Pacific Gas and Electric Company®

Frances Yee
Acting Director
Regulatory Compliance & Support
Gas Operations

375 N. Wiget Lane, Suite 200
Walnut Creek, CA 94598
925-974-4316
Fax: 925-974-4232
Internet: FSC2@pge.com

September 24, 2012

General Jack Hagan
California Public Utilities Commission
505 Van Ness Avenue, Room 2205
San Francisco, CA 94102-3298

Re: Status Report on Laboratory Testing of Pipe Cut-Outs

Dear General Hagan:

PG&E is providing an updated status report on laboratory testing of pipe cut-outs from PG&E's natural gas pipeline system. This report reflects activity through August 31, 2012.

The Status Report on Laboratory Testing of Pipe Cut-Outs provides a list of each pipeline piece that has been removed either for cause or for hydrostatic testing and any completed laboratory tests. We will continue to provide you with an update to this report on a regular basis.

If there are any questions regarding this report, please contact me, or Redacted Redacted Manager of Gas Operations Support at Redacted

Sincerely,

Frances Yee

cc: Julie Halligan, CPUC
Mike Roberston, CPUC

Redacted

Trina Horner, PG&E
Joe Medina, PG&E
Shilpa Ramaiya, PG&E
Sumeet Singh, PG&E
Jane Yura, PG&E

Cut Outs for Cause

Line Number	Approx. MP	Date Removed	Reason for Removal	Removal Comments	ATS or Other Test Report #	Report Results
L-100	139.030	4/29/2011	Perform mechanical testing on the SSAW seam weld	A mid-wall manufacturing anomaly was identified at this location during a validation dig following In-Line Inspection. A sample of pipe, including the mid-wall lamination, was cut-out to further analyze the seam weld.	Anamet #2500501493	Pipe properties confirmed. Seam weld was determined by ATS to be SSAW.
L-100	149.020	8/20/2011	Remove weld anomalies in the long-seam and girth weld	This pipe was exposed as part of an In-Line Inspection dig to validate some minor external corrosion.	ATS WO # 07876-011	ATS radiographed both the SSAW long-seam and the girth weld which both contained porosity. A cut-out was performed to remove the weld anomalies. Portions of Line 100, *including this section, are scheduled for* hydrotesting in 2012.
132	42.900	7/14/2011	Removed Per Pipeline Engineers Request. Girth Weld Sample to be Tested for Fitness for Service Study	Removed sleeve used to repair a 2009 girth weld leak. Removal will allow destructive testing to determine the cause of the leak. Girth weld originally chosen by Pipeline Engineering for testing & use in a Fitness for Service evaluation. The CPUC requested involvement in the weld leak testing (entry above) and therefore the girth weld was removed from the Fitness for Service Study due to timing issues.	ATS #3413.61-12.34 ATS #413.61-11.179	Radiographic report of girth welds at this location. Numerous spots were discovered to contain lack of fusion, elongated indications, burn through and slag. Draft report reviewed and comments resolved with Vendor. Expect report week of 6/11. Weld is safe and fit for service in its present condition.
132	42.900	7/14/2011	Removed Per Pipeline Engineers Request. Girth Weld Sample to be Tested for Fitness for Service Study	A leak on a girth weld in a circa 1948 segment of Line 132 was previously detected and repaired using a full encirclement steel sleeve in 2010. The repaired section was recently removed from the pipeline and a failure analysis was performed on the leak.	Report No./DNV Reg. No.: ANEUS826BAMEND (20120410)–0 Rev. No.0, June 13, 2012	The leak was found to be the result of workmanship flaws in the girth weld. No evidence of service related progression such as fatigue, stress corrosion, corrosion pitting, etc was found. The precise reason for the leak occurring so long after installation is unknown. The leak may have resulted from trapped slag in a weld-metal workmanship defect working its way out over time. Both pipes met the mechanical property requirements of the 1948 and the present API 5L requirements. Although in 1948 radiographic testing was not a code requirement, the girth weld failed current API Standard 1104 acceptance criteria for flaws detected by radiographic, magnetic particle, dye penetrant, and visual inspection.
132	43.180	7/25/2011	Girth Weld Sample to be Tested for Fitness for Service Study	Girth weld chosen by Pipeline Engineering for testing & use in a Fitness for Service evaluation.	ATS #413.61-11.179	Weld is safe and fit for service in its present condition.
132	43.180	7/25/2011	Longitudinal Weld Repair	Factory Repaired Longitudinal weld repair removed for testing at same *location as above girth weld removal*	ATS #413.61-11.179	Weld is safe and fit for service in its present condition.
132	41.610	7/21/2011	Girth Weld Sample to be Tested for Fitness for Service Study	Girth weld chosen by Pipeline Engineering for testing & use in a Fitness for Service evaluation.	ATS #413.61-11.179	Weld is safe and fit for service in its present condition.
132	42.410	7/21/2011	Girth Weld Sample to be Tested for Fitness for Service Study	Girth weld chosen by Pipeline Engineering for testing & use in a Fitness for Service evaluation.	ATS #413.61-11.179	Weld is safe and fit for service in its present condition.
132	42.410	7/23/2011	Girth Weld Sample to be Tested for Fitness for Service Study	Girth weld chosen by Pipeline Engineering for testing & use in a Fitness for Service evaluation.	ATS #413.61-11.179	Weld is safe and fit for service in its present condition.
132	39.368	7/29/2011	Offset removed @ request of Sunil Shori	Offset removed @ request of Sunil Shori	N/A	No testing performed - stored in Milpitas
132	39.311	8/5/2011	1956 pipe segment removed @ request of Sunil Shori	1956 pipe segment removed @ request of Sunil Shori	GE Inspection Services Report #LAPI0005	Sample being stored in Milpitas. MP corrected from 38.414 to 39.311. The inspections performed did not discover the presence of Stress Corrosion Cracking or any other external metal loss greater than 20% nominal wall thickness at the time of inspection. The inspection did find linear indications in the downstream long-seam.

Cut Outs for Cause

Line Number	Approx. MP	Date Removed	Reason for Removal	Removal Comments	ATS or Other Test Report #	Report Results
132	40.830	8/13/2011	Engineers Request - Long Seam Indication	Surface indication (dent) on the long-seam weld at L-132 MP 40.83. ATS was requested to also inspect the seam weld for weld quality purpose.	ATS #413.61-11.90	• Dent - No visible evidence of internal indications • The weld quality of the respective long seam welds are acceptable to API Specification 5L.
21E	64.170	5/12/2011	Perform Charpy V-Notch Testing on ERW long seam	Removed ERW seam samples for testing to support development of the updated Acceptance Criteria Position Paper.	Anamet #2500490196	Pipe properties confirmed
21E	55.560	6/5/2011	Evaluation of ERW Seam Leak in Line 21E.	The seam flaw had caused in a leak that was subsequently repaired in 1983 by installing a welded full encirclement steel sleeve. The objective of the analysis was to determine the cause of the leak and the characteristics of the pipe to support fatigue life evaluations for hypothetical seam flaws that might remain in the pipeline.	PP016880 DNV	An ERW seam leak in Line 21-E was the result of a short, very deep lack-of-fusion defect. The mechanical properties of the pipe material meet the requirements of the applicable API 5LX specification in effect at the time of manufacture. The toughness of the pipe material is sufficient to minimize the likelihood of long ruptures at the maximum allowable operating pressure (MAOP).
177A	153.370	7/13/2011	Stuck pig in an elbow	Removed an elbow during pigging because a piece of wood caused the pig to become lodged.	Anamet #2500518014	Pipe properties confirmed
177A	140.950	7/20/2011	Stuck pig in an elbow	Removed an elbow during pigging because a piece of steel debris caused the pig to become lodged.	Anamet #2500528620	Pipe properties confirmed
177A	98.380	8/3/2011	Buckled elbow discovered by a caliper pig	Removed an elbow during pigging because it was creating an ID restriction which wouldn't allow the Geometry and MFL tools to pass through without damage. The removed elbow turned out to be buckled which was causing the ID restriction.	Anamet #2500528620	Pipe properties confirmed. The buckled elbow was confirmed as well.
300A	130.360	6/25/2011	Linear indication in seam	Excavation was performed since the as-built records show 34" seamless pipe. As a result of the seam characterization process, a linear inclusion was identified in the pipeline and approzimately 20' of pipe was replaced at this location and line returned to normal pressure operating conditions.	ATS #06.3.1-11.5	The NDE Services Group of PG&E's Applied Technology Services (ATS) Division was requested to characterize the long-seam weld at two different locations of Line 300A and evaluate all exposed long seam welds. The results indicated that at both locations the weld seam is a double-submerged arc weld (DSAW). Weld quality evaluation of 4 short sections indicated that 3 of 4 had acceptable weld quality. One was unacceptable.
153	12.990	6/24/2011	Longitudinal indication	Portion of pipe crossing canal (~80 ft) cut-out after x-ray revealed a longitudinal indication. Sent to ATS for radiography testing.	ATS #06.3.1-11.4	Weld seam is a double-submerged arc weld (DSAW). The weld quality of the seam weld is Unacceptable to current API Specification 5L and Unacceptable to the alternate criteria (reference Kiefner & Associates, Inc. Final Report No. 11-048, "Effect of Rounded Inclusions on the Integrity of Submerged-Arc Welded Seams").
153	Redacted	6/26/2011	Corrosion	Visual inspection indicated corrosion on 4 inch tap valve.	N/A	No test performed
153	14.839	7/12/2011	Similar in age and construction to L153 MP 12.990 listed above	Portion of pipe crossing canal (~80 ft) cut-out because it was similar in age and construction to T-45 above.	N/A	No test performed
132	42.190	6/2/2011	Feature	Possible internal wall loss @2:30 position.	ATS #413.61-11.179	An anomoly was confirmed to be an internal deposit. No pitting, corrosion or wall loss was detected.

Cut Outs for Cause

Line Number	Approx. MP	Date Removed	Reason for Removal	Removal Comments	ATS or Other Test Report #	Report Results
132	43.540	6/7/2011	Non-standard construction	Tie-in sleeve exhibiting non-standard construction features.	ATS #413.61-11.179	The feature was confirmed as being a non-standard construction practice with the sleeve possessing two longitudinal weld seams.
132	43.590	6/3/2011	No apparent long-seam	Short pipe section, miter between Segment 189.3 and 189.6.	ATS #413.61-11.179	Although interrnal video inspection had originally indicated that this was a section of mitered pipe with no apparent long seam, visual examination after removal showed that it was a trimmed down fitting that was actual seamless.
132	42.340	5/29/2011	External Anomaly	Visual inspection by PLE and on-site USRB staff identified.	ATS #413.61-11.179	The axial component length of the C-shaped indicated was approximately 1.5" long. The indication was determined to be a lap or lamination in the surface of the pipe created during the original manufacturing process..
132	39.368	9/16/2011	Deactivation of Glenview Dr, San Bruno Rupture Site	Cut-out of 4'-10.5" of 24" at [illegible] San Bruno for deactivation/slurry fill of L132 at San Bruno Incident site	N/A	No test performed - stored in Gilroy
132	38.930	9/15/2011	Deactivation of Glenview Dr, San Bruno Rupture Site	Cut-out of 3'-.375" of 24" at [illegible] San Bruno for deactivation/slurry fill of L132 at San Bruno Incident site	N/A	No test performed - stored in Gilroy
132	39.311	9/13/2011	Deactivation of Glenview Dr, San Bruno Rupture Site	Cut-out of 25'-9.5" of 30" at [illegible] San Bruno for deactivation of L132 at San Bruno Incident site	N/A	No test performed - stored in Gilroy
132	39.311	9/13/2011	Deactivation of Glenview Dr, San Bruno Rupture Site	Cut-out of 21'-0" of 30" at [illegible] San Bruno for deactivation of L132 at San Bruno Incident site	N/A	No test performed - stored in Gilroy
132	22.050	11/18/2011	Hydrotest Failure	Cut-out approximately 58'-6" of 24" SMLS 0.3125"WT installed on GM 85737 in 1947.	Pendng at Exponent. Draft Report being reviewed.	Pending
132	35.450	10/7/2011	Linear indication on elbow	36" elbow removed from L-132 at MP 35.45 sent to San Ramon for X-ray & then to Exponent for failure analysis	Pending at Exponent	Pending
132	41.830	11/1/2011	Seismic/Liquefaction Risk	Cut-out 85' of existing 30" DSAW pipeline installed in 1948 due to liquefaction risks near [illegible] in South San Francisco	N/A	No test performed - stored in Gilroy
132	41.850	11/1/2011	Seismic/Liquefaction Risk	Cut-out 14'-7" of existing 30" DSAW pipeline (and miter joint) installed in 1948 to accommodate insertion of 30" pipeline with 24"/16" in South San Francisco	N/A	No test performed - stored in Gilroy
132	42.040	11/1/2011	Seismic/Liquefaction Risk	Cut-out 126' of existing 30" DSAW installed in 1948 due to unplanned miter obstruction and allow sufficient room for inserting.	N/A	No test performed - stored in Gilroy
132	42.076	11/1/2011	Seismic/Liquefaction Risk	189.2' removed from a dog-leg in the existing pipe due to conflict with the 290.5' installation of new direct buried 30" pipe	N/A	No test performed - stored in Gilroy
132	42.136	11/1/2011	Seismic/Liquefaction Risk	316,5' removed due to conflict with new 30" direct burial	N/A	No test performed - stored in Gilroy
132	42.171	11/1/2011	Seismic/Liquefaction Risk	186.5' removed at south end and 10.2' removed at north end of [illegible] due to conflict with new 24" pipe direct burial	N/A	No test performed - stored in Gilroy
132	42.175	11/1/2011	Seismic/Liquefaction Risk	18.9' removed to receive insert and make tie-in to existing [illegible] crossing pipe.	N/A	No test performed - stored in Gilroy
132	42.183	11/1/2011	Seismic/Liquefaction Risk	45' removed to insert 16" pipe for Mission Insert #1	N/A	No test performed - stored in Gilroy
132	42.207	11/1/2011	Seismic/Liquefaction Risk	123.2' removed to cut out unplanned miter obstacles, build offset around sewer crossing, and for insertion work	N/A	No test performed - stored in Gilroy
132	42.225	11/1/2011	Seismic/Liquefaction Risk	98.1' removed for insertion work	N/A	No test performed - stored in Gilroy
132	42.250	11/1/2011	Seismic/Liquefaction Risk	134' removed to allow for insertion work and for strength testing and project tie-in	N/A	No test performed - stored in Gilroy

Cut Outs for Cause

Line Number	Approx. MP	Date Removed	Reason for Removal	Removal Comments	ATS or Other Test Report #	Report Results
109	52.710	11/15/2011	Leak	Cut-out approximately 7'-9" of 24" DSAW .0.3125"WT installed on GM 1956721 in 1991. Under direction from Integrity Management ATS did testing to locate the leak then sent to Anamet Lab for failure analysis, which has been completed (leak is under a reinforcing pad).	Anamet Lab report 5004-7268 Accepted and routed to appropriate PG&E personnel.	Leak in saddle weld caused by large preexisting welding defects.
57A	15.500	11/13/2011	Dent	Removed two dents, one 10% deep and one 12% deep, that were identified by a geometry pig.	N/A	No test ordered.
131	42.380	12/17/2011	Dent	Removed a piece of pipe from a casing which contained a dent with metal loss.	N/A	No test ordered.
300B	284.000	10/24/2011	Seam Hydro Rupture	Bakersfield Hydrotest rupture (34" dia). Failure investigation concluded that Hydro rupture was due to pre-existing weld metal cracking and the presence of weld lack of penetration - both of which were manufacturing anomalies created during the pipe fabrication.	Kiefner Report #12-020 Exponent Report #1108060.000 A0T0 0312 RE13	Pre-existing seam weld defects.
301A	3.000	3/10/2012	Seam Leak	Hollister SSAW Seam Leak for Failure investigation. Sent to ATS to find exact location of leak. Gas Dept then sent the pipe to Anamet Lab for further testing.	Anamet Lab report 5004-7264 completed and accepted by PG&E.	Pin-hole leak in SSAW longitudinal seam weld. The leak was caused by solidification problems in the seam weld metal during manufacture of the pipe. No evidence of service related progression such as fatigue, stress corrosion, pitting corrosion , or hydrogen embrittlement/cracking was found.
151	8.400	4/7/2011	Seam Leak	Failure investigation by Anamet Lab began in April 2012.	Anamet Lab Report 5004-7353 and routed to appropriate PG&E personnel.	Leak in Spiral Seam weld due to large preexisting spiral seam weld defects AND internal corrosion.
0210-01	0.200	Approx 10/31/2011	Linear indications in pipe body.	Found during T-122C bell hole inspection. Failure investigation by Anamet Lab completed and draft report is under review.	Anamet Lab Work In Progress	Pending
124A	21.320	11/30/2011	Long Seam Indication	Rejectable radiographic indications in the SSAW Seam weld. Failure investigation not started yet.	Analysis to begin in June 2012 at Anamet Lab	Pending
L-153	25.827	10/1/2010	Pinhole Seam Leak	Pinhole Leak in SSAW seam weld. Failure investigation completed. Cause was weld metal solidification anomaly during pipe fabrication. No evidence of service related progression (fatigue, corrosion, SCC, etc) found.	Testing in process at Anament	Xray confirmed pin hole leak.
300A	256.210	9/1/2011	Welding Flaws in Long Seam	Review long seam weld quality for possible defects.	ATS #006.3.1-11.20	A section of L-300A at PLS4 had some visible porosity in the long seam. We engaged ATS to perform NDT and the findings were that there are some manufacturing flaws that are not acceptable by PG&E. The test were done while the line was in-service(NDT). Based on the information it was decided to cut out the section.
118	62.285	12/16/2011	Construction Defect	MAOP validation team identified PCF's listed as ANSI 150. Based on operating pressure ANSI 300 or greater is required.	N/A	Upon inspection, it was determined that 2 fittings were not manufactured fittings and therefore were replaced. No testing was necessary.
220	24.160	11/8/2010	External Corrosion	Examined Pipe and field site. Cross sectioned to examine leak. Confirmed to be external corrosion of a repair that also appeared to have been ext corr.	No failure report. MEARS did CIS Report #9101117301	Contracted MEARS to perform an on/off survey. Looking for additional corroded pipe.
124B	7.830	10/28/2010	External Corrosion	Examined Pipe and Leak site in field - Confirmed to be corrosion.	No failure report. MEARS did CIS Report #9101117301	Contracted MEARS to perform an on/off survey. Looking for additional corroded pipe.
50A	15.150	9/30/2010	Construction Defect	100% Complete. Pipe visually examined and cross-sectioned in ATS Lab. Construction defect/porosity in the weld. No signs of corrosion.	No report generated.	Construction defects - porosity & slag in saddle (fillet) weld.

Cut Outs for Cause

Line Number	Approx. MP	Date Removed	Reason for Removal	Removal Comments	ATS or Other Test Report #	Report Results
300B	76.300	12/15/2011	Weld Failure	Fizzer in weld toe at elbow weld. Ground out approx 1/8 inch and weld repaired. Cut out Repaired Weld. ATS did radiographic testing, then cut-out was sent to Anamet for root cause testing.	ATS #413.61-11.257 is radiography report. Anamet Lab draft failure analysis report submitted and under review	Pending
153	25.830	10/21/2010	Construction Defect	Cause is known to be Construction Defect (porosity/voids) in Long seam weld metal. Review of final Anamet Report 5004.5239 complete, but final wording will not effect cause or source of leak.	Anamet #5004.5239	Construction defect - small pinhole leak in SSAW long seam weld metal.
114	12.580	9/10/2011	Linear indication in seam of fitting	Removed mitered angle piece with defects in seam weld.	N/A	No test performed
114	10.510	12/14/2011	Crack on Elbow	Removed elbow with defect and adjacent pipe with corrosion.	N/A	No test performed
1502-11	6.350	10/12/2010	Leak at girth weld	Found due to ALS performed in last qtr 2010 (LK# 10-81004-1). On 10/12/10 installed (2) 4" PCF s with a temp by-pass and installed 1ft of 4" pre-tested pipe to remove leaking girth weld. Pipe installed was pre-tested on A-0620-01 STPR. PSRS ID: 22801 PM#: 30816669	N/A	No test performed
0632-01	1.940	10/27/2010	Leak at girth weld	Grade 1 leak found on the Gas Transmission Leak Survey (LK#10-81009-1). Leak pinpointed to be on the girth weld of the 3" 0632-01 DFM that supplies Williams. PSRS ID: 22746 PM#: 30811954	Pending	Cross section of 3" weld indicates lack of fusion at the root (Analysis by a d e R
DREG5479 (R0045)	0.01 to 0.02	10/20/2011	Insufficient pipe specs to establish Mop of 600 psig	3 sections removed for testing to validate pipe specs as part of Class Location OII. Note that the pipe in question was deactivated and replaced with new pipe on PSRS24878 PM30863585	ATS #413.61-12.112 Anamet Report #5004.7131	Confirmed as commensurate
L-50A	18.130	9/29/2011	Leak developed around cap fabricated to cover an old service tee	LK 1310810011 PSRS ID: 22837 PM#: 30817842 Section of pipe provided to Paul Tibbals and Dave Aguiar	ATS #413.62-11.7	Lack of fusion between pipe and fabricated cap
153-6	0.010	Week of 4/2/12	Dent	Dent was found during camera work Hydro T-047C. It was only six feet from the tie in hole.	N/A	No test performed - this section of pipe was replaced.
191A	2.960	7/13/2011	Dent	Dent was found on Gas Transmission Leak Survey because this section of main was exposed by a run off system.	Anamet #5004.6329	The metalurgical evaluation revealed that the girth weld exhibited a lack of penetration, porosity, a lack of fusion and an insufficient amount of filler metal for complete fusion. The overall quality of the girth weld was poor.
L-195	4.24	03/10/12	Verification of pipe properties for assessment of commensurate status	Removed a piece of pipe to perform destructive testing and determine yield strength. ATS sent out for Destructive Test (API 5L Standard).	ATS #413.61-12.105 Anamet #5004.7131	Testing confirmed pipe diameter, wall thickness and seam. Yield strength verified through destructive testing. Segment confirmed to be commensurate.
DREG5479	0.00	10/20/11	Verification of pipe properties for assessment of commensurate status	Removed a piece of pipe to perform destructive testing and determine yield strength. ATS sent out for Destructive Test (API 5L Standard).	ATS #413.61-12.113 Anamet #5004.7131	Testing confirmed pipe diameter, wall thickness and seam. Yield strength verified through destructive testing. Segment confirmed to be commensurate.
SP3	169.39	09/25/11	Verification of pipe properties for assessment of commensurate status	Removed a piece of pipe to perform destructive testing and determine yield strength. ATS did a Destructive Test (API 5L Standard).	ATS #413.61-11.133	Yield strength verified through destructive testing. Segment confirmed to be commensurate.
DCUST7910	0.2	1/12/2012	Mechanical Damage	Mears attempted to cad weld leads to 1 1/4" pipe as part of a casing inspection project. During cad weld process the pipe wall thickness was reduced and required cut-out	N/A	No test performed - It is likely that the "shot" used in the Cad weld was too hot and melted the pipe wall.
DCUST7910	0.26	1/12/2012	Mechanical Damage & Corrosion	Mears discovered mechanical damage with presence of corrosion while conducting a casing inspection	N/A	No test performed
L-197A	37.9	1//24/12	Leak in Long Seam	Appears to have 1-1/4" long crack in long seam	Pending with Anamet Lab	Pending
DFDS3639	0.00	04/19/12	Weld Failure	Removed a piece of pipe to perform a weld failure anaylsis on leaking 2" girth weld	ATS #413.61-12.119	Testing showed weld discontinuities which led to leakage.
220	14.43	4/20/2012	Verification of pipe properties for assessment of commensurate status	Removed a piece of pipe to perform destructive testing and determine to determine pipe properties.	Pending	Pending

Cut Outs for Cause

Line Number	Approx. MP	Date Removed	Reason for Removal	Removal Comments	ATS or Other Test Report #	Report Results
L-124A	24.19	5/30/2012	Inclusion or lamination	Removed for further examination as part of L-124A ILI DE&R (Dig Site 10).	ATS #413.61-11.239;	TBD
L-124A	24.19	5/30/2012	Internal Metal loss	Removed for further examination as part of L-124A ILI DE&R (Dig Site 10a).	ATS #413.61-11.116;	TBD
220	24.31	5/11/2012	Historical leak repair fitting removed	ECDA dig found a leak repair fitting for a historical leak repair. This fitting was reported to have a leak on it and it was removed for further analysis.	Pending	Pending
108	4.59	6/16/2012	Coupon miss-aligned on the completion plug	24" TDW fitting was removed along with 10' of 24" pipe. The coupon was facing 90 degrees to the flow.	NA	TBD
131	45.09	6/3/2012	Leak in Girth Weld	Removed piece to inspect weld for leak defect.	Pending	Pending
131	45.09	6/3/2012	Non-Standard Construction	Removed series of mitered angle fittings with bell-spigot style girth welds to perform destructive strength testing.	Pending	Pending
132	39.3	6/27/2012	Deactivation of Glenview Dr, San Bruno Rupture Site	Cut-out of 4'-10" of 30" (1956 Vintage) at Crade San Bruno for deactivation of L132 at San Bruno Incident site	N/A	Sampling is being performed to determine mercury and other contaminant levels embedded in the pipe wall prior to slurry fill and permanent abandonment
132	39.3	6/27/2012	Deactivation of Glenview Dr, San Bruno Rupture Site	Cut-out of 8'-0" of 30" (1948 Vintage) at Crade San Bruno for deactivation of L132 at San Bruno Incident site	N/A	Sampling is being performed to determine mercury and other contaminant levels embedded in the pipe wall prior to slurry fill and permanent abandonment. This 1948 section of pipe spanned the former Crestmoor Canyon and has been abandoned since 1956.
101	12.06	6/28/2012	Leak on Valve	4" tap valve (TK Floating Ball Valve) leaking from flanged body. No repair could be made so valve was cut-out and replaced.	Pending MPR	TBD
172A	78.51	8/6/2012	Long seam defect (lack of fusion)	ECDA was performing a direct examination inspection of L-172A at approximate MP 78.51. Upon completion of Radiography at this dig site some indications were discovered in the long seam of the pipeline.All 12 feet of the exposed long seam weld was inspected by radiograph. From the 7-8 view to 11-12 view, intermittent indications of Lack of Fusion is present, spread throughout these 5 linear feet of long seam. Just to be sure, two confirmation shots confirmed these indications exist and are not image artifacts, etc. According to API 5L, 44th Ed, "any cracks, lack of complete penetration, and lack of complete fusion found by radiographs inspection shall be classified as defects. There is no Alternate Acceptance criteria (Kiefner Report) applicable to these indications.~ 8 feet of pipe to remove long seam with linear indications was replaced.	Pending	TBD
L-21E	60.04	8/21/2012	Dent with Gouge on Long-Seam Weld	Removed a dent with gouge affecting the ERW long-seam weld	N/A	Likely third party damage, results documented on Form H, no further testing required

	Indicates new or updated information

Cut Outs Hydro Tests

Test #	Line Number	MP1	MP2	Hydrotest Date	Test Performed by	Date Test Completed	Report #	Corresponding MP to Report # and matching material	Test Report Status	Report Results
2011 Hydrotests										
T-02	L-101	0.62	3.08	06/04/11	ATS	03/27/12	413.62-21.34	413.62-12.34 corresponds with MP 3.08, Loc B.	1st Test Completed 2nd Test Pending	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-03	L-101	3.08	4.66	06/07/11	ATS	3/27/12 07/09/12	413.62-12-34	413.62-12.34 corresponds with MP 3.08 Loc B 413.62-12.119 corresponds with MP 4.66 Loc A	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-07	L-105A	38.00	41.00	09/29/11	ATS	3/21/12 03/21/12 07/25/12	413.62-12.13 413.62-12.14	413.62-12.13 corresponds with MP 38.97 Loc C 413.62-12.14 corresponds with MP 38.97 Loc C	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-10	L-105C	0.00	1.77	08/25/11	ATS	06/08/12	413.62-12.60	413.62-12.60 corresponds with MP 1.67 Loc B. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-11	L-105N	11.07	11.86	06/05/11	ATS	12/6/2011 06/29/12	413.62-11.26 413.62-12.92	413.62-11.26 corresponds with MP 11.88 Loc A 413.62-12.92 corresponds with MP 11.07 Loc B	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-15	L-105N	27.94	28.13	09/11/11	ATS	06/08/12	413.61-12.173	413.62-12.173 corresponds with MP 27.96 Loc B Only one sample was taken because Location A and B have the same	Completed	X-Ray weld indication - X-ray conducted at Modesto pipe yard during Hydrotest mechnical properties testing process.
T-16	L-105N	28.13	28.64	09/23/11	ATS	05/31/12	413.62-12.49	413.62-12.49 corresponds with MP 28.66 Loc A Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-17	L-105N	28.64	30.63	10/17/11	ATS	5/31/12 07/25/12	413.62-12.56 413.62-12.141	413.62-12.56 corresponds with MP 30.63 Loc A 413.62-12.141 corresponds with MP 30.64 Loc A-4.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-12017	L-132	40.04	40.08	11/21/11	ATS	06/29/12	413.62-12.103	413.62-12.103 corresponds with MP 40.08 Loc B MP 40.04 (Loc A) corresponds with T-32, 413.62-12.67 with the same pipe	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-19	L-114	16.52	16.59	09/16/11	ATS	6/15/12 07/26/12	413.62-12.66 413.62-12.133	413.62-12.66 corresponds with MP 16.50 Loc A 413.62-12.133 corresponds with MP 16.57 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-20	L-131	42.34	42.42	07/26/11	ATS	5/31/12 07/18/12	413.62-12.57 413.62-12.107	413.62-12.57 corresponds with MP 42.34 Loc A 413.62-12.107 corresponds with MP 42.42 Loc C	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-22N	L-131	50.71	51.43	10/12/11	ATS	5/31/12 07/09/12 07/18/12	413.62-12.46 413.62-12.116 413.62-12.120	413.62-12.46 corresponds with MP 55.88 Loc C 413.62-12.116 corresponds with MP 50.7 Loc A	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.

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T-22S	L-131	51.43	55.50	10/13/11	ATS	05/31/12	413.62-12.46	413.62-12.46 corresponds with MP 55.53 Loc C 413.62-12.120 corresponds with MP 51.35 Loc M (T-22N)	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-24	L-132	0.95	1.88	10/23/11	ATS	5/18/12 07/18/12	413.62-12.23 413.62-12.110	413.62-12.23 corresponds with MP 0.945 Loc B 413.62-12.110 corresponds with MP 1.88 Loc A.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-25A	L-132	3.05	4.00	06/19/11	ATS	07/18/12	413.62-12.111	413.62-12.111 corresponds with MP 3.05 Loc B1. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-26	L-132	4.92	7.10	10/15/11	ATS	07/26/12	413.62-12.134	413.62-12.134 corresponds with MP 4.92 Loc B MP 7.10 Loc A corresponds with 413.62-12.112 (T-27)	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-27	L-132	7.10	8.54	09/05/11	ATS	07/18/12 07/18/12	413.62-12.112 413.62-12.113	413.62-12.112 corresponds with MP 8.54 Loc A 413.62-12.113 corresponds with MP 7.11 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-28	L-132	8.54	10.32	08/14/11	ATS	05/31/12	413.62-12.15	413.62-12.15 corresponds with MP 10.32 Loc A MP 8.54 is different WT than T-27 same location	1st Test Completed 2nd Test Pending	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-29	L-132	10.32	13.95	09/09/11	ATS	05/31/12	413.62-12.24	413.62-12.24 corresponds with MP 13.95 Loc A. MP 10.32 Loc B correspond with 413.62-12.15 (T-28)	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-30	L-132	13.95	18.46	11/10/11	ATS	7/18/12 07/25/12	413.62-12.114 413.62-12.142	413.62-12.114 corresponds with MP 18.46 Loc A 413.62-12.142 corresponds with MP 13.87 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-31	L-132	18.46	23.16	11/12/11	ATS	07/18/12	413.62-12.123	413.62-12.123 corresponds with MP 23.16 Loc A-1. Only one sample was taken because Location A and B have the same diameter, wall thickness, and steel grade.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-32	L-132	23.16	25.60	11/04/11	ATS	06/20/12	413.62-12.67	413.62-12.67 corresponds with MP 25.55 Loc A. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-33	L-132	29.06	31.95	10/13/11	ATS	06/08/12	413.61-12.170	413.61-12.170 corresponds with MP 31.95 Loc A.	1st Test Completed 2nd Test on HOLD, see Test Results	X-ray Weld Indication - X-ray conducted at Modesto pipe yard during Hydrotest mechanical properties testing process.

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T-34	L-132	31.95	34.68	10/20/11	ATS	06/08/12	413.61-12.171	413.61-12.171 corresponds with MP 31.96 Loc B. Only one sample was taken because Location A and B have the same	Completed	X-ray weld indication - X-ray conducted at Modesto pipe yard during Hydrotest mechnical properties testing process.
T-35	L-132	34.68	38.39	10/30/11	ATS	5/31/2012 6/8/2012	413.62-12.47 413.61-12.172	413.62-12.47 corresponds with MP 38.39 Loc A 413.61-12.172 corresponds with MP	Completed	X-ray weld indication - X-ray conducted at Modesto pipe yard during Hydrotest mechnical properties testing process.
TV-36A TV-36B	L-132	40.08	43.61	06/09/11	ATS	06/15/12	413.62-12.68	413.62-12.68 corresponds with MP 40.08 Loc A. Sample testing from Location B and C pending.	1st Test Completed 2nd Test Pending	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements. For Site B, the hydrotested length of pipe was included in a subsequent insertion/replacement job so is not longer in service. Samples are being taken from the replacement job.
T-40	L-132A	0.01	1.45	05/09/11	ATS	07/19/12 07/19/12	413.62-12.121 413.62-12.122	413.62-12.121 corresponds with MP 0.09 Loc A, 413.62-12.122 corresponds with MP 0.064 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-41	L-132A	1.46	1.47	05/09/11	ATS	07/26/12	413.62-12.131	413.62-12.131 corresponds with MP 1.446 Loc C MP 0.064 Loc B corresponds with 413.62-12.122	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-42	L-147	0.02	0.85	10/14/11	ATS	05/31/12	413.62-12.58	413.62-12.58 corresponds with MP 0.02 Loc A. MP 0.85 same as T-43A, ATS Report pending	1st Test Completed 2nd Test Pending	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-43A	L-147	0.85	1.50	10/17/11	ATS	05/31/12	413.62-12.55	413.62-12.55 corresponds with MP 1.951 Loc B. MP 0.85 Location A, ATS Report pending	1st Test Completed 2nd Test Pending	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-43B	L-147	1.50	3.40	10/22/11	ATS	07/18/12 07/26/12	413.62-12.124 413.62-12.147	413.62-12.124 corresponds with MP 3.39 Loc C, 413.62-12.147 corresponds with MP 2.36 Loc E.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-44	L-153	0.00	3.45	07/29/11	ATS	6/29/12 07/26/12	413.62-12.95 413.62-12.150	413.62-12.95 corresponds with MP 3.45 Loc A 413.62-12.150 sampled from MP 3.45 Loc A, same material as MP 3.45 Location B	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-45	L-153	9.20	13.61	06/29/11	ATS	05/31/12	413.62-12.51	413.62-12.51 corresponds with MP 13.60 Loc A. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.

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Test #	Line Number	MP1	MP2	Hydrotest Date	Test Performed by	Date Test Completed	Report #	Corresponding MP to Report # and matching material	Test Report Status	Report Results
T-46	L-153	13.62	17.62	07/09/11	ATS	3/21/2012 06/29/12	413.62-12.16 413.62-12.96	413.62-12.16 corresponds with MP 14.839, 413.62-12.96 corresponds with MP 13.62 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
TV-47A	L-153	17.65	18.01	07/28/11	ATS	06/15/12	413.62-12.69	413.62-12.69 corresponds with MP 18.01 Loc A. Only one sample was taken because Location A and C have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-47B	L-153	18.03	20.06	11/15/11	ATS	07/26/12	413.62-12.132	413.62-12.132 corresponds with MP 20.06 Loc A, Only one sample was taken because MP 18.03 Loc B corresponds with 413.62-	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-49E	L-191	6.48	7.72	10/31/11	ATS	07/09/12	413.62-12.115	413.62-12.115 corresponds with MP 6.48 Loc B. Only one sample was taken because Loc.A and Loc. B have the same pipe	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-49W	L-191	7.72	9.44	11/11/11	ATS	06/08/12	413.62-12.62	413.62-12.62 corresponds with MP 9.44 Loc A. Only one sample was taken because MP 7.72 Loc E corresponds with 413.62-	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-51	L-300A	121.87	122.68	06/08/11	ATS	03/21/12	413.62-12.17	413.62-12.17 corresponds with MP 122.68 Loc A. Only one sample was needed because Location A and B have the same diameter, wall thickness, and grade.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-52	L-300A	127.03	127.93	06/06/11	ATS	03/27/12	413.62-12.18	413.62-12.18 corresponds with MP 127.93 Loc A. Only one sample was taken because Location A and B have the same diameter, wall thickness, and steel grade.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-54B	L-300A	155.08	156.40	09/21/11	ATS	05/31/12	413.62-12.25	413.62-12.25 corresponds with MP 155.07 Loc B. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-55	L-300A	156.40	157.86	09/23/11	NA	NA	NA	Corresponds to 413.62-12.146 T-75; they are the same pipe segment with the same	Completed	NA
T-56S	L-300A	157.86	159.33	09/27/11	ATS	05/31/12 05/31/12 07/26/12	413.61-12.202 413.62-12.26 413.61-12.130	413.62-12.202 corresponds with MP 159.86 Loc B. 413.62-12.26 corresponds with MP 159.33 Loc B.	Completed	X-ray weld indicationX-ray conducted at Modesto pipe yard during Hydrotest mechnical properties testing process.
T-60	L-300A	256.22	257.08	08/09/11	ATS	05/31/12 06/27/12	413.62-12.27 413.62-12.83	413.62-12.27 corresponds with MP 257.08 Loc A, 413.62-12.83 corresponds with MP 256.21 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-62	L-300A	345.02	345.26	06/26/11	ATS	02/27/12 07/18/12	413.62-12.01 413.62-12.128	413.62-12.01 corresponds with MP 345.26 Loc A, 413.62-12.128 corresponds with MP 345.02 Loc B	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.

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Test #	Line Number	MP1	MP2	Hydrotest Date	Test Performed by	Date Test Completed	Report #	Corresponding MP to Report # and matching material	Test Report Status	Report Results
T-63	L-300A	353.56	353.85	06/24/11	ATS	3/27/2012 06/29/12	413.62-12.19 413.62-12.90	413.62-12.19 corresponds with MP 353.85 Loc A, 413.62-12.90 corresponds with MP 353.56 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-64	L-300A	414.79	416.98	12/05/11	ATS	05/31/12 07/18/12	413.62-12.50 413.62-12.126	413.62-12.50 corresponds with MP 414.91 Loc B, 413.62-12.126 corresponds with MP 417.11 Loc A.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-65A	L-300A	450.00	450.83	09/22/11	ATS	07/18/12	413.62-12.127	413.62-12.127 corresponds with MP 450.82 Loc A. MP 450.00 Loc B corresponds with 413.62-12.02 MP 445.49	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-65B	L-300A	445.59	446.48	09/23/11	ATS	02/27/12 07/09/12	413.62-12.02 413.62-12.117	413.62-12.02 corresponds with MP 445.49 Loc A, 413.62-12.117 corresponds with MP 445.594 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-67A	L-300A	477.77	478.06	10/21/11	ATS	06/08/12	413.62-12.61	413.62-12.61 corresponds with MP 478.06 Loc D. Only one sample was taken because Location C and D have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-67B	L-300A	475.26	475.77	10/22/11	ATS	06/27/12	413.62-12.84	413.62-12.84 corresponds with MP 475.77 Loc C. Only one sample was taken because Location C and D have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-68	L-300A	480.74	483.76	11/03/11	ATS	06/27/12 06/27/12	413.62-12.70 413.62-12.85	413.62-12.70 corresponds with MP 483.74 Loc A,	Completed	Testing in process at Anamet
T-70	L-300A	490.48	490.63	07/25/11	ATS	2/27/2012 06/29/12	413.62-12.03 413.62-12.93	413.62-12.03 corresponds with MP 490.63 Loc A, 413.62-12.93 corresponds with MP 490.48 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-71	L-300A	490.66	493.59	07/29/11	ATS	05/31/12	413.62-12.28	413.62-12.28 corresponds with MP 490.68 Loc B. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-72	L-300A	493.59	496.05	08/01/11	ATS	5/31/2012 06/27/12	413.62-12.29 413.62-12.76	413.62-12.29 corresponds with MP 493.61 Loc B, 413.62-12.76 corresponds with MP 496.05 Loc A.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-73	L-300A	496.36	499.77	08/02/11	ATS	06/15/12	413.62-12.71	413.62-12.71 corresponds with MP 496.36 Loc B.	Completed	Test results under review.
T-74	L-300A	499.77	502.23	08/04/11	ATS	5/31/2012 06/29/12	413.62-12.30 413.62-12.97	413.62-12.30 corresponds with MP 502.23 Loc A, 413.62-12.97 corresponds with MP 502.12 Loc C.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-75	L-300A-1	156.40	157.86	09/25/11	ATS	07/26/12	413.62-12.146	413.62-12.146 corresponds with MP 156.41 Loc B. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.

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Test #	Line Number	MP1	MP2	Hydrotest Date	Test Performed by	Date Test Completed	Report #	Corresponding MP to Report # and matching material	Test Report Status	Report Results
T-76	L-300B	0.15	0.46	08/28/11	ATS	3/30/2012 06/27/12	413.62-12.20 413.62-12.78	413.62-12.20 corresponds with MP 0.45 Loc A, 413.62-12.78 corresponds with MP 0.24 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-77	L-300B	126.88	127.50	06/16/11	ATS	04/06/12	413.62-12.21	413.62-12.21 corresponds with MP 127.50 Loc A. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-79A	L-300B	152.73	155.26	10/11/11	ATS	05/31/12	413.62-12.53	413.62-12.143 corresponds with MP 155.26 Loc A. Only one sample was taken because MP 152.73 Loc B corresponds with 413.62-	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-79B	L-300B	160.71	160.88	10/17/11	ATS	5/31/2012 06/27/12	413.62-12.53 413.62-12.79	413.62-12.53 corresponds with MP 160.88 Loc A, 413.62-12.79 corresponds with MP 160.58 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-80	L-300B	237.45	240.56	08/26/11	ATS	05/31/12	413.62-12.31	413.62-12.31 corresponds with MP 237.45 Loc B. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-81	L-300B	256.66	257.51	08/22/11	ATS	5/31/2012 06/29/12	413.62-12.40 413.62-12.98	413.62-12.40 corresponds with MP 256.65 Loc C, 413.62-12.98 corresponds with MP 257.51 Loc A.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-82	L-300B	263.46	264.46	08/23/11	ATS	06/15/12	413.62-12.72	413.62-12.72 corresponds with MP 264.89 Loc A. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-84A	L-300B	353.54	353.82	07/22/11	ATS	3/30/2012 06/29/12	413.62-12.22 413.62-12.89	413.62-12.144 corresponds with MP 353.81 Loc E, 413.62-12.89 corresponds with MP 353.53 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-84B	L-300B	354.02	354.31	07/22/11	ATS	07/25/12	413.62-12.144	413.62-12.22 corresponds with MP 354.02 Loc C T-84 Loc. A corresponds to 413.62-12.45 and 413.62-12.94	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-85	L-300B	384.06	384.90	06/28/11	ATS	02/27/12 07/09/12	413.62-12.04 413.62-12.94	413.62-12.04 corresponds with MP 384.06 Loc B, 413.62-12.94 corresponds with MP 384.901 Loc A.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-86	L-300B	414.79	418.03	12/12/11	ATS	5/31/2012 06/29/12	413.62-12.45 413.62-12.99	413.62-12.45 corresponds with MP 417.37 Loc A East, 413.62-12.99 corresponds with MP 414.7728 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-87A	L-300B	450.78	450.80	10/04/11	ATS	02/27/12 07/25/12 02/27/12	413.62-12.05 413.62-12.135 413.62-12.09	413.62-12.05 corresponds with MP 450.79 Loc B 413.62-12.135 corresponds with MP 450.78 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.

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T-87B	L-300B	450.05	450.78	10/08/11	ATS	07/25/12	413.62-12.136	413.62-12.136 corresponds with MP 449.78 Loc B. Loc A corresponds with 413.62-12.135 MP 450.78	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-87C	L-300B	445.49	446.50	10/05/11	ATS	07/09/12 07/25/12	413.62-12.118 413.62-12.139	413.62-12.118 corresponds with MP 445.49 Loc B, 413.62-12.139 corresponds with MP 446.5 Loc A.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-89D	L-300B	484.01	484.72	08/16/11	ATS	03/21/12	413.62-12.10	413.62-12.10 corresponds with MP 484.72 Loc D. Only one sample was taken because Location D and E have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-89N	L-300B	489.33	490.92	08/20/11	ATS	06/27/12	413.62-12.80	413.62-12.80 corresponds with MP 490.91 Loc A. MP 489.33 Loc B corresponds with 413.62-12.10 MP 484.72	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-90A	L-300B	490.94	493.90	08/28/11	ATS	06/29/12	413.62-12.100 413.62-12.11	413.62-12.100 corresponds with MP 490.94 Loc E-South. MP 493.90 corresponds to 413.62-12.11 Location D	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-90B	L-300B	493.90	496.37	08/29/11	ATS	03/27/11	413.62-12.11 413.62-12.138	413.62-12.11 corresponds with MP 493.89 Loc D. Location D and C have the same diameter, wall thickness and grade.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-90C	L-300B	496.37	499.33	08/30/11	ATS	07/25/12	413.62-12.138 413.62-12.151	413.62-12.138 corresponds with MP 496.36 Loc C. MP 499.33 Loc. B corresponds to 413.62-12.151	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-90D	L-300B	499.33	502.62	08/31/11	ATS	07/25/12 07/26/12	413.62-12.137 413.62-12.151	413.62-12.137 corresponds with MP 502.62 Loc A, 413.62-12.151 corresponds with MP	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe sections met API 5L requirements.
T-93A	L-400-3	293.41	297.87	11/14/11	ATS	06/29/12	413.62-12.101	413.62-12.101 corresponds with MP 293.40 Loc A. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-93B	L-400	293.40	297.86	11/02/11	NA	NA	NA	Location A and B have pipes with the same diameter, wall thickness, and steel grade. T-93B L-400 is the same material as the parallel L-400-3, T-93A.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-96A (E)	SP5	2.40	3.87	05/16/11	ATS	03/27/12	413.62-12.33	413.62-12.33 corresponds with MP 3.87 Loc A. Only one sample was taken because Location A and B have the same diameter, wall thickness, and grade. Also MP 2.4 Loc B corresponds with	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-96B (W)	SP5	0.00	2.40	05/19/11	ATS	06/29/12	413.62-12.91	413.62-12.91 corresponds with MP 0.0 Loc C. Only one sample was taken because Location B and C have the same diameter, wall thickness, and grade. Also MP 0.0 Loc C corresponds with	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.

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T-109E	L-148	14.60	17.11	10/24/11	ATS	07/26/12	413.62-12.145	413.62-12.145 corresponds with MP 14.62 Loc A. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-109W	L-148	17.11	17.63	10/31/11	ATS	06/15/12	413.62-12.73	413.62-12.73 corresponds with MP 17.63 Loc C. MP 17.11 corresponds to T-109E Location A and B	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-112	L-191	9.47	10.58	11/13/11	ATS	06/8/12 06/08/12	413.62-12.63 413.62-12.64	413.62-12.63 corresponds with MP 9.47 Loc A,	Completed	Testing in process at Anamet
T-115	L-300A	288.96	291.44	10/05/11	ATS	06/15/12	413.62-12.74	413.62-12.74 corresponds with MP 288.96 Loc B. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-116A	L-300A	267.94	268.65	11/12/11	ATS	05/31/12	413.62-12.54	413.62-12.54 corresponds with MP 268.65 Loc D. Only one sample was taken because Location E has the same diameter, wall thickness, and steel grade as Location D	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-116B	L-300A	269.51	269.83	11/13/11	ATS	06/29/12	413.62-12.86	413.62-12.86 corresponds with MP 269.51 Loc B. Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-117	L-300B	283.85	284.62	10/27/11	ATS	05/31/12 07/18/12	413.62-12.48 413.62-12.129	413.62-12.48 corresponds with MP 284.62 Loc A, 413.62-12.129 corresponds with MP 283.85 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-118A	L-300A	239.57	241.60	11/13/11	ATS	06/29/12	413.62-12.87	413.62-12.87 corresponds with MP 239.57 Loc A. MP 241.6 corresponds to 413.62-12.75 Also, Location A and B are the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-118B	L-300A	241.60	243.74	11/15/11	ATS	06/20/12	413.62-12.75	413.62-12.75 corresponds with MP 241.6 Loc B. MP 243.74, Loc. C, is the same material as Location A and B	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-119-11	L-300A	372.50	374.61	01/24/12	ATS	05/11/12 06/29/12	413.62-12.37 413.62-12.88	413.62-12.37 corresponds with MP 374.572 Loc C, 413.62-12.88 corresponds with MP 372.499 Loc A.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-120	L-300A	384.65	385.55	11/17/11	ATS	06/27/12 not listed	413.62-12.77 413.62-12.102	413.62-12.77 corresponds with MP 384.63 Loc A, 413.62-12.102 corresponds with MP 385.45 Loc B.	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-121	L-303	26.56	27.67	11/16/11	ATS	05/31/12	413.62-12.52	413.62-12.52 corresponds with MP 27.704 Loc A Only one sample was taken because Location A and B have the same	Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-122	L-0211-01	0.00	0.74	10/28/11						Awaiting Final Report
2012 Hydrotests										
PR-002-12	2405-01	0.553	0.62	04/28/12						

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PR-003-12	L-131	0	0.1752	04/05/12						Loc A: Completed Awaiting Final Report, Loc B: At Lab For Testing
PR-004-12	L-300B	0.24	0.24	08/05/12						
T-018-12	L-132	48.44	49.98	7/3/2012						Awaiting Final Report
C-019-12	L-153	22.87	25.11	NA						Camera Work
T-021-12	L-191-1	9.5862	9.94	03/21/12		9/7/2012	413.62-12.168			Awaiting Final Report
T-025-12	L-100	138.43	143.853	05/09/12		9/7/2012	413.62-12.169			Awaiting Final Report
T-026-12	L-100	143.853	147.77	05/19/12		9/7/2012	413.62-12.170			Awaiting Final Report
T-027-12	L-100	147.77	150.13	05/19/12		9/7/2012	413.62-12.174			Awaiting Final Report
T-038-11	L-132	46.61	48.44	06/06/12						
T-039B-11	L-132	49.98	51.5	07/05/12						
T-040-12	7221-10	7.208	9.652	04/26/12		8/20/2012 09/07/2012	413.62-12.157 413.62-12.166			Awaiting Final Report
T-044-12	L-138	22.55	28.64	07/26/12						Awaiting Final Report
T-045-12	L-138	28.64	35.91	07/24/12						
C-047C-11	L-153	20.07	22.87	NA						Camera Work
T-048-12	L-142N	0	3.159	04/28/12						
T-049-12	L-142N	3.159	6.6854	04/26/12		9/7/2012	413.62-12.172			Loc A: Awaiting Final
T-052-12	L-142S	0-02	0.69	06/28/12						
T-053-12	L-142S	3.21	3.87	07/06/12						Awaiting Final Report
T-054-12	L-142S	10.445	11.48	07/23/12						Loc B: Completed Awaiting Final
T-057E-11A	L-300A	180.94	181.77	03/07/12	NA	NA	NA		Completed	ATS examination to confirm mechanical value for data collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections met API 5L requirements.
T-057E-11B	L-300A	182.12	182.33	03/09/12						2 chain of custodys, Data pending testing & lab results from ATS
T-057W-11	L-300A	187.85	188.41	03/05/12						2 chain of custodys, Data pending testing & lab results from ATS
T-059-12	L-300A	277.89	278.12	07/28/12						Awaiting Final Report
T-061-12	L-300A	372.87	374.2568	01/24/12						*(Same as T-119-11)*
T-073-12	L-021F	19.17	20.09	05/17/12		8/20/2012	413.62-12.158			Awaiting Final Report
T-096-12	1816-01	16.3	18.25	07/25/12						Awaiting Final Report
T-097-12	L-148	0	6.06	04/01/12		8/20/2012	413.62-12.156			Loc C: Completed Awaiting Final Report, Loc A: At Lab For Testing
T-099-12	L-148	6.06	12.58	04/19/12						
T-100-12	L-148	12.58	14.62	05/17/12						Awaiting Final Report
TIM-102A-12	L-118A	0	0.18	05/21/12		8/20/2012	413.62-12.155			Awaiting Final Report
T-102D-12	L-118A	37.38	37.71	06/15/12		9/7/2012	413.62-12.167			Loc A: Awaiting Final Report, Loc B: At Lab For Testing
T-102F-12	L-118A	58.21	58.74	06/29/12						Awaiting Final Report
TIM-114-11	L-109	7.57	8.72	06/12/12		09/07/2012 09/07/2012	413.62-12.176 413.62-12.175			Awaiting Final Report
T-122-12	L-300B	0.1294	0.1549	03/22/12						
TIM-125-12	L-109	21.422	22.225	07/30/12						Loc A: Awaiting Final Report, Loc B: At Lab For
TIM-126-12	L-109	18.56	19.55	07/28/12						
TIM-130-12	3017-01	0.8157	3.92	07/28/12						Loc B: Awaiting Final Report
TIM-131-12	3017-01	3.92	7.54	07/28/12						
TIM-159-12	L-181B	4.0776	4.5077	06/28/12		9/7/2012	413.62-12.173			Awaiting Final Report

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T-025B-11	L-132	4.29	4.92	08/16/12						
PV-047C-11	L-153	18.8	20.6	NA						
T-055-12	L-300A	230.32	231.2	08/31/12						
T-079-12	L-119A	0.0035	3.824	08/29/12						
TIM-101-11	1816-01	3.441	8.44	08/24/12						
T-110-12	L-300A	446.4777	449.706	08/24/12						
TIM-133-12	7224-01	5.34	6.02	08/03/12						Awaiting Final Report