

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

February 19, 2013

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 January 31, 2013.

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 Vanessa Anderson, Manager of Gas Operations Support, at (925) 974-4114.

Sincerely,

Frances Yee

cc: Julie Halligan, CPUC Mike Roberston, CPUC Redacted

PG&E

PG&E

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

Pacific Gas and Electric Company Pipeline Cut Outs Testing Summary (Activity through January 31, 2013)

Cut Outs for Cause	
Analysis Completed	38
Analysis In Progress	23
No Analysis Needed to	
Understand Root Cause	42

Subtotal: Cut Outs for Cause 103

Cut Outs Hydrotesting 2012/2013	
Analysis Completed	26
Initial Analysis Completed, Additional	14
Testing Pending Awaiting Testing or Analysis	40
No Lab Testing to be Performed	5

Subtotal: Cut Outs for Hydrotesting 85 188 Grand Total:

2/19/13 - 1 -

	Approx.	Date			ATS or Other Test Report	
Line Number	MP	Removed	Reason for Removal	Removal Comments	#	Report Results
L-100	139.030	4/29/2011		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.	g Anamet #2500501493 i	ipe 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 A	TS 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 sleeve used to repair a 2009 girth weld leak. Removal will allow destructive testing to determine the cause of the leak. Girth wel 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.		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	Engineers Request. Girth Weld Sample to be Tested	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.		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, dyepenetrant, 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 sar location as above girth weld removal	ne 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	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 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

2/19/13 - 1 -

	Approx.	Date			ATS or Other Test Report	
Line Number	МР	Removed	Reason for Removal	Removal Comments	# '	Report Results
132	39.311	8/5/2011	1956 pipe segment removed @ request of Sunil Shori	1956 pipe segment removed @ request of Sunil Shori	GE Inspection Service 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.
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 F	ipe 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 A	h 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 o 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 F	ipe 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 F	ipe 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 bucklewhich was causing the ID restriction.		ipe 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 longitudinal indication. Sent to ATS for radiography testing.	a 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").

2/19/13 - 2 -

	Apprøx.	Date	ATS or Other Test Report				
Line Number	MP	Removed	Reason for Removal	Removal Comments	#	Report Results	
153	15333 Wicks Blvd.	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.	79 An anomoly was confirmed to be an inter deposit. No pitting, corrosion or wall loss was detected.	
132	43.540	6/7/2011	Non-standard construction	Tie-in sleeve exhibiting non-standard construction features.	ATS #413.61	11.179 turehease 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 #413.61-11.1	9 Although rimbe 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 #413.61-1	.179 The axial example 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 1210 Claremont Dr, 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 777 Glenview Dr, 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 1701 Earl Ave, San Bruno for deactivation of L132 at San Bruno Incident site	n 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 1701 Earl Ave, San Bruno for deactivation L132 at San Bruno Incident site	of N/A	No test performed - stored in Gilroy	
132	22.050	11/18/2011	-lydrotest Failure	Cut-out approximately 58'-6" of 24" SMLS 0.3125"WT installed on G 85737 in 1947.	at-out approximately 58'-6" of 24" SMLS 0.3125"WT installed on GEXponent report number 1108825.000 A0T0 1112 RE13 issued 12/21/12.		
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 ray & then to Exponent for failure analysis		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 Colma Creek in South San Francisco	N/A	No test performed - stored in Gilroy	
132	41.850	11/1/2011	Seismic/Liquefaction Risk			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 unplann miter obstruction and allow sufficient room for inserting.	ed N/A	No test performed - stored in Gilroy	

2/19/13 - 3 -

	Approx.	Date					
Line Number	MP	Removed	Reason for Removal	Removal Comments	#	Report Results	
132	42.076	11/1/2011	Seismic/Liquefaction Risk	189.2' removed from a dog-leg in the existing pipe due to conflict v the 290.5' installation of new direct buried 30" pipe	ith 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 perfoendrend Göstnory	
132	42.171	11/1/2011	Seismic/Liquefaction Risk	186.5' removed at south end and 10.2' removed at north end of Antoinette Lane 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 Colma Creek 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 Csitoor ed in	
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 an project tie-in	d N/A	No test performed - stored in Gilroy	
109	52.710	11/15/2011	Leak	Cut-out approximately 7'-9" of 24" DSAW .0.3125"WT installed on GN 1956721 in 1991. Under direction from Integrity Management ATS of 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	temoved two dents, one 10% deep and one 12% deep, that were N/A dentified by a geometry pig.		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 I	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		for further testing.	Anamet Lab report 5004- 264 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	ailure investigation by Anamet Lab began in April 2012.	Anamet Lab Report 7353 and routed to appropriate PG&E personnel.	DOBM 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.	Failure investigation by Anamet Lab completed and draft report reviewed. Anamet has comments and is revising report.		
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	

2/19/13 - 4 -

	Approx.	Date			ATS or Other Test Report		
Line Number	MP	Removed	Reason for Removal	Removal Comments	#	Report Results	
L-153	25.827	10/1/2010	Pinhole Seam Leak	Pinhole Leak in SSAW seam weld.	Testing completed at Anamet	Xray confirmed pin hole leak. Failure investigation completed. Cause was weld metal solidification anomaly during pipe fabrication. No evidence of service related progression (fatigue, corrosion, SCC, etc) found.	
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 vis 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 o operating pressure ANSI 300 or greater is required.	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 r MEARS did CIS Report #9101117301	•Corttracted 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.	Construction defects - porosity & slag in saddle (fillet) weld.		
300B	76.300	12/15/2011	Weld Failure	Fizzer in weld toe at elbow weld. Ground out approx 1/8 inch and w repaired. Cut out Repaired Weld. ATS did radiographic testing, then cut-out was sent to Anamet for root cause testing.	eldATS #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). Or 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		No test performed	
0632-01	1.940	10/27/2010		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	Cross section of 3" weld indicates lack of fusion at the root (Analysis by Dave Aguiar)		
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	Confirmed as commensurate		
L-50A	18.130	9/29/2011	Leak developed around cap fabricated to cover ar 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	

2/19/13 - 5 -

	Approx.	Date	ATS or Other Test Report	er Test Report I				
Line Number	MP	Removed	Reason for Removal	Removal Comments	#	Report Results		
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	he 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. Testing confirmed pipe diameter, wall thickness		
DREG5479	0.00		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).	moved a piece of pipe to perform destructive testing and determine ATS #413.61-12.113			
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		ars 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 N	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	1/24/2012	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		Removed a piece of pipe to perform destructive testing and determine to determine pipe properties.	Pending	Pending		
L-124A	24.19	5/30/2012	Inclusion or lamination	Removed for further examination as part of L-124A ILI DE&R (Dig 10).	r	TBD		
L-124A	24.19	5/30/2012	Internal Metal loss	Removed for further examination as part of L-124A ILI DE&R (Dig 10a).	SiteATS #413.61-11.116;	TBD		
220	24.31	5/11/2012	Hstorical 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 furthe analysis.	Pending	Pending		
L-177A	158.23	6/1/2012		A sleeve was removed from a 12" pipe to determine the root cause of the original leak PM# 41604542	N/A			
L-137C	8.24	6/3/2012	Incorrect repair of a leaking girth weld	Removed the girth weld of a 4" pipe PM# 30923304	N/A	No test performed		
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.				
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 1121 Glenview Dr, 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		

2/19/13 - 6 -

	Approx.	Date		ATS or Other Test Report			
Line Number	MP	Removed	Reason for Removal	Removal Comments	#	Report Results	
132	39.3	6/27/2012	Deactivation of Glenview Dr, San Bruno Rupture Site	Cut-out of 8'-0" of 30" (1948 Vintage) at 1121 Glenview Dr, San Brun for deactivation of L132 at San Bruno Incident site	o 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	BD	
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-21C	37.25	8/16/2012	Consecutive Girth Weld Leaks	Removed two leaking girth welds that were repaired with clamps PM# 41718610	N/A		
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	
191-1	15.7	9/29/2012	Unknown Long Seam	This Drip was removed due to Intergirty Mangament concerns of an unknown long seam in the drip leg	N/A		
L-105N	7.60	10/12/2012	Missing STPR record	Removed a 30 inch organ style drip due to missing hydrotest records and replaced with new 24 inch pipe on PSRS 27905 PM 30940671	N/A		
L-105N	18.48	10/20/2012	Insufficient pipe specs to establish MOP of 328 psig	Removed 21 feet of 6 inch pipe in question and replaced with new 6 inch pipe on PSRS 26664 PM 41658907	N/A		
L-21E	95.98	10/19/2012	Metal loss in the long seam weld	L-21E Dig Site 16. Removed approximately 60 feet (one full pipe joir to further investigate long seam corrosion found as part of L-21E Immediate Digs (SO 41668200). ILI vender reported metal loss (ML) on the long seam weld (LSW).	t) Pending	Pending	
L-21E	95.24	10/19/2012	Metal loss and linear indications in the long seam weld	L-21E Dig Site 21. Removed approximately 60 feet (one full pipe joir to further investigate long seam corrosion found as part of L-21E Immediate Digs (SO 41668200). ILI vender reported manufacturing metal loss (ML) on the long seam weld (LSW).	t) Pending	Pending	
177A	108.33	11/3/2012	7' long area of low UT reads with no metal loss.	Suspected lamination. Plan to complete destructive testing to confirm nature of low UT reads.	Pending	Pending	
L314	23.3 & 26.35	12/2/2012	Seam leaks	Removed 10 feet of 10-inch and 10 feet of 12inch sent to ATS for roccause analysis	, 3	in progress	
L-142S	4.28	11/30/2012		External corrosion was discovered with an interacting linear indication, along with a separate linear indication affecting the long seam formed by Electric Resistance Welding (ERW).		ATS is planned to perform further testing to determine the nature of the linear indication.	
L-118B	7.8	12/1/2012	Mech Damage	Removed 4' of mechanically damaged pipe, L118B was blown flat to remove the damaged portion of pipe	NA	No Test Performed	

2/19/13 - 7 -

Line Number	Approx. MP	Date Removed	Reason for Removal	Removal Comments	ATS or Other Test Report #	Report Results
1609-01	1.64	12/1/2012	Pipe Failure	Pipe ruptured, $\sim\!\!24"$ of the pipe was blown out of the ground, line was blown flat and bypass installed	Yes	Likely third party damage, results documented on Form H, no further testing required
1609-01	1.41	12/15/2012	Mech Damage M	ech damage from power pole installation	Yes	Likely third party damage, results documented on Form H no further testing required
1609-01	1.44	12/15/2012	Mech Damage M	ech damage from power pole installation	Yes	Likely third party damage, results documented on Form H, no further testing required
1609-01	1.51	12/15/2012	Mech Damage M	ech damage from power pole installation	Yes	Likely third party damage, results documented on Form H, no further testing required

2/19/13 - 8 -

				Hydrotest	Test Performed	Date Test		Corresponding MP to Report # and matching	Test Report	
Test #	Line Number	MP1	MP2	Date	by	Completed	Report #	material	Status	Report Results
PR-002-12	2405-01	0.553	0.62	04/28/12	ру	Completed	кероп #	material	Status	Location A sample taken at Modesto yard, shipped to
PR-003-12	L-131	0.555	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					N/A	Nitrogen test, no cut-outs from test to sample/test.
TM-013A-12	L-109	41.9	43.473	10/11/12						Location A sample shipped to Anamet 11/27/12, awaiting ATS report. Location B sample taken at Modesto yard, shipped to Anamet.
T-013B-12	L-109	43.492	44.7195	10/16/12						Location D sample taken at Modesto yard, shipped to Anamet.
T-018-12	L-132	48.44	49.98	7/3/2012	ATS	10/10/2012 10/10/2012 10/10/2012	413.62-12.190 413.62-12.191 413.62-12.192	413.62-12.190 corresponds with MP 48.44 Loc A. 413.62-12.191 corresponds with MP 49.98 Loc B. 413.62-12.192 corresponds with MP 49.98 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.
C-019-12	L-153	22.87	25.11	NA					N/A	Camera Work, see TIM-019-13
TIM-019-12	L-153	22.94	25.11	8/30/2012						Samples from 3 Locations (A, B, R) shipped to Anamet for testing, 1/10/13.
TIM-020-12	L-153	25.11	27.76	11/17/2012						Location A corresponds to Location B. Samples from 3 Locations (B, M, W) taken at Modesto yard, shipped to Anamet 1/15/13.
T-021-12	L-191-1	9.5862	9.94	03/21/12	ATS	9/7/2012	413.62-12.168	413.62-12.168 corresponds with MP 9.5862 Loc B.	1st Test Completed 2nd Test Pending	Loc B: 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. Loc A: Awaiting Final Report
TIM-024-12	0813-01	0.0293	1.2862	10/27/12						Location A sample taken at Modesto yard, shipped to Anamet 1/3/13. Location B sample taken at Modesto yard, shipped to Anamet 1/3/13.
T-025-12	L-100	138.43	143.853	05/09/12	ATS	9/7/2012	413.62-12.169	413.62-12.169 corresponds with MP 138.43 Loc B.	1st Test Completed 2nd Test Pending	Loc B: 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. Loc A: Awaiting Final Report
T-025B-11	L-132	4.29	4.92	08/16/12	ATS	07/18/12	413.62-12.111	413.62-12.111 corresponds with MP 4.29 Loc B, Only one sample was taken 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-026-12	L-100	143.853	147.77	05/19/12	ATS	9/7/2012	413.62-12.170	413.62-12.170 corresponds with MP 143.853 Loc B.	1st Test Completed 2nd Test Pending	Loc B: 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. Awaiting Final Report
T-027-12	L-100	147.77	150.13	05/19/12	ATS	9/7/2012	413.62-12.174	13.62-12.174 corresponds with MP150.13 Loc A.	1st Test Completed 2nd Test Pending	Loc A: 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. Loc B: Taking samples in Modesto yard.
TIM-037-11	L-132	43.61	46.57	9/2/2012						X-Ray weld indication - X-ray conducted at Modesto pipe yard during Hydrotest mechnical properties testing process.
T-038-11	L-132	46.61	48.44	06/06/12	ATS	10/10/2012	413.62-12.190	13.62-12.190 corresponds with MP 48.44 Loc B, Only one sample was taken 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.

2/19/13 - 1 -

					Test					
				Hydrotest	Performed	Date Test		Corresponding MP to Report # and matching	Test Report	
Test #	Line Number	MP1	MP2	Date	by	Completed	Report #	material	Status	Report Results
T-039B-11	L-132	49.98	51.5	07/05/12	ATS	10/10/2012	413.62-12.187	413.62-12.187 corresponds with MP 49.98 Loc A. Only one sample was taken 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-040-12	7221-10	7.208	9.652	04/26/12	ATS	8/20/2012 09/07/2012	413.62-12.157 413.62-12.166	416.62-12.157 corresponds with Loc B. 413.62-12.166 corresponds with Loc A.	1st Test Completed 2nd Test Pending	Loc B: 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. Loc A: Taking samples in Modesto yard.
T-044-12	L-138	22.55	28.64	07/26/12	ATS	10/10/2012	413.62-12.185	13.62-12.185 corresponds with MP 22.55 Loc A. Sample needed for Loc. B.	1st Test Completed 2nd Test Pending	Loc A: 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. Loc B: Taking samples in Modesto yard
T-045-12	L-138	28.64	35.91	07/24/12						Location A corresponds to Location B. Location B sample taken at Modesto yard, shipped to Anamet 1/3/13.
C-047C-11	L-153	20.07	22.87	NA					N/A	Camera Work, see T-047C-11
T-047C-11	L-153	20.06	22.9	10/12/12						Location B: X-Ray weld indication - X-ray conducted at Modesto pipe yard during Hydrotest mechnical properties testing process.
T-047-12	L-138	45.39	45.56	9/15/2012	ATS	10/29/2012	413.62-12.206	13.62-12.206 corresponds with MP 45.39 Loc A. Only one sample was taken because MP 3.824 Loc I corresponds with 413.62-12.207 MP 3.824.		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-048-12	L-142N	0	3.159	04/28/12	ATS	9/7/2012	416.62-12.172	413.62-12.172 corresponds with MP 3.17 Loc A 413.62-12.172 corresponds with MP 3.17 Loc B	Completed	Location A corresponds with T-049-12 Loc. A. Location B corresponds with T-049-12 Loc. B.
T-049-12	L-142N	3.159	6.6854	04/26/12	ATS	9/7/2012	413.62-12.172	413.62-12.172 corresponds with MP 3.17 LocA	1st Test Completed 2nd Test Pending	Loc A: 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. Loc B: Sample taken at Modesto yard, shipped to Anamet.
T-052-12	L-142S	0-02	0.69	06/28/12	ATS	10/10/2012	413.62-12.181	413.62-12.181 T-053-12 used for Loc. B, same diameter, wall thickness and grade.	Completed	Location A, no cut-out at this location, pipe pup & flange were re-installed. Location B corresponds to T-053-12 Location A.
T-053-12	L-142S	3.21	3.87	07/06/12	ATS	10/10/2012		413.62-12.181 corresponds with MP 3.21 Loc A. Only one sample was taken because Location A and B have the same diameter, wall thickness, and grade.		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-054-12	L-142S	10.445	11.48	07/23/12	ATS	10/10/2012	413.62-12.183	413.62-12.183 corresponds with MP 11.48 Loc B.	1st Test Completed 2nd Test Pending	Loc B: 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. Loc A: X-Ray weld indication - X-ray conducted at Modesto pipe yard during Hydrotest mechnical properties testing process.
T-055-12	L-300A	230.32	231.2	08/31/12	ATS	10/29/2012		13.62-12.204 corresponds with MP 230.32 Loc A.	J	Loc A: Results are in question, additional sampling of locations B and C taking place. Loc B: X-Ray weld indication - X-ray conducted at Modesto pipe yard during Hydrotest mechnical properties testing process. Loc C: Sample taken at Modesto yard, shipped to Anamet.
T-057E-11A	L-300A	180.94	181.77	03/07/12	NA	NA	NA	C	ompleted 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.

2/19/13 - 2 -

					I Test					
T. 4 #		SAD4	1400	Hydrotest	Performed	Date Test	D4#	Corresponding MP to Report # and matching	Test Report	Decid Decile
Test # T-057E-11B	Line Number	MP1 182 12	MP2 182 33	Date 03/09/12	by	Completed	Report #	material	Status	Report Results 2 chain of custodys, Data pending testing & lab results
1-037E-11B	E-300A	102.12	102.33	03/09/12						from ATS, x-ray anomalies in review
T-057W-11	L-300A	187.85	188.41	03/05/12						Same mat'l samples as -057E, Data pending testing &
1-03/44-11	L-300A	107.00	100.41	03/03/12						lab results from ATS, x-ray anomalies in review
T-059-12	L-300A	277.89	278.12	07/28/12	ATS	10/10/2012	413.62-12.193	413.62-12.193 corresponds with MP 278.12 Loc B.	Completed	ATS examination to confirm mechanical value for data
								Only one sample was taken because Location A and		collection and analysis. Pipe coupons were x-rayed and
								B have the same diameter, wall thickness, and		weld zone was found to be defect free. Pipe sections
								grade.		met API 5L requirements.
T-061-12	L-300A	372.87	374.2568	01/24/12					N/A	(Same as T-119-11), see 2011
T-073-12	L-021F	19.17	20.09	05/17/12	ATS	8/20/2012	413.62-12.158	413.62-12.184 corresponds with MP 19.93 Loc C.		Loc A&C: ATS examination to confirm mechanical value
						10/10/2012	413.62-12.184	413.62-12.158 corresponds with MP 20.09 Loc A	Completed	for data collection and analysis. Pipe coupons were x-
									& 3rd Test	rayed and weld zone was found to be defect free. Pipe
									Pending	sections met API 5L requirements.
T-079-12	L-119A	0.0035	3.824	08/29/12	ATS	10/29/2012	413.62-12.207	413.62-12.207 corresponds with MP 3.824 Loc B.	0	Loc B: Taking samples in Modesto yard
1-079-12	L-119A	0.0035	3.824	08/29/12	AIS	10/29/2012	413.62-12.207	Only one sample was taken because MP 45.39 Loc A	Completed	ATS examination to confirm mechanical value for data
i								corresponds with 413.62-12.206 MP 45.39.	Î .	collection and analysis. Pipe coupons were x-rayed and weld zone was found to be defect free. Pipe sections
								corresponds with 413.02-12.200 MF 45.39.		met API 5L requirements.
T-089-12	L-210B	7.4976	10.8217	9/9/2012	ATS	1/7/2013	413.62-13.4	413.62-13.4 corresponds with MP 7.4976 Loc A		Loc B being evaluated
T-090-12	L-210B	10.8217	15.6107	9/26/2012	AIG	1/1/2013	410.02-10.4	413.02-13.4 Corresponds with Mir 1.4970 Edc A		Location A corresponds to T-089-12 Loc. A, awaiting
1 000 12	L 201B	10.0211	10.0101	0/20/2012						ATS report.
										Location B corresponds to T-092-12 Loc. B, awaiting
										ATS report.
T-091-12	L-210B	15.6107	20.222	10/18/2012						Location A sample taken at Modesto yard, shipped to
										Anamet 1/3/13.
										Location B sample taken at Modesto yard, shipped to
										Anamet 1/3/13.
T-092-12	L-210B	22.98	25.98	10/11/2012	ATS	1/7/2013	413.62-13.9	413.62-13.9 corresponds with MP 25.98 Loc. B		Loc A being evaluated
T-096-12	1816-01	16.3	18.25	07/25/12	ATS	10/10/2012	413.62-12.182	413.62-12.182 corresponds with MP 16.3018 Loc A.	Completed	ATS examination to confirm mechanical value for data
								Only one sample was taken because Location A and		collection and analysis. Pipe coupons were x-rayed and
								B have the same diameter, wall thickness, and		weld zone was found to be defect free. Pipe sections
								grade.		met API 5L requirements.
T-097-12	L-148	0	6.06	04/01/12	ATS	8/20/2012	413.62-12.156	413.62-12.156 corresponds with MP 2.29 Loc C	1st Test	Loc C: ATS examination to confirm mechanical value for
									Completed	data collection and analysis. Pipe coupons were x-rayed
									2nd Test	and weld zone was found to be defect free. Pipe
									Pending	sections met API 5L requirements.
										Loc A: Taking samples in Modesto yard
T-099-12	L-148	6.06	12.58	04/19/12						Loc B: Sample taken at Modesto yard, shipped to
										Anamet.
T-100-12	L-148	12.58	14.62	05/17/12						Samples taken, ready to go for laboratory testing
TIM-101-11	1816-01	3.441	8.44	08/24/12						Loc. A yard search in progress
										Loc. B section ATS performing testing in house (ABI),
TIM-102A-12	L-118A	0	0.18	05/21/12	ATS	8/20/2012	413.62-12.155	413.62-12.180 corresponds with MP 0.00 Loc A.	Completed	insufficient sample size remains for further testing ATS examination to confirm mechanical value for data
11IVI-102A-12	L-110A	U	0.10	03/21/12	AIS	10/10/2012	413.62-12.133	413.62-12.155 corresponds with MP 0.00 Ecc A.	Completed	collection and analysis. Pipe coupons were x-rayed and
						10/10/2012	413.02-12.100	413.02-12.133 corresponds with MP 0.16 Edc B.		weld zone was found to be defect free. Pipe sections
										met API 5L requirements.
										The state of the s
T-102D-12	L-118A	37.38	37.71	06/15/12	ATS	9/7/2012	413.62-12.167	413.62-12.167 corresponds with MP 37.38 Loc A.	1st Test	Loc A: ATS examination to confirm mechanical value for
	1					1	1		Completed	data collection and analysis. Pipe coupons were x-rayed
	1					1	1		2nd Test	and weld zone was found to be defect free. Pipe
	1					1	1		Pending	sections met API 5L requirements.
										B: At Lab For Testing
T-102F-12	L-118A	58.21	58.74	06/29/12	ATS	10/10/2012	413.62-12.194	413.62-12.194 corresponds with MP 58.21 Loc A.	Completed	ATS examination to confirm mechanical value for data
	1					1	1	Only one sample was taken because Location A and		collection and analysis. Pipe coupons were x-rayed and
	1					1	1	B have the same diameter, wall thickness, and		weld zone was found to be defect free. Pipe sections
		I						grade.		met API 5L requirements.

2/19/13 - 3 -

					l Test				1	
				Hydrotest	Performed	Date Test		Corresponding MP to Report # and matching	Test Report	
Test #	Line Number	MP1	MP2	Date	by	Completed	Report #	material	Status	Report Results
T-104-12	L-132	25.06	29.06	9/18/2012	<u> </u>	I	(T		×	Location A sample taken at Modesto yard, shipped to
										Anamet 1/3/13.
										Location B sample taken at Modesto yard, shipped to
										Anamet 1/3/13.
T-110-12	L-300A	446.4777	449.706	08/24/12				413.62-12.02 corresponds with MP 446.478 Loc. A	Completed	ATS examination to confirm mechanical value for data
								413.62-12.02 corresponds with MP 449.706 Loc. B		collection and analysis. Pipe coupons were x-rayed and
										weld zone was found to be defect free. Pipe sections
										met API 5L requirements.
TIM-114-11	L-109	7.57	8.72	06/12/12	ATS	09/07/2012	413.62-12.176	413.62-12.176 corresponds to Loc A	Completed	
						09/07/2012	413.62-12.175	413.62-12.175 corresponds to Loc B		
T-122-12	L-300B	0.1294	0.1549	03/22/12					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.
TIM-123-12	L-109	30.52	32.806				413.62-12.195	413.62-12.195 corresponds with MP 21.422 Loc A	Completed	oc A & B: ATS examination to confirm mechanical value
								and Loc. B.		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.
TIM-125-12	L-109	21.422	22.225	07/30/12	ATS	10/10/2012		413.62-12.195 corresponds with MP 21.422 Loc A.	Completed	oc A & B: ATS examination to confirm mechanical value
						10/29/2012	413.62-12.202	413.62-12.202 corresponds with MP 22.225 Loc B.		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.
TIM-126-12	L-109	18.56	19.55	07/28/12	ATS	10/29/2012	413.62-12.201	413.62-12.201 corresponds with MP 18.56 Loc A.	Completed	Loc A & B: ATS examination to confirm mechanical value
						10/29/2012	413.62-12.203	413.62-12.203 corresponds with MP 19.55 Loc B.		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.
TIM 400 40	2047.04	0.0457	2.00	07/00/40	ATO	10/10/0010	440.00.40.400	140 00 40 400	0	ATO accominations to a section was benefit at a data
TIM-130-12	3017-01	0.8157	3.92	07/28/12	ATS	10/10/2012		413.62-12.196 corresponds with MP 7.54 Loc B.	Completed	ATS examinations to confirm mechanical value for data
						12/07/2013	413.62-13.1	413.62-13.1 corresponds with MP 0.8157 Loc A.		collection and analysis. Pipe coupons were x-rayed and
										weld zone was found to be defect free. Pipe sections
TIM 404 40	2047.04	2.00	7.54	07/00/40	4.70	40/40/0040	440.00.40.400	440 00 40 400 seems de with MD 7 54 to a D	0	met API 5L requirements.
TIM-131-12	3017-01	3.92	7.54	07/28/12	ATS	10/10/2012	413.62-12.196	413.62-12.196 corresponds with MP 7.54 Loc B	Completed	Loc B: ATS exmination to confirm mechanical value for
										data collection and analysis. Pipe coupons were x-rayed
										and weld zone was found to be defect free. Pipe
TIM 400 40	7004.04	5.04	0.00	00/00/40	4.70	10/10/0010	140.00.40.407	40.00 40.407	0	sections met API 5L requirements.
TIM-133-12	7224-01	5.34	6.02	08/03/12	ATS	10/10/2012	413.62-12.197	413.62-12.197 corresponds with MP 5.34 Loc B.		ATS examination to confirm mechanical value for data
								Only one sample was taken because Location A and		collection and analysis. Pipe coupons were x-rayed and
								B have the same diameter, wall thickness, and		weld zone was found to be defect free. Pipe sections
TIM-134A-12	L-107	18.69	26.01	9/21/2012				grade.	N/A	met API 5L requirements. Nitrogen test, no cut-outs from test to sample/test.
TIM-134A-12	L-107 1614-01	18.69	3.9	10/30/2012	ATS	1/7/2013	413.62-13.8	413.62-13.8 corresponds with MP 3.932 Loc. B	in/A	Loc A being evaluated
TIM-140-12	L-103	15.6417	15.86	10/30/2012	AIS	1/1/2013	413.0Z-13.0	+15.02-15.0 corresponds with IVIP 5.952 EOC. B		X-Ray weld indication - X-ray conducted at Modesto pipe
11101-140-12	L-103	13.0417	13.00	10/13/2012	1	1			1	yard during Hydrotest mechnical properties testing
										process.
TIM-142-12	L-103	27.16	27.26	10/25/2012	-			1	-	Loc A: Sample taken at Modesto yard, shipped to
111VI-14Z-1Z	E-103	27.10	21.20	10/23/2012	1	1			1	Anamet.
TIM-143-12	0405-01	3.87	13	9/23/2012	ATS	1/7/2013	413.62-13.3	413.62-13.3 corresponds with MP 13 Loc. B		Loc A being evaluated
TIM-143-12	0405-01	3.87	13	9/23/2012	A10	1/1/2013	T10.02-10.0	713.02-13.3 COTTOSPOTIOS WHILE WIF 13 EOC. B		Loc B: Sample shipped to Anamet 11/27/12, awaiting
111111-144-12	0-03-01	3.07	13	512512012	1	1			1	ATS report.
TIM-146-12	0115-01	0	0.4054	11/18/2012	 					7.1.5 755010.
TIM-149-12	0813-02	0	0.4054	10/2/2012	 	-			 	Loc A: Sample taken at Modesto yard, shipped to
	******		1							Anamet.
TIM-150-12	0814-05	0	0.31	10/2/2012	1				1	Loc B: Sample taken at Modesto yard, shipped to
				I						Anamet.
	•		•	•	•			•		

2/19/13 - 4 -

	1				l Test					
				Hydrotest	Performed	Date Test		Corresponding MP to Report # and matching	Test Report	
Test #	Line Number	MP1	MP2	Date	bv	Completed	Report #	material	Status	Report Results
TIM-155-12	L-138D	45.1	46.64	12/3/2012	- Side	I			K6	Location A corresponds to Location B.
										Location B, sample taken at Modesto yard, shipped to
										Anamet 1/3/13.
TIM-159-12	L-181B	4.0776	4.5077	06/28/12	ATS	9/7/2012	413.62-12.173	413.62-12.173 corresponds with MP 4.50 Loc B.	Completed	Loc A: ATS examination to confirm mechanical value for
								Only one sample was taken because Location A and		data collection and analysis. Pipe coupons were x-rayed
								B have the same diameter, wall thickness, and		and weld zone was found to be defect free. Pipe
TIM-160B-12	7222-01	11.16	13.15	9/29/2012	ATS	1/7/2013	413.62-13.6	grade. 413.62-13.6 corresponds with MP 13.15 Loc. B		sections met API 5L requirements. Loc A: Sample taken at Mesto vard, shipped to
111VI-100B-12	1222-01	11.10	13.13	9/29/2012	AIS	1///2013	413.02-13.0	413.62-13.6 corresponds with MP 13.13 Loc. B		Anamet.
TIM-161-12	7223-01	0.1436	8.4	08/06/12	ATS	10/29/2012	413.62-12.205	413.62-12.205 corresponds with MP 8.4 Loc. B	1st Test	Loc A Samples sent to lab
11111 101 12	122001	0.1100	0.1	00,00,12	,,,,	10,20,20,12	110.02 12.200	10.02 12.200 donnopondo mar im 0.1 200. B	Completed	250 / Campico cent to lab
									2nd Test	
									Pending	
TIM-162-12	7224-09	0	1.4	12/15/12						
TIM-166-12	1301-01	4.18	4.6	10/08/12	ATS	1/7/2013	413.62-13.2	413.62-13.2 corresponds with MP 4.18 Loc. A		Loc B being evaluated
TIM-168-12	1614-08	0.56	1.0	08/07/12						Loc A: Sample taken at Modesto yard, shipped to
TIM-169-12	L-197B	0	4.467	9/21/2012		-				Anamet.
T-172-12	L-197B	35.73	35.89	08/03/12						Loc A: Sample taken at Modesto yard, shipped to
1-112-12		00.10	00.00	00/00/12						Anamet.
T-173-12	7219-01	0.0025	3.73	08/30/12	ATS	1/7/2013	413.62-13.5	413.62-13.5 corresponds w/ MP 0.0025 Loc A.	Completed	ATS examination to confirm mechanical value for data
							413.62-13.7	413.62-13.7 corresponds w/ MP 3.73 Loc B.		collection and analysis. Pipe coupons were x-rayed and
										weld zone was found to be defect free. Pipe sections
			 							met API 5L requirements.
TIM-175-12	L-109	16.93	17.1	10/18/12	ATS	10/10/2012		413.62-12.195 corresponds with MP 16.19 Loc A.	Completed	Location A corresponds to TIM-125-12 Loc. A.
						10/29/2012	413.62-12.203	413.62-12.203 corresponds with MP 17.10 Loc B.		Location B corresponds to TIM-126-12 Loc. B. 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-176-12	L-301F	7.114	7.9	08/22/12	ATS	10/29/2012	413.62-12.208	413.62-12.208 corresponds with MP 7.9 Loc. B	1st Test	Loc A Samples sent to lab
									Completed	
									2nd Test	
				1					Pending	
TIM-177-12	L-119A	16.12	16.4	10/21/12						Loc A: Sample taken at Modesto yard, shipped to
TIM-179-12	L-153-2	0	0.03075	11/11/12						Anamet
TIM-180-12	I -191-1	34.7	35.28	11/06/12		+				Location A corresponds to Loc. B.
		",,,	00.20	1						Location B: X-Ray weld indication - X-ray conducted at
1										Modesto pipe yard during Hydrotest mechnical properties
						<u> </u>				testing process.
T-182-12	L-109	0.44	1.2	10/21/12						
T-182-12	L-109	0.44	1.2	10/21/12						

2/19/13 - 5 -