

response plan. Field team initiates remote site surveillance plan. Stand up test planned and initiated.

- d. **Start Up:** LT alarms will not be cause for line shutdown until after the start up gains balance the shut down losses within +/- 15%. Once start up gains and losses are balanced within +/-15% or when 90 minutes have elapsed since initial balance, whichever occurs first, all shutdown protocols regarding LT1, LT2, and LT3 alarms will be enacted.
- e. **PIG Anomalies:** PLM LT alarms created as a result of PIG run dynamics will be eligible for dismissal on confirmed instances that station pressures and flow signals coincide with PIG location. PIG run dynamics will not be cause to dismiss LT alarms beyond 10% of alarm set point.
- f. **Communication system and Power System Failures:** PLM LT alarms can be a result of momentary losses to communication or power system infrastructure. Resultant losses of data can create PLM alarms. These alarms will not initiate H-SLC shut down procedures provided the data loss is not for a period of time greater than 20 minutes.

**Trending Strategy:**

NWCP controller PI screens have enhanced trending with additional details for trends of operating parameters to include:

- Line and meter pressure, temperature, and flow
- H-SLC hourly accumulated meter loss and gain deviations
- H-SLC daily accumulated meter loss and gain deviations
- Statistical deviations of H-SLC leak deviation calculations

**2. What equipment including valves have been modified or replaced**

- Fort Douglas (Red Butte) block valve site – valve and piping modifications
- Salt Lake Station – insulating flange removal

**3. Any additions to SCADA e.g. field telemetry points added, etc.**

No additional SCADA points have been installed at this time.

**4. Summary of all work performed re: the 3 anomaly digs**

- a. Include a short summary of the called out anomaly size,
- b. as found and as left conditions,
- c. a summary of any previous indications at each position, etc.

**Hanna to Salt Lake Crude System MP 108.5 to MP 182.5**

MP 119.74 - Repair #1 (60 Day) is complete and back filled. It was determined that the called out indication was a designed bend in the pipe. The bend was Ultrasonically Tested (UT) and indicated no metal loss. The section of pipe was recoated. Neither a dent nor metal loss was identified in the 2008 In-Line Inspection (ILI) report but an indication of some type of Inside Diameter (I.D.) feature could be seen in the vendor's software.

MP 121.07 - Repair # 2 (Immediate) was validated. It was a dent as suggested in the ILI data as a small gouge near the center. It was original construction, and the coating at the dent was in excellent condition. No metal loss was identified and a sleeve was installed. A weld inspection was completed, and the pipe has been recoated and backfilled. The dent was listed in the 2008 ILI report but at that time indicated no metal loss thus no further action was required.

MP 124.56 - Repair #3 (60 Day) is complete and back filled. A dent was found with no metal loss, and the coating was sound. A sleeve was installed. The dent was listed in the 2008 ILI report but at that time indicated no metal loss thus no further action was required.

MP 134.64 - Repair #4 (60 Day) is complete and backfilled. The pipe was sitting on a rock, the coating was cracked and general corrosion was found outside of the dent. The corrosion was very light and UT testing indicated no metal loss. A sleeve was installed and a weld inspection was completed. Neither a dent nor metal loss was identified in the 2008 In-Line Inspection (ILI) report but an indication of some type of Inside Diameter (I.D.) feature could be seen in the vendor's software.

MP 136.26 - Repair #5 (60 Day) is complete and backfilled. The Pipe was sitting on a rock, the coating was in good condition, and no corrosion or metal loss was identified. A sleeve was installed and the weld inspection was completed. The dent was listed in the 2008 ILI report but at that time indicated no metal loss thus no further action was required.

MP 142.37 - Repair #6 (60 Day) is complete and backfilled. The pipe was sitting on a rock, the coating was cracked and disbanded, and general corrosion was found outside of the dent. The corrosion was very light and UT testing indicated no metal loss. A sleeve was installed and the weld inspection was completed. Neither a dent nor metal loss was identified in the 2008 In-Line Inspection (ILI) report but an indication of some type of Inside Diameter (I.D.) feature could be seen in the vendor's software

MP 162.92 - Repair #7 (60 Day) is complete and backfilled. The anomaly is a mill defect and not a dent. A sleeve was installed and the weld inspection was completed. No corrosion or metal loss was indicated. The dent was listed in the 2008 ILI report but at that time indicated no metal loss thus no further action was required.

MP 164.65 - Repair #8 (60 Day) is complete and backfilled. The pipe was sitting on a rock with a slight dent with no coating damage, corrosion, or visual metal loss. A sleeve was installed and the weld inspection was completed. Neither a dent nor metal loss was identified in the 2008 In-

Line Inspection (ILI) report but an indication of some type of Inside Diameter (I.D.) feature could be seen in the vendor's software

**5. For all work performed, have a field engineer not familiar with the specific work (not the one who designed the alteration), review each field installation or removal point.**

- a. The engineer should be accompanied by a Chevron O&M technician familiar with field installations and operations.
- b. The field updated as-built (alternatively, the docs applicable to the new installation or removal of equipment) should be provided to these folks so they know what was changed.
- c. Create a checklist of items to be checked by the engineer and technician for each location
- d. Items should include but not be limited to:
  1. Check paperwork for all newly installed pipe
    - a) appropriate hydrotest docs;
    - b) proper design strength for the operations;
  2. Check ANSI flange and component ratings to ensure they are applicable for the installation's pressure requirements;
  3. Check the torque on all flange bolts that were removed, loosened or replaced;
  4. Check all appurtenances, control lines, pressure sensors, etc. just to make sure everything is tight;
  5. Make sure all valves are in their proper position.
  6. Any additional items it makes sense to include on such a facility review checklist.

**CPL Engineer and Salt Lake team member performed the following to satisfy this item (#5 a – d)**

Rangely to SL Station #2 Crude Pipeline: Field Installation and Removal Checklist

Field Engineers will be accompanied by OQ Certified Field Personnel on all site visits .

- Locate and review the following for field installation and removal of pipe and/or valves:
  - Pipe Mill Specifications
  - Pipe Hydrotest data
  - Welder Qualifications
  - Weld test reports
  - Valve test data (from manufacturer)
  - P&ID (where applicable)
  - Updated field schematic showing as-built configuration
- Verified proper design strength for all piping and components
- Verified all stud bolts are tightened
- Verified all components are tightened
- Verified all valves in proper position

CPL O&M personnel inspected the above-ground valve facilities between Hanna Pump Station and Salt Lake Station:

6. **For each area where any modifications were made should supply a completed signed checklist that indicates a general description of the work reviewed.**
  - a) Document any loose connections or other anomalous conditions discovered and the remediation required

CPL's engineering supervisor signed the document for the two locations where modifications occurred. See attachment

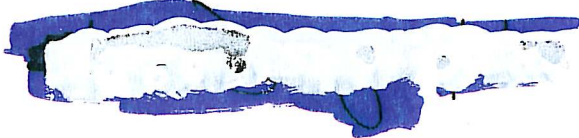
## Rangely to SL Station #2 Crude Pipeline: Field Installation and Removal Checklist

**\*\* Field Engineers will be accompanied by OE Certified Field Personnel on all site visits  
\*\***

- Locate and review the following for field installation and removal of pipe and/or valves:
  - Pipe Mill Specifications
  - Pipe Hydrotest data
  - Welder Qualifications
  - Weld test reports
  - Valve test data (from manufacturer)
  - P&ID (where applicable)
  - Updated field schematic showing as-built configuration
- Verify proper design strength for all piping and components
- Verify all stud bolts are tightened in accordance with CPL Torque Specification
  - Torque Specification
- Verify all components are tightened
- Verify all valves in proper position

### List of modified locations:

- COMPLETE** • Fort Douglas (Red Butte) block valve site – valve and piping modifications
- COMPLETE** • Salt Lake Station – insulating flange removal (NO visual inspection)



**DESIGN REVIEW SHEET**

**LOCATION**

**Red Butte Valve Site**

**Description**

**Complete**

**Person**

1	As-built dwg	Yes	WE
2	P&ID - (if applicable)	markups done	WE
3	Hydrotest Data - Pipe and fittings	Yes	WE
4	Mill Certs - pipe, valves and fittings	Yes	WE
5	Weld Map	Yes	WE
6	Welder Qualification sheet	Yes	WE
7	Weld Test Reports - NDE	Yes	WE
8	Mainline Valve Test Data	Yes	WE
9	Design Review for all piping and components	Yes	WE
10	Verify stud bolts are properly torqued (840 ft-lbs)	Yes	WE
11	Verify all componets are tight	yes	WE
12	Verify valves in correct position	yes	WE

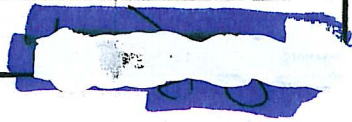


**DESIGN REVIEW SHEET**

**LOCATION**

**SL Station Flange Cutout**

	<b><u>Description</u></b>	<b><u>Complete</u></b>	<b><u>Person</u></b>
1	As-built dwg	Yes	WE
2	P&ID - (if applicable)	n/a	
3	Hydrotest Data - Pipe and fittings	Yes	WE
4	Mill Certs - pipe,	Yes	WE
5	Weld Map	Yes	WE
6	Welder Qualification sheet	Yes	WE
7	Weld Test Reports - NDE	Yes	WE
8	Mainline Valve Test Data	n/a	
9	Design Review for all piping and components	yes	WE
10	Verify stud bolts are properly torqued	n/a	
11	Verify all components are tight	n/a	
12	Verify valves in correct position	n/a	



## Appendix B

PHMSA requested additional information (01-26-11) regarding CPL's Restart Plan  
Below is CPL's responses:

1. Appendix A, Hourly/Daily and LTI Surveillance and Response Plans - Please change the PHMSA Phone Number to [REDACTED] for business hours contact and [REDACTED] for "after hours" contact.

*CPL Response: the Restart Plan has been updated to include the phone numbers that your department provided CPL.*

2. Please confirm that the Management of Change (MOC) process you are conducting regarding remote operation of the valves at Kimball Junction and Red Butte will prevent the possibility of over pressuring the pipeline should one or both of these valves be closed.

*CPL Response: The MOC will develop a protocol to protect the pipeline from overpressure when valves are closed remotely.*

3. Please confirm that the valve enhancement analysis you are conducting per Item 9 of our CAO will evaluate the possibility of providing remote operation to the #2 line block valve at Little Mountain.

*CPL Response: CPL commits to include the valve at Little Mountain facility in our valve enhancement analysis to understand the consequences of installing or converting the valve into a remote operated valve.*

4. Please verify that Chevron has provided Salt Lake City with up to date and accurate 24-hour emergency contact information both for the Control Center in Houston and for Local Chevron Personnel in the Salt Lake Area. Also verify that Chevron has updated and accurate contact information for key response personnel within Salt Lake City. These numbers should be made a part of the Restart Plan.

*CPL Response:*

*CPL revised the Restart Plan to include the following CPL contact information:*

*CPL Operations Manager* [REDACTED]

*CPL Salt Lake Field Team* [REDACTED]

*SL City Officials contact information:*

*Salt Lake City Non-emergency 24/7: (801) 799-4231*

*Salt Lake City Public Utilities Dispatch 24/7: (801) 483-6700*

*Jeff Niermeyer, Director*

*Salt Lake City Public Utilities*

*Office 801-483-6785*