PG&E Response

1.1	I understand that this project is installing four miles of a new 24- inch natural gas pipeline. Correct?	Yes, PSEP pipe replacement project R-134 (PSRS #27979) is installing approximately 3.71 miles of new 24" pipe.
1.2	When did this project begin?	Construction on the project started on 01/07/13, after equipment mobilization commenced on 01/03/13.
1.3	When did the welding process start & end?	The welding process started on 01/09/13. The Radiographic Testing (RT) contractor, Western Industrial Xray, Inc., or WIX, also started on that day. Welding will continue until the final project tiein(s) are completed, currently scheduled in late September.
1.4	How many total welds are there on L-114?	The total number of welds performed as of 8/17/13 was 765. It is estimated that this total at project completion will exceed 800 welds.
1.5	What is the current status of the project? What is the work that's being performed, other than re- validation of the welding?	The project is currently in construction, with current activities focused on the installation of pipe and completion of welding at three cut-out locations on the project's central section and an additional cut-out location on the northern section (sections removed for insertion of in-line inspection tool - see further detail below question 2.4), the subsequent hydrotest of the central section is currently scheduled for late August; preparation and completion of the hydrotest of the project's northern section on or about 8/21/13 (hydrotest on the southern section was completed on 8/13/13); and the fabrication and subsequent hydrotesting testing of tie-in pieces for all three sections is also scheduled for late August.
2.1	Is the exposure angle of 120 degrees set by the API 1104 or PG&E procedure?	Exposure angle is designated in API 1104 Section 11.1.3.1.
2.2	Is it technically correct to refer to Radiographic Testing as X-ray testing (and if not, what's the difference)?	Yes, X-Ray testing and radiographic testing are one and the same (Technical reference ASTM E1316 -11b Section D).
2.3	How long does it usually take for the Radiographic Testing images to become available after the images were taken in the field?	Manual film processing of industrial X Ray film is generally available for interpretation within one hour of commencing film processing.
2.4	Is using a pig instead of Radiographic Testing considered an equivalent validation?	Yes, ultrasonic testing, as applied by PG&E in its use of the AUT (Automated Ultrasonic Testing) inline inspection tool on the L-114 project, is permitted by API 1104 20th Edition and provides for a weld inspection that covers the entire weld volume. There are no restrictions as to whether this testing is manual or automated, or if completed from the inside or outside surfaces.

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Qn Ref	SED Question	PG&E Response
2.5	Is a concern that inspection of welds using a pig "will not show inspectors if there are bubbles inside the welds" and that only X-ray can provide sufficient certainly of a weld's safety?	No, that is not a concern; Ultrasonic inspection is an industry accepted method for the detection of gas pores within a weld volume (Technical references: ASME V Article 4 Appendix N Figure N-481(h), API 1104 20th Edition 9.6.1.4, and BS EN 583-5).
3.1	How long has TCI been under contact with PG&E to perform weld examination?	TCI has provided services to PG&E under a series of agreements that began in 2001, though activity in 2001 and 2002 was relatively small. PG&E's final agreement with TCI began in November 2006 and as indicated in our prior email was terminated in 2013 as a result of the L-114 inspection issue.
3.2	Out of total number of welds on L-114, how many of those were validated by TCI?	<ul> <li>173 inspections of welds were completed by TCI on the L-114 project. Of those: <ul> <li>142 TCI inspections were re-inspected by PG&amp;E (the results of these re-inspections are provided in response to question 5.4 below); and</li> <li>31 TCI inspections did not require re-inspection (9 re-inspections were not required as the welds were removed as part of locating the insertion points for the AUT tool, 11 inspections of welds were completed by TCI under the direct supervision of PG&amp;E NDE staff and are considered compliant, 2 re inspections were not required as the welds were previously removed from the pipe due to issues unrelated to TCI inspections, and 9 re-inspections were not required as the inspections by TCI were on 8" pipe and are considered compliant).</li> </ul> </li> </ul>
3.3	What projects, other than L-114, has TCI been used to validate welds?	A list of projects on which TCI has previously provided RT is included as an appendix to this response. This list was compiled as part of an "extent of condition analysis" performed by PG&E's ATS organization and the inclusion of the L-114 RT issue into PG&E's Corrective Action Program (CAP) under the supervision of PG&E's Quality Engineering and Improvement (QE&I) organization within Gas Operations. An executive summary of the results of this analysis is currently under review with an industry expert and we anticipate providing this to the CPUC by Friday August 23, 2013.
3.4	Are any of the lines that TCI was used for in weld examination currently in service?	Yes, see response to prior question for additional detail on CAP event and 'extent of condition' analysis.
3.5	What other contactors that PG&E uses to perform weld examination? WIX and anyone else?	The following is a current listing of RT contractors used by PG&E: Western Industrial XRay, Inc. (WIX), Mistras Group, Inc., Team Industrial Services, Inc., Valley Industrial X-Ray and Inspection Services, Inc., JanX Integrity Group, Edge Inspection, and Shaw Pipeline Services, Inc.

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Qn Ref SED Question

#### PG&E Response

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3.6	What's the name of the contactor that's performing the actual welding (or is it done by PG&E employees)?	Welding on the L-114 project has been performed by resources from PG&E Gas Transmission General Construction and Snelson Companies, Inc.
4.1	What is the relationship of the NDE Services Group of PG&E's Applied Technology Services (ATS) Division and the Quality Improvement group in Gas Operations?	PG&E's ATS organization is part of PG&E's Electric Operations line-of-business. ATS' NDE group supports Gas Operations Quality Engineering & Improvement (QE&I) organization with subject matter experts.
4.2	Did the NDE inspector observe the incorrect Radiographic Testing procedure as it was being done in the field or after the fact?	The original observation occurred real-time in the field.
4.3	What is the PG&E QA/QC process for Radiographic Testing in the field and the subsequent images?	PG&E is currently performing a program of bi-weekly job observations (real-time and post review of images) on all projects using RT within PG&E's Gas Operations.
5.1	To your knowledge, when was CPUC first notified of the issue with TCI?	PG&E has been supporting CPUC SED oversight at the project location throughout construction and has provided information on inspection activities to CPUC staff and assigned contractors as requested in the field. Discussions on this issue between CPUC SED and PG&E staff commenced during the week beginning6/3/13, and have subsequently included review of inspection drawings and specifications at Bishop Ranch on August 5th. Formal notification of the issue was included within PG&E's quarterly PSEP compliance report filed July 30, 2013.
5.2	How many welds that TCI validated have been re-validated to date?	All welds originally inspected by TCI and remaining on the L-114 project have been re-validated and are fit for service. To date, 142 inspection of welds completed by TCI have been re-inspected, including 101 re-inspections using the AUT in-line inspection tool, and 41 re-inspections by RT (Wix). An additional 9 TCI inspections of welds did not require re-inspection as the welds were removed/cut-out to locate insertion points for the AUT in-line tool.
5.3	What process was used to re- validate the welds?	Radiographic and Ultrasonic test methods as allowed in API 1104 20th Edition, Sections 11.1 (Radiographic Testing Methods) and 11.4 (Ultrasonic Testing Methods).

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Qn Ref	SED Question	PG&E Response	
5.4	Out of the re-validated welds, how many of those had issues that were identified upon re- examination?	A total of 6 welding issues have been identified to date - 3 weld issues were identified as a result of re- inspection using the AUT in-line inspection tool, and the other 3 weld issues were identified by RT (WIX). Two of the three weld issues identified by RT were repaired in the field and upon completion of reinspection are considered fit for service. The remaining weld issue identified by RT was also subsequently identified by the AUT tool and was cut out along with the other 3 AUT-identified weld issues. ATS has custody of the pipe cut outs and RT films related to all weld issues identified by the reinspection activities on the L-114 project and is in the process of completing additional analysis.	
5.5	What steps has PG&E taken to ensure that there isn't the same quality issue with other welding validation contactors?	<ul> <li>In addition to the bi-weekly job observation program noted above, QE&amp;I along with ATS has undertaken the following activities to ensure that all Non-Destructive Examination (NDE) activities are executed in a consistent and quality manner:         <ul> <li>Increased the frequency and quantity of jobsite observations of NDE contractors across Gas Operations</li> <li>Completed a detailed independent third party review of all contactors' certification programsand NDE procedures</li> <li>Completed the issuance of standardized NDE forms to ensure all documentation is complete, consistent and captures all information required by the referencing Code; and</li> <li>Initiated a NDE services request for proposal (RFP) process, which includes: <i>Robust Pre-qualification Program</i></li> <li>PG&amp;E is in the process of implementing the verification of NDE contractor technicians' proficiency in all certified methods by requiring demonstrations prior to job start. Success of the demonstration will result in the issuance of a PG&amp;E proficiency endorsement identification card. These proficiency endorsement cards shall serve as qualification verification tools for PG&amp;E oversight personnel while conducting "in the field" job observations. Failure to comply with procedures or Code requirements shall result in withdrawal of the card and the ability to provide NDE services on further RG&amp;E projects. <i>Mandatory Adoption of PG&amp;E NDE Technical Specification</i></li> <li>Under the terms and conditions of the RFP all signatory NDE companies and NDE service providers must adopt and meet the minimum requirements specified in ANSI/ASNT CP-189. CP-189 is typically utilized in the nuclear industry and sets higher qualification and training requirements for all NDE personnel.</li> <li>The implementation of these activities across all NDE contractors within Gas Operations is planned to be completed by the end of 2013.</li> </ul> </li> </ul>	
5.6	What has been the impact on the project from this issue? Both in terms of schedule and cost?	The L-114 TCI weld inspection-issue has negatively impacted the project's schedule and costs, creating a delay approximately 2 months and additional costs to date of approximately \$3 million (exclusive of the impact beyond this project).	

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Qn Ref	SED Question	PG&E Response
5.7	When is PG&E planning to submit the corrective action/quality review plan to the CPUC?	The corrective actions taken on the L-114 project are complete. PG&E is currently assessing the results of the extent of condition analysis note above, including the potential incorporation of additional input from an industry expert on this information. PG&E anticipates that it will be better able to outline the scope and activities within its wider corrective action/quality review plan once all information has been appropriately analyzed, and will continue to share its plans and progress with the CPUC. PG&E anticipates that it will complete the analysis and planning of the corrective action/quality review plan by the end of September.

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#### Extent of Condition Analysis List of T.C. Inspection Work Assignments<sup>\*</sup>

		<u> </u>
Purch.Doc. #	Order #	SAP Order Description
2500726249	2032287	ATS 2012 Hydrotest Pipe Testing
2500750362	2032287	ATS 2012 Hydrotest Pipe Testing
2500756770	30933793	DFM-0817-01 MP 0.52-1.30 REPLACEMENT 4000
2500747274	30896219	1818-01 MP0 & 1816-50 MP1.05 2INSULATORS
2500692980	30865355	DFM-0837-01 REPL 0.03MI MP 1.52-1.54 PH1
2500692980	30917312	DFM-7222-01 MP 6.95-7.08 (REPL)
2500751291	30713007	DFM-8807-01-02 UPRATE LAWRENCE STAGE 1
2500736300	30900655	L103 MP 9.5 SAN ANDREAS FAULT REPLACE
2500704387	30842130	L-103 REPL 0.65MI MP 16.61 - 19.60 PH1
2500736300	30842130	L-103 REPL 0.65MI MP 16.61 - 19.60 PH1 (included as item 9)
2500746831	30842130	L-103 REPL 0.65MI MP 16.61 - 19.60 PH1 (included as item 9)
2500792233	30677903	L-109 MP 0.00-43.47 ILI UPGRADE
2500782554	30943472	L-114_2 REPL 3.60MI MP 12.70-16.52 PH1
2500792226	30677902	L-132 MP 0.00-31.93 ILI UPGRADE
2500735061	41756015	L-147 MP 2.29 20" LEAK REPAIR BRITTAN AV
2500754855	30889623	L181A-10, LOWER 12" MAIN, MP 0.73
2500742143	30957740	RIM-150&199 - STUB6318 STUB6319 (REPL)
2500736364	30842271	VALVE AUTO - BIRCH & S. DELAWARE PH. 1
2500777002	30965941	Lower 8" Burlingame DFM 0211-01
2500776350	30844296	GDWRO-AGUACALIENTE RD & ARNOLD DR, SON
2500747369	41449673	L-177A MP 88.80-163.04 DIRECT EXAM & REP
2500800477	30714896	OC4 GEP1789GRAVENSTEIN HWY S,SBSTPOL *GC
2500616932	30838332	EP 3355 N BEECHER RD STOCKTON
2500690791	30878686	IRVINGTON V5 REPLACEMENT
2500699393	30889856	NSTALL DR.ST. EL CHARRO RD LIVERMORE
2500678857	30875092	ALLIED WASTE - MILPITAS CNG
2500728037	30849080	CPA 3957-10W @ CARMEL VALLEY RD & TEHAMA
2500693099	41719888	L-103 MP 23.2 12" LEAK REPAIR SHERWOOD
2500757647	30959339	L-300A MP 467.25 6" V-12 REPLACEMENT
2500624618	41654598	L301A MP 3.0 LEAK (both PO's in 1 envelope 30/31)
2500635729	41654598	L301A MP 3.0 LEAK (both PO's in 1 envelope 30/31)
2500750677	41666255	MILPITAS C1 &C2 CLEANING AND DUMP REPAIR
2500668528	30903714	MPR REPL.N.SAN JUAN ROAD AROMAS
2500752692	30891336	Per Ernesto, no work done by TCI
2500781661	2032985	2013 HYDROTEST PIPE DESTRUCTIVE TESTING
2500733558	30852525	OC1 2HPR 2"MAIN&CONVERT LXNGTN, SMATEO
	Purch.Doc. #         2500726249         2500750362         2500756770         2500747274         2500692980         2500751291         2500736300         250074837         2500746831         2500736300         2500746831         2500736300         2500746831         2500736300         2500746831         2500735061         2500735061         2500735061         2500736364         2500776350         25007474369         2500747369         2500747369         2500690791         2500690791         250069303         2500757647         2500757647         2500757647         2500757647         250068528         2500750677         2500750677         2500750677         2500750677         2500752692         2500781661         2500733558	Purch.Doc. #Order #25007262492032287250075036220322872500756770309337932500747274308962192500692980308653552500692980309173122500751291307130072500736300309006552500746831308421302500736300308421302500746831308421302500746831308421302500792233306779032500792263067790325007350614175601525007350614175601525007350614175601525007363643084227125007363643084227125007763503084429625007763503084429625007763503084429625007763503084429625006169323083833225006907913087868625006930941719888250075764730959319250062461841654598250075067741666255250075067741666255250075269230891336250075269230891336250073355830852525

<sup>\*</sup> Projects identified upon searching for TCI work assignments since 2011 from Sourcing database.

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37	2500762900	30938237	Redacted SAN MATEO HPR REMOVAL
38	2500762771	30938237	SAN MATEO HPR REMOVAL
39	2500783945	41608302	L-300B MP 450-502 ILI RE-INSPECTION
40	2500664881	30882126	R1 G REPL REG SO LUCILLE, Redacted
41	2500700188	30899018	GPRedacted
42	2500626032	30604187	L-132, MP 0.93-1.87 REPLACE
43	2500658419	41684306?	*CANC* DFM-0206-01MP0.29 WOODSIDE LEAK
44	2500654493	30712995	L-101 MP 0.00-11.85 ILI UPGRADE SOUTH
45	2500659150	30842234	L-181A REPL 1.73MI MP 15.31-16.81 PH1
46	2500599371	41609998	*CANC* L-197A MP 37.9 GR 2 LEAK REPAIR
47	2500767716	30853332	+RELOCATE DOWNSTREAM VALVE LOHP-77 +
48	2500661792	30909108	1608-01 MP0.01 REPAIR VALVES & REM STUB
49	2500755888	30963281	1609-01 MP1.64 PIPE FAILURE AND REPAIR
50	2500605725	41617602	DFM 1613-06 MP 1.75 PIPE LOWERING
51	2500702429	41729443	DFM 1614-02 MP 1.81 MECH DAMAGE EVALUATI
52	2500703789	30943949	GPRedacted STOCKTON
53	2500663220	30873892	GP RPL VALVES ST-HP-35 PERSHING & SWAIN
54	2500656888	30668856	GPRP Redacted O CLAY STKN
55	2500635979	41449657	L-108 MP 0.00 - 37.12 PIGGING & ANALYSIS
56	2500664387	30603910	L-108 MP 14.62-36.96 ILI UPGRADE (56 and 57 are paired together)
57	2500744135	30603910	L-108 MP 14.62-36.96 ILI UPGRADE (56 and 57 are paired together)
58	2500649026	30687274	L-108 MP 38 NCPA LODI ENERGY CENT METER
59	2500697573	30919862	L-108 MP 38.17 MLV AND BRIDLE SET
60	2500732545	30915268	L-108 REPL 0.30MI MP 39.17-39.47 CLC
61	2500780275	30905920	L-197A MP 27.1 REPALCE MLV LOT
62	2500660815	30879385	L-197A, MP 39.57-39.97 PIPE REPL
63	2500600613	30841081	PP-METER MARIPOSA ENERGY
64	2500778968	30876488	REPLACE REGS LOHP-85, Redacted
65	2500649112	41516467	SBI LEAK ROOT CAUSE DFM1617-01 CUT OUT
66	2500779010	30876487	OC2 REPL REGS MAHP Redacted
67	2500774362	30812170	+REPL REGS MAHP-47 Redacted
68	2500779009	30812172	OC2 REPL FILTER & REGS MAHP Redacted
69	2500650163	41449662	L-105N MP 7.75-22.86 PIGGING & ANALYSIS
70	2500715701	41737021	L-107 MP 15.28 GRADE 2+ LEAK REPAIR
71	2500664408	41668974	L131 MP-45.07 REPAIR LEAK
72	2500632901	41656705	L-153 MP 17.94 - 18.00 EXAM. T-47A WELDS
73	2500751037	30882210	Redacted PO not used. No xrays
74	2500681440?	41599879?	L-153_2 C-020-12 MP 25.11 TO MP 27.88
74A	2500-421760	41599879	L-153_2 C-020-12 MP 25.11 TO MP 27.88
75	2500615254	30848926	HPR PROJECT Redacted

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76	2500749841	30750766	DFM 1601-01 REPL REGS MACARTHUR STA CAP
77	2500597439	30767919	MARIPOSA ENERGY PROJECT ALAMEDA COUNTY
78	2500787246	41857785	1617-01 MP 0.98 GR-2 LEAK REPAIR
79	2500787044	30741865	REPL REGS TYHP-64 Redacted
80	2500762859	30832330	R2 GP BART / CALAVERAS CROSSING, SAN JOS
81	2500737462	30750581	HERSHEY JUNCTION PLC & REG REPLACEMENT
82	2500663804	41647941	DREG5143 MP 0 LEAKING 3" VALVE
83	2500734721	30871539	DFM 0402-01, MP6.8 V-ABAN O88 O88B O89
84	2500592613	30723268	DFM 0405-01, MP 12.09 REMOVE TAP VALVE
85	2500674153	30930036	EVANS DFM HPR DOWNRATE
86	2500670379	30927047	Redacted - GRADE 1 LEAK
87	2500606119	30900897?	McDonald Island
87-A	2500606119	41497360	L-147 T-043A-11 MP 1.13 TO MP 2.20
88	2500743247	30914409?	Muller Valve #1 & #2 +?
88-A	2500743247	41504836	L-57A MP9.48-16.68 ILI DIRECT EXAM & REP
89	2500730225	30858190	OC4-CUSTHPRSTA PGET/INTALLMAIN,GRATON*GC
90	2500763154	2009830	GSM,McDonal,Common,Maintenance
91	2500762462	41817480	118B MP 7.85 DIG IN
92	2500697929	30827767	DFM 7211-01 RB57 REPL V2,3&6 ADD MONITOR
93	2500752242	30933205	DFM 7228-16 MP 0.69 GR-2+ LEAK REPAIR
94	2500744901	30842202	DFM7225-02 DWN RT RPL 2.42MI MP0.00-2.42
95	2500798528	30854376	GP INST MN <sup>Redacted</sup> MODESTO, 3 HPR
96	2500664143	30814693	L-118, V-81.68 RELOCATE VAULT Redacted
97	2500726727	30940161	L-118A MP 38.61 GR-2+ LEAK REPAIR
98	2500656351	41702266	L-118A MP 56.87 LEAK REPAIR CUT OUT
99	2500656351	30932187	L-118A MP 57.7 REM STUB6098 & MTR D EL
100	2500703467	30941811	L-118A MP 78.57 REDUCED COVER
101	2500583716	30775305	L-118B MP 11.9 MADERA CNG SVC 2011
102	2500650135	41803483	L-148 MP 10.8 MECHANICAL DAMAGE GR-1 LEA
103	2500709894	30927064	L-164 AMADOR STATION- LEAK REPAIRS
104	2500726727	41672061	L-331 MP 0.00 REPLACE UNDERRATED 20" TEE
105	2500592687	41587561	LK 7011308931-AMADOR, COALINGA
106	2500650135	30851912	OC2 GP INST MN Redacted MODESTO; 18
107	2500656351	30828170	OC2 REBUILD REG STA RC-06, LOS BANOS
108	2500594980	30871726	OC2 GP Redacted REG RELOC MRCD
109	2500597227	30852089	OC2 GP INST MN Redacted
110	2500617427	30852028	OC2 GP INST MNRedacted URLOCK, 25 HP
111	2500750540	30851943	OC2 GP INST Redacted , MODSTO 10 HPRS
112	2500656351	30852025	OC2 GP INST MN Redacted
113	2500650135	30854374	OC2 GP INST MN (Redacted );2 HP +
114	2500620700	30851654	OC2 GP Redacted , DRS

115	2500656351	30888225	Redacted
116	2500656351	30888225	
117	2500798527	30983567	DFM 1202-09 6-INCH FRESNO BELTMAIN DIGIN
118	2500785566	30928111	OC2 REBUILD REG STN - RA10; ATWATER
119	2500694096	41718610	L21C MP 37.25 GRADE 1 LEAK REPAIR
120	2500678753	41668200	L-21E MP 93.55-114.89 DIRECT EXAM & REPA
121	2500711722	30912401	Rep V3 @ Reda Sabastapol, Redacted Santa Rosa
122	2500729830	41680257	L-101 MP0-44.61 2012-ICDA (PENINSULA)
123	2500636056	41666398	4" PLF Redacted San Jose)
124	2500614495	41635502	DFM 1301-01 MP 4.6 REPAIR LEAK COTATI AV
125	2500685903	30724384	L 126A MP 10.77 REMOVE 6" DRIP
126	2500747368	30820596	L-21C&D, MP 37.8/24.6 RELOCAT DENMAN WRO
127	2500616909	41449654	L-21E MP 53.12-114.89 ILI PIGGING & ANAL
128	2500668414	30716289	Redacted DRILL A NEW STORAGE WELL
129	2500760232	30905510	G DEACT IDLE STA, Redacted
130	2500746831	41815401	L314- MP 22.8,23.3 AND 26.35 LEAK REPAIR
131	2500-421760	30796263	L400 ANTIOCH GENON MARSH LANDING PP P/L
132		3804525	(Part of Line Items 131 and 138)
133	2500-421760	30763524	PITTSBURG PP METER STATION UPGRADE
134		41617913	L-153_2 C-019-12 MP 22.87 TO MP 25.11
135	2500734721	30875139	EC E 6865 E HEATON, FRESNO-BAD PM 1PH TX
136	2500743247	30888183	316-2 0.50 ICDA REPLACEMENT
137	2500-606119	30796264	L-400 ANTIOCH GENON MARSH LANDNG PP MET
138	2500-606119	30813671	REBUILI <sup>Redacted</sup> STATION
139	2500-606119	30882124	OC1 R1 REBUILD Redacted
140	2500-606119	30712875	MCD IS WSS REBUILD
141		41592552	REPAIR V-B78 @ RW29Redacted
142	2500-606119	30604058	LOS MEDANOS REWORK WELL 8C (2012)
143	2500-606119	30882125	R1 G REBUILD Redacted STATION, WALNUT C
144	2500-606119	30826505	G REBUILI <sup>Redacted</sup> STATION, MORAGA
145	2500-421760	41482931	L-057A-MD1 TIM-042-12 MP 0.004 TO 0.613
146		41759303	L-057A KINK IN PIPE AT Redacted
147	2500485885	30603879	INST L108/401 CROSSTIE, VERNALIS TAP
148	2500-500005	30603879	INST L108/401 CROSSTIE, VERNALIS TAP
149	2500530136	30603910	L-108 MP 14.62-36.96 ILI UPGRADE
150	2500367972	30603910	L-108 MP 14.62-36.96 ILI UPGRADE
151	2500530293	30603910	L-108 MP 14.62-36.96 ILI UPGRADE
152	2500552844	30698447	L-108 MP 38.1 NCPA LODI ENERGY CENTER
153	2500554378	30814410	L-401 MP-323.53 INSTALL MLV CLASS CHNG
154	2500586342	30606848	DFM 2408-05 Redacted RELOCATE 525' 16"
155	2500421760	30610011	L-191, MP 2.76-3.08 RELOCATE (WRO H)

2500567915	30676555	L-105N MP-22.86 INSTALL ENRICO STATION
2500573883	41596255	L-131 MP24.88-50.57 ILI DIRECT EXAM&REPR
2500590901	30871881	DFM 0404-04 & 0404-01, MP 3.21 CROSS TIE
2500474724	41449672	L21 Cut Outs
2500563637	30714400	OC1 Redacted REPLACE REG
2500432260	41313713	NCPA White Slough Mtr Set, Lodi
2500480092	41313713	NCPA White Slough Mtr Set, Lodi
2500732364	30915268	L-108 Repl 39.17 - 3947 CLC, Lodi
2500475243	30603909	L-105N MP 7.75-22.85 ILI UPGRADE
2500421760	30763524	OC2 STS LH HARD-BDRQ-INST-100 BLOCK OAK
2500421760	30812259	L-191, MP 2.76-3.08 RELOCATE (WRO H)
2500421760	41608301	L-114 MP-10.51, REPLACE 22-IN ELBOW
2500421760	41449665	L-57A MP 9.46 - 16.68 PIGGING & ANALYSIS
06303208U	Unknown	Redacted
2500421760	30610011	L-191, MP 2.76-3.08 RELOCATE (WRO H)
2500421760	30717922	L-57A M12.86 RELOCATE 100 FT OF 18-IN
2500395381	30807931	191A MP 2.91 REPLACE DENTED PIPE
2500421760	30813671	REBUILD Redacted STATION
2500424979	30639497	L-191, MP 3.90-4.69 RELOCATE (WRO C)
2500337288	30708425	MCDI WSS & TCS FILTER SEPARATORS INSTALL
	30692911	OC1 G REBUILD Redacted STN, PITTSBUR
2500421760	30603920	L-57A MP 9.29-16.68 ILI UPGRADE
2500421760	41534024	L114 MP-12.58 REPLACE 22-IN ELBOW
2500-521760	9712102	SP-5 MP 2.7 - 3.7 RELOCATE (WRO LT/H)
2500424979	30639497	L-191, MP 3.90-4.69 RELOCATE (WRO C)
2500424979	30613285	*CANC* Redacted CANC
	2500567915 2500573883 2500590901 2500474724 2500432260 2500432260 2500432260 2500432364 2500475243 2500421760 2500421760 2500421760 2500421760 2500421760 2500421760 2500424979 2500421760 2500424979 2500421760	250056791530676555250057388341596255250059090130871881250047472441449672250056363730714400250043226041313713250043226041313713250043264309152682500732364306039092500421760307635242500421760308122592500421760416083012500421760416083012500421760306100112500421760306100112500421760306100112500421760308136712500421760308136712500421760306394972500337288307084252500421760306394972500421760306394972500421760306039202500421760306394972500421760971210225004217609712102250042497930639497250042497930639497250042497930639497