Dear Mr. Darras:

We have completed our investigation into the October 22, 2019 federally reportable incident located at 710 North Stratford Moses Lake, incident NRC #1263446, and WA UTC #8116.

This incident involved a ¾” steel stub and service tee being pulled off the top of a 6” steel main. This incident occurred when CNGC personnel were unable to precisely locate the ¾” stub even though several attempts were made and both CNGC and the contractor attempted to find the exact location of the facility using electronic pipe locators and maps.

Staff believes that both CNGC and the contractor involved made reasonable attempts to locate and expose the stub prior to it being damaged. This investigation will be closed as of the date of this letter.

If you have any questions or if we may be of any assistance, please contact Scott Rukke at (360) 870-4923. Please refer to the subject matter described above in any future correspondence pertaining to this inspection.

Sincerely,

Sean C. Mayo
Pipeline Safety Director

cc: Josh Sanders, Director, Operations Policy & Procedures
    Mike Schoepp, Director, Operations Services
    Ryan Privratsky, Director, System Integrity, Integrity Management
    Sam Hamilton, Manager, Compliance Operations Programs
UTC Incident Investigation Form

Notification ID: 3595
Investigation ID: NRC #1263446 and UTC #8116

Inspector Name: Scott Rukke
360-870-4923
Scott.Rukke@utc.wa.gov

Date Report Submitted to Chief Engineer: November 19, 2019
Date Report Reviewed & Approved by Chief Engineer: December 20, 2019

Operator: Cascade Natural Gas Co.
District/Unit: Moses Lake
Locations: 710 N. Stratford, Moses Lake WA (Originally reported as 911 N. Stratford Road)
Incident Date: October 22, 2019

Description:

A contractor pulled a steel stub and tore a ¾” tee off a 6-inch steel intermediate pressure main. The main was operating at 40 psig. The size of the hole was 3/8-inch in diameter. The main was a one way feed and located in a business district. Approximately 25 commercial customers were served by the main including numerous restaurants so the decision was made by Cascade Natural Gas to install stopples and a bypass around the damage to keep the commercial customers live during repairs.

This was originally reported on 10/22/2019 as a State only reportable while CNG determined the actual cost of the incident.

On November 8, 2019, CNG determined the costs to have exceeded $50,000 and the incident was reported as NRC #1263446.

Facts/Chronology of Events:

On 10/17/19 at 710 North Stratford Road, Moses Lake, WA, a third-party contractor used a mini excavator alongside a CNGC field employee with a shovel in an attempt to locate a long stub service line that was unlocatable. They dug 5.5 feet deep, but were unable to locate the stub.

On 10/18/19, two CNGC field employees were unsuccessful in locating this stub but were unsuccessful. They contacted a CNGC Corrosion Control Technician for...
assistance.

On 10/21/19, the Corrosion Control Technician attempted to again locate the stub with no success. Markings provided by CNGC were based on measurements from field drawings.

On 10/22/19, two CNGC field employees were on-site (see First Operator Arrival time) at 8:30 am working with the third-party contractor.

At 9:00 am, the contractor was digging very slowly when he struck the unlocatable stub service line and pulled the 3/4" auto perf tee away from the 6" steel main creating a 3/8" hole.

The damaged main was a single feed serving a business district consisting primarily of restaurants and businesses that relied heavily on natural gas service. CNGC decided to allow the gas to blow and installed two stopples with a bypass to keep the businesses live while repairs were made. System pressure was 40 psig at the time of the incident and was lowered to 27 psig at 2:50 pm in order to mitigate gas loss.

Once the main was bypassed and the blowing gas brought under control, a CNGC crew dug up the damaged main to make permanent repairs. 7 customers that were tied in between the stopples lost gas service. The 6-inch steel main was cut out and replaced as a cylinder.

Size of hole: 3/8"

Gas Loss: From 9:00 am to 2:50 pm at 47 psig with a 3/8” hole size = 51 MCF and from 2:50 pm to 9:00 pm at 27 psig with a 3/8” hole size = 36 MCF. Pressure was reduced to 27 PSIG at 2:50 PM at the regulator station feeding this area. Gas Loss of the entire incident is estimated at approximately 87 MCF.

Total cost of this incident minus gas loss currently at $65278.69
Causes/Contributing Factors:

Locates were requested. The service stub was unlocatable. CNGC personnel attempted to dig and find the stub but were unsuccessful. CNGC was standing by as the contractor slowly dug but the stub was pulled and damaged the service tee on the main. Measurements of the tie in location were apparently not accurate possibly due to road realignment over the years.

Regulatory Analysis/ Violations:

No violations at this time. CNGC and the contractor worked together and made reasonable attempts to locate, excavate and expose the stub. Attempts were unsuccessful and the stub and main were damaged.
## UTC Incident Investigation Form

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