATION AN MAINTENANCE WORK REQUEST NUMBERS FOR NECESSARY REPAIRS).
REMARKS: WHEN BAD IS MARKED AN EXPLANATION IS REQUIRED. (WHEN REPLACEMENT IS MADE OF REGULATOR, RELIEF VALVE, OR VALVES – LIST MAKE, MODEL, PILOTS, MARKERS OR SIGNS. INCLUDE OPERATION AN MAINTENANCE WORK REQUEST NUMBERS FOR NECESSARY REPAIRS).
REMARKS: WHEN BAD IS MARKED AN EXPLANATION IS REQUIRED. (WHEN REPLACEMENT IS MADE OF REGULATOR, RELIEF VALVE, OR VALVES – LIST MAKE, MODEL, PILOTS, MARKERS OR SIGNS. INCLUDE OPERATION AN MAINTENANCE WORK REQUEST NUMBERS FOR NECESSARY REPAIRS). PARTS CHARGED: YES NO
FOLLOW-UP REQUIRED: YES NO
WORK ORDER NUMBER
NSPECTED BY DATE 1 12 GENERAL MANAGER WINGER DATE 2/28/12

EXHIBIT (M) CNG VALVE MAINT. INDACATING OPERATION OF VALVE CNG 287B CASCADE NATURAL GAS FACILITY NO. V-66

CNG 287B REV 8/11

FACILITY MAINTENANCE & INSPECTION RECORD OPERATIONAL VALVE

FACILITY LOCATION	Burden Buib A	And Conven	TION PL.	
TOWN DASCO	DISTRICT	Kennewar	STATE CUM	
,				
☑ annual ☐ rebuii	D NEW] RETIRE	ECIAL	
SIZE 2" N	IAKE Muller	MOI	DEL_ #-17800	
VALVES OPERATE FREELY VALVE POSITION CHECKED VALVES LUBE VALVE BOX VALVE BOX LID VAULT LID VAULT	YES NO OPEN CLOSED YES NO GOOD BAD GOOD BAD GOOD BAD GOOD BAD GOOD BAD	N/A FENCE N/A WRAP N/A	GOOD BAD S GOOD BAD GOOD BAD GOOD BAD GOOD BAD	N/A N/A N/A N/A
CHECKED VALVE LOCKS ☐ IN-PLACE	x ¹N/A			
MAINTENANCE WORK REQUES		ARY REPAIRS).		
,				
FOLLOW-UP REQUIRED: [YES 🔀 NO			
WORK ORDER NUMBER_				

DATE 1812 VAREPOINT AND STATE _DATE<u>//1</u>2_ GENERAL MANAGER

ORIGINAL - DISTRICT

COPY - SHAREPOINT

EXHIBIT (M) CNG VALVE MAINT. INDACATING OPERATION OF VALVE CNG 287B REV 8/11 CASCADE NATURAL GAS FACILITY NO.

FACILITY MAINTENANCE & INSPECTION RECORD OPERATIONAL VALVE

	EDITH ST		Lumorist	
TOWN BURDONK	DISTR	ICT Keni	sewick	STATE WA
				,
ANNUAL REBUIL	.D NEW	RETIRE	🗹 SPECIAL	,
SIZE 2" M	IAKE nul	ier	MODEL	14.17800
VALVES OPERATE FREELY VALVE POSITION CHECKED VALVES LUBE VALVE BOX VALVE BOX LID VAULT LID VAULT	YES NO CLOS OPEN CLOS NO SE GOOD BAD GOOD BAD GOOD BAD GOOD BAD GOOD BAD BAD GOOD BAD	□ N/A SED ☑ N/A □ N/A □ N/A ☑ N/A ☑ N/A ☑ N/A	GROUNDS FOR CENCE CONTROL OF CENCE CONTROL OF CENTRAL O	GOOD BAD N/A
CHECKED VALVE LOCKS ☐ IN-PLACE	™ N/A			
REMARKS: WHEN BAD IS MAREGULATOR, RELIEF VALVE, OR MAINTENANCE WORK REQUEST PARTS CHARGED: YES	VALVES – LIST MAK NUMBERS FOR NECE	E. MODEL. PILOT	S MARKERS OR SI	EMENT IS MADE OF IGNS. INCLUDE OPERATION AND
FOLLOW-UP REQUIRED: [YES 🗷 NO			
WORK ORDER NUMBER_				
			./	1//1
INSPECTED BY M. Coqui		2 GENERAL M	ANAGER JIMILA	11 M/M DATE 3/18/13

EXHIBIT (M) CNG VALVE MAINT. INDACATING OPERATION OF VALVE CNG 287B REV 8/11 CASCADE NATURAL GAS FACILITY NO. V - 8 1

FACILITY MAINTENANCE & INSPECTION RECORD OPERATIONAL VALVE

FACILITY LOCATION G	oage And Lestie Rd	pt R.77
TOWN Richard	DISTRICT Kenn	eve STATE WA
☑ ANNUAL ☐ REBUIL	D NEW RETIRE	☐ SPECIAL
SIZE 2" M	IAKE Muller	MODEL 14. 17800
VALVES OPERATE FREELY VALVE POSITION CHECKED VALVES LUBE VALVE BOX VALVE BOX LID VAULT LID VAULT	YES	SIGNS GOOD BAD N/A GROUNDS GOOD BAD N/A FENCE GOOD BAD N/A WRAP GOOD BAD N/A PAINT GOOD NEEDS PAINT N/A
CHECKED VALVE LOCKS ☐ IN-PLACE	⊉ Ñ/A	
REGULATOR, RELIEF VALVE, OF	R VALVES – LIST MAKE, MODEL, PILO I NUMBERS FOR NECESSARY REPAIRS	D. (WHEN REPLACEMENT IS MADE OF IS, MARKERS OR SIGNS. INCLUDE OPERATION AND).
FOLLOW-UP REQUIRED:	YES NO	
WORK ORDER NUMBER_	·	
INSPECTED BY 111. Can V	DATE 1/17/12-GENERAL I	MANAGER MANAGE

ORIGINAL - DISTRICT

COPY-SHAREPOINT - TE

EXHIBIT (M) CNG VALVE MAINT. INDACATING OPERATION OF VALVE CASCADE NATURAL GAS FACILITY NO. V-83

CNG 287B REV 8/11

FACILITY MAINTENANCE & INSPECTION RECORD **OPERATIONAL VALVE**

FACILITY LOCATION	Foster Wellind 2	Burlington
TOWN DIASCO		rewick STATE (1/4-
	1237	0.00
PANNUAL REBUII	LD NEW RETIRE	SPECIAL
$SIZE _ 2''$ N	IAKE <u>Mueller</u>	MODEL 17800
VALVES OPERATE FREELY	YES □ NO □ N/A N/A	SIGNS 🔀 GOOD 🗌 BAD 🔲 N/A
VALVE POSITION CHECKED VALVES LUBE		GROUNDS ☐ GOOD ☐ BAD ☐ N/A
VALVES LOBE.	☐ YES ☐ NO ☑ N/A ☐ SOOD ☐ BAD ☐ N/A	FENCE ☐ GOOD ☐ BAD ☑ N/A WRAP ☑ GOOD ☐ BAD ☐ N/A
VALVE BOX LID	☑ GOOD ☐ BAD ☐ N/A	WRAP <u>⊿</u> GOOD ∐ BAD ☐ N/A
VAULT LID	☐ GOOD ☐ BAD ☑ N/A	PAINT ☑GOOD ☐NEEDS PAINT ☐N/A
VAULT	☐ GOOD ☐ BAD 🛣 N/A	·
CHECKED AND A LOCKE		
CHECKED VALVE LOCKS	⊠N/A	
LI ATTENDE	Altiva	
MAINTENANCE WORK REQUEST	NUMBERS FOR NECESSARY REPAIRS	S, MARKERS OR SIGNS. INCLUDE OPERATION AND
		
:		
		
FOLLOW-UP REQUIRED:] YES 🔀 NO	
WORK ORDER NUMBER		

ORIGINAL - DISTRICT

COPY - SHAREPOINT

EXHIBIT (M) CNG VALVE MAINT. INDACATING OPERATION OF VALVE CNG 287B REV 8/11 CASCADE NATURAL GAS FACILITY NO. 130

FACILITY MAINTENANCE & INSPECTION RECORD OPERATIONAL VALVE

		(SIDEWALK)
FACILITY LOCATION _		64 at (Norsh west Corner)
TOWN PASCO	DISTRICT Kem	lui STATE UP,
,		
☐ ANNUAL ☐ REBU	ILD NEW RETIRE	SPECIAL
SIZE_2"	MAKE MUTLER	MODEL 11 - (7800
VALVES OPERATE FREELY VALVE POSITION CHECKE VALVES LUBE VALVE BOX VALVE BOX LID VAULT LID VAULT		SIGNS GOOD BAD N/A GROUNDS GOOD BAD N/A FENCE GOOD BAD N/A WRAP GOOD BAD N/A
CHECKED VALVE LOCKS ☐ IN-PLACE	DK√/A	
MAINTENANCE WORK REQUE PARTS CHARGED: YE	ST NUMBERS FOR NECESSARY REPAIR	OTS, MARKERS OR SIGNS. INCLUDE OPERATION AND (S).
FOLLOW-UP REQUIRED:	☐ YES ØNO	
WORK ORDER NUMBER		
		1/ 7/1//
INSPECTED BY M. Cu.i	// DATE 2/28/12 GENERAL	MANAGER 1/1/1/1/1/1/1/1/1/2 DATE 2/18/12