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Pacific Gas and Electric Company
Gas Pipeline Facilities Strength Test Pressure Report
 (For Pipeline Facilities Designed to Operate over 100 PSIG)

62-4921 (Rev. 2/04)
 California Gas Transmission
 (Use in Accordance with Gas Standard A-34 and CGO 112-D)

Sheet **2** of **2**

PART I - DESIGN DATA (TO BE PREPARED BY PROJECT ENGINEER)

Feeder Main Number, Line Number, or Station Name 0211-01	Area 1	Division/District Peninsula	Job Number 41598529	Date Job Authorized 10/25/11
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Description of Job -- Include Reference Drawing Numbers, and Pipeline Mileposts
Test 1 -- Test tie-in pieces, temporary piping and existing 6" & 8" L-0211-01. Existing pipeline material listed; ie. Pipe, elbows, sleeves are from the 'Material of Record' (refer to Drawing 41598529, sheet 3 of 3)
Strength test 0211-01 from MP 0.02 - 0.68 Burlingame, CA (Test section 122)

Location Class 3	Design Factor (F) .5	MAOP to be Established for this Piping by this Test 400 PSIG	Future Design Pressure 400 PSIG
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STATIC HEAD DUE TO ELEVATION DIFFERENCE (WHERE APPLICABLE)	Max. Elevation N/A Ft.	Static Head Calculation	For Water 0.433 X Elev. Diff. = _____ PSIG
	Min. Elevation N/A Ft.		Other (Specify) 0.433 X Elev. Diff. = _____ PSIG

Size		Pipe Specification		Footage to Be Tested	Pipe Spec. and Footage Verified in Field	% of SMYS			Pressure to Give 90% SMYS
O.D.	W.T.	API or ASTM Grade Long Seam (ERW, DSAW, Seamless, Etc.)				At MAOP	At Min. Test Press.	At Max. Test Press.	
2.375	0.154	Pipe, GR B, SMLS	(item #9)	65'	MOR	8.81	13.22	15.20	4085
8.625	0.322	Tee, GR B	(item #10)	2 Ea.	MOR	15.31	22.96	26.40	2352
8.625	0.219	Tee, GR B	(item #11)	1 Ea.	MOR	22.50	33.76	38.82	1600
8.625	-	Valve, ANSI 300	(item #13)	2 Ea.	MOR	-	-	-	-
6.625	0.280	Pipe, GR B, SMLS	(item #14)	13'	MOR	13.52	20.28	23.32	2663
6.625	0.280	Elbow, GR B	(item #15)	1 Ea.	MOR	13.52	20.28	23.32	2663
6.625x 8.625	0.280x 0.322	Reducer, GR B	(item #16)	1 Ea.	MOR	15.31	22.96	26.40	2352

Minimum Test Pressure @ Max. Elevation 600 PSIG	Test Fluid To Be Used NITROGEN	MINIMUM TEST DURATION - UNDER 30% SMYS (1 HR. MINIMUM) - 30% SMYS & OVER (8 HRS. MINIMUM) - PREINSTALLATION TEST (SEE ATTACHMENT 'A', GAS STD. A-34)	1 HOURS
Maximum Test Pressure @ Min. Elevation 690 PSIG			

Prepared By: **Redacted** Date: **10/25/11** For Information or Changes, Call: **Mark Cabral (925) 588-3640** Approved By: **Mark Cabral** Date: **10-26-11**

PART II - TEST DATA (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST)

Note: Minimum test pressure and duration are not to be changed without written approval.

Time and Date Test Pressure Reached 5:45 pm 10/29/2011	Elevation at Test Point -7 FT	M'n. Required Test Press. At Test Point (1) 617 PSIG	Max. Allowable Test Press at Test Point (4) 687 PSIG
Time and Date Test Ended 8:15 pm 10/29/2011	Max. Elevation in Test Section 33 FT	M'n. Indicated Test Pressure (2) 629 PSIG	Max. Indicated Test Pressure (5) 667 PSIG
Actual Duration of Test 2 HR. 30 min	Min. Elevation in Test Section -13 FT	M'n. Test Pressure at Max. Elevation (3) 628 PSIG	Max. Test Pressure at Min. Elevation (6) 607 PSIG

Test Fluid Used: **NITROGEN** Pipe Specification and Footage Verified (See Part I): **JESSE PAE.**

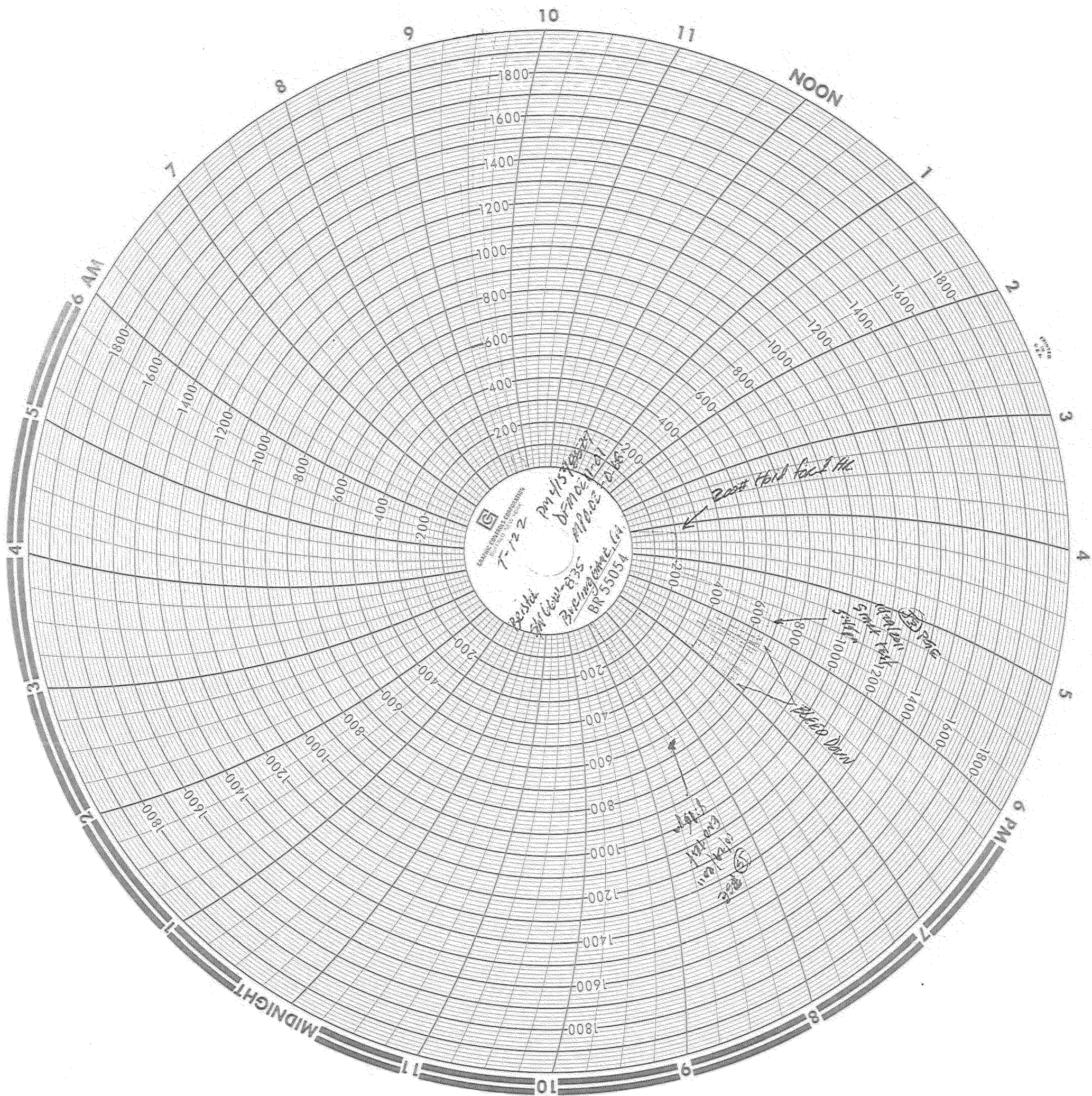
Make, Range, and Serial No. of Pressure Recording Gauge: **Bristol, 66w-835, 0-2000psi** Date Last Calibrated: **9-1-2011** Make, Range, and Serial No. of Dead Weight Tester (See Note 7): **Chandler, 20401, 50-5000 psi** Date Last Calibrated: **7-7-2011**

Test Supervised By: **Sam S. Fay** Date: **10/29/2011** Approved By: **Colt M. Bunnie** Date: **10-31-11**

PUT SCHEMATIC PIPING SKETCH ON BACK OF THIS SHEET
 SHOW LOCATION OF FACILITY TESTED, MINIMUM AND MAXIMUM ELEVATION IN FEET, MILE POINTS, VALVE NUMBERS AND INCORPORATED AREAS. USE AN ADDITIONAL SHEET IF NECESSARY (SHOW REFERENCE NUMBERS ON FACE OF ALL DRAWINGS AND ATTACHMENTS). FOR STATION PIPING, FABRICATED UNITS AND SHORT SECTIONS OF PIPE, ALSO SHOW A DETAILED SKETCH OF EACH ASSEMBLY TESTED.

- NOTES:**
- (1) Add the static head due to elevation difference (between test point and maximum elevation) to "minimum test pressure at maximum elevation" from PART I.
 - (2) Use lowest pressure on test gauge at any time during test.
 - (3) Subtract static head due to elevation difference (between test point and maximum elevation) from minimum indicated test pressure.
 - (4) Subtract static head due to elevation difference (between test point and minimum elevation) from "maximum test pressure at minimum elevation" from PART I.
 - (5) Highest pressure on test gauge at any time during test.
 - (6) Add static head due to elevation difference (between test point and minimum elevation) to maximum indicated test pressure.
 - (7) A dead weight tester is only required when testing to a pressure which produces a stress level of 90% of SMYS or greater. However, if a dead weight tester is used on any test, enter the information in the space provided above.

- DISTRIBUTION**
- JOB FILE (AT SPONSORING ORGANIZATION)
 - GSM&TS RESPONSIBLE DISTRICT SUPERINTENDENT
 - PROJECT MANAGER/PROJECT ENGINEER
 - TECHNICAL & CONSTRUCTION SERVICES - ASSIGNED JOBS ONLY
 - CAPITAL ACCOUNTING (FOREMAN'S COPY OF JOB)
 - RECORDS SECTION (WC), GSM&TS
 - REPORT FAILURES UNDER TEST TO GAS ENGINEERING & PLANNING



Job #. 41598529

Location. DFM DZ11-01, MP 0.02-0.68

DATE. 10-29-2011 PRESSURE. 629

TIME. 5:45pm - 8:15pm DURATION. 2 hrs. 30min

RECORDING GAUGE. BRISTOL SEE #. 660-835

RANGE. 0-2000 PSI LAST CALIBRATED. 9-1-2011

DEAD WEIGHT. CHANDLER SEE #. 26401

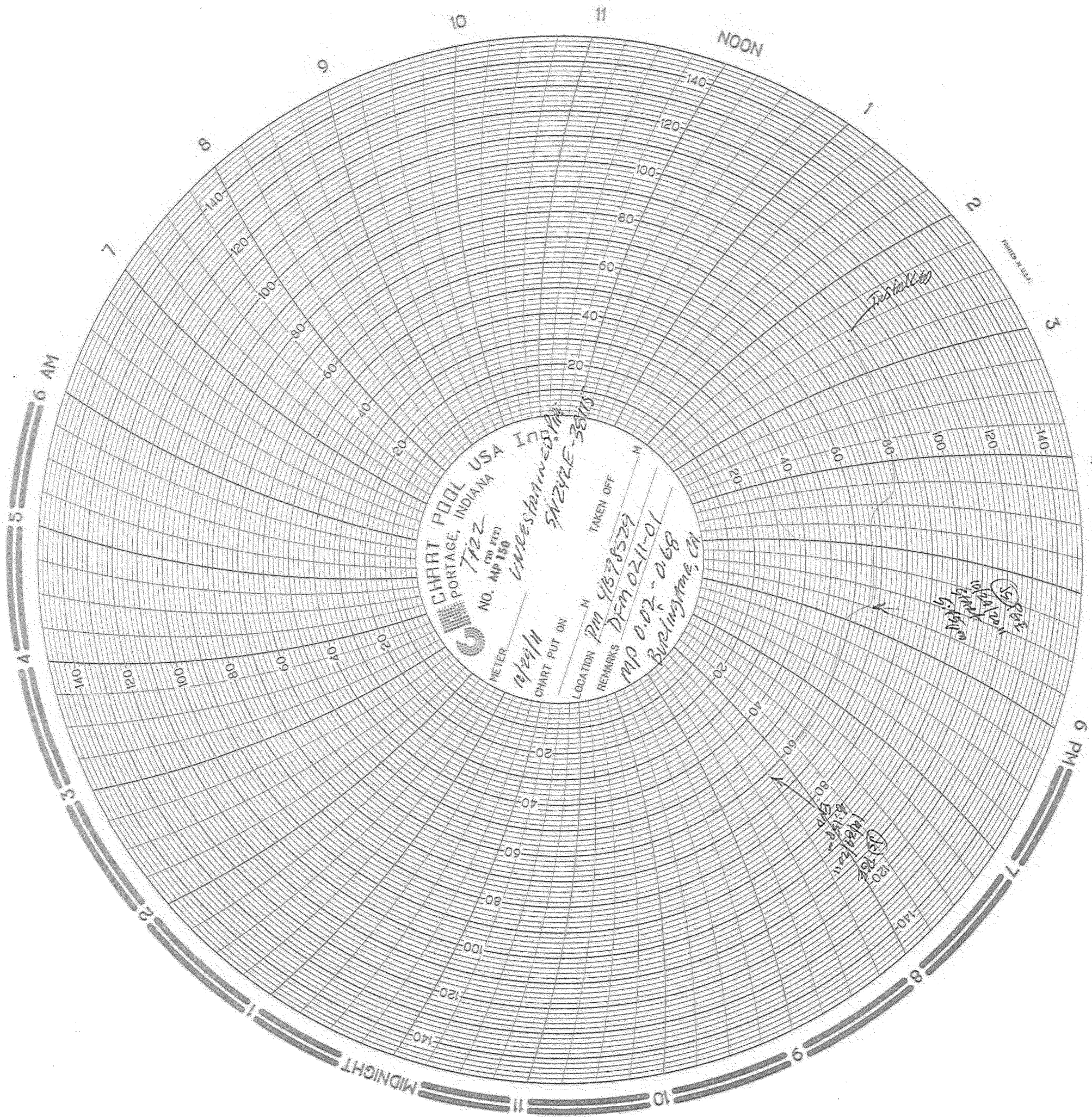
RANGE. 50-5000 PSI LAST CALIBRATED. 7-7-2011

TEST FLUID. NITROGEN

SUPERVISED. *James J. [Signature]* TEST DATE. 10/29/2011

APPROVED. *Carl [Signature]* DATE. 10-31-11

14.	SIZE 6.625	WT. 0.220	PIPE SPEC. API 5L X 42 ^{GRB} SMLS	LENGTH 11'
15.	SIZE 2.375	WT. 0.154	PIPE SPEC. API 5L GRB SMLS	LENGTH 2.5"
16.	SIZE 6.625	WT. 0.172	PIPE SPEC. GRB SMLS	LENGTH 387'
17.	SIZE 8.625	WT. 0.219	PIPE SPEC. GRB SMLS	LENGTH 2214'
18.	SIZE 8.625	WT. 0.168	PIPE SPEC. GRB SMLS	LENGTH 231'
19.	SIZE 8.625	WT. 0.219	PIPE SPEC. API 5L X 42 EPW	LENGTH 650'
20.	SIZE 8.625	WT. 0.172	PIPE SPEC. API 5L X 42 EPW	LENGTH 147'
21.	SIZE 8.625	WT. 0.198	PIPE SPEC. API 5L X 42 EPW	LENGTH 117'
22.	SIZE 2.375	WT. 0.154	PIPE SPEC. GRB SMLS	LENGTH 65'
23.	SIZE 6.625	WT. 0.180	PIPE SPEC. GRB SMLS	LENGTH 13'
24.	SIZE	WT.	PIPE SPEC.	LENGTH
25.	SIZE	WT.	PIPE SPEC.	LENGTH
26.	SIZE	WT.	PIPE SPEC.	LENGTH
27.	SIZE	WT.	PIPE SPEC.	LENGTH



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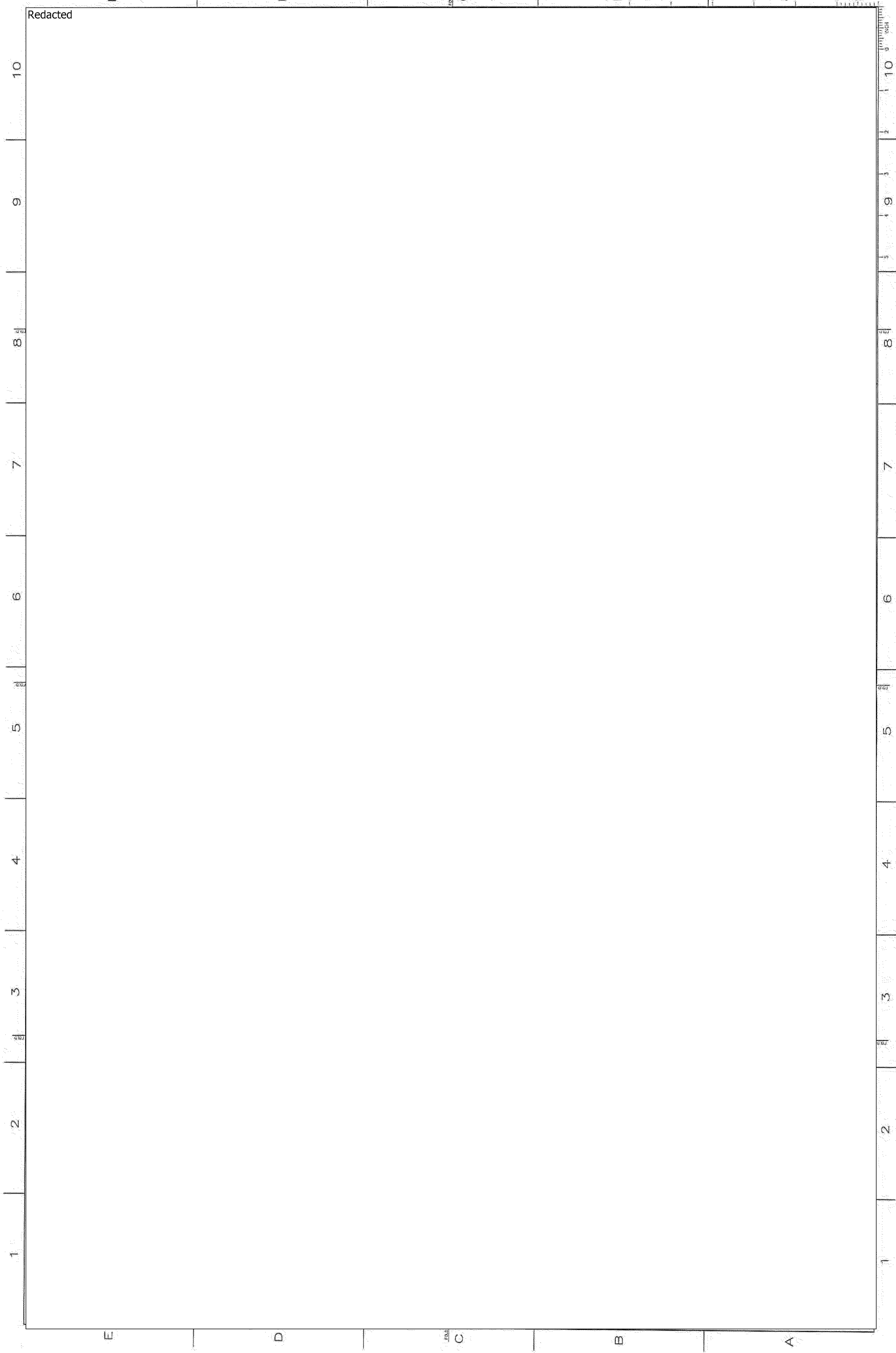
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Nitrogen Pressure Test Log Sheet

Owner Company	Pacific Gas and Electric Company	Job Number	41598529
Construction Co.	ARB	Job Number	0629-53-3500 T-122
Testing Co.	Pacific Gas and Electric Company	Job Number	41598529

Test Section	Name	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68	
		Station (0+00)	Elevation (Feet)
	Test Location	36+59	33 ft
	Begin	0+00	(7) ft
	End	36+59	33 ft
	High Elevation	36+59	33 ft
Low Elevation	2+50	(13) ft	

Pipe Data	Section	Length (ft.)	O. D. (in.)	W.T. (in.)	Unrestrained (ft.)	Restrained (ft.)	Grade	Seam/Joint Type
	1	11.00 ft	6.625 in	0.280 in	11.00 ft		API5L-Grade B	SM
	2	0.21 ft	2.375 in	0.154 in	0.21 ft		API5L-Grade B	SM
	3	387.00 ft	8.625 in	0.172 in		387.00 ft	API5L-Grade B	SM
	4	2,214.00 ft	8.625 in	0.219 in		2,214.00 ft	API5L-Grade B	SM
	5	237.00 ft	8.625 in	0.188 in		237.00 ft	API5L-Grade B	SM
	6	650.00 ft	8.625 in	0.219 in		650.00 ft	API5L-X42	ERW-HF
	7	147.00 ft	8.625 in	0.172 in		147.00 ft	API5L-X42	ERW-HF
	8	117.00 ft	8.625 in	0.188 in		117.00 ft	API5L-X42	ERW-HF
	9	65.00 ft	2.375 in	0.154 in		65.00 ft	API5L-Grade B	SM
10	13.00 ft	6.625 in	0.280 in		9.00 ft	API5L-Grade B	SM	

Test Period		Date	Time	Test Medium	Water	<input type="checkbox"/>
	Begin	29-Oct-11	5:45 PM		Nitrogen	<input checked="" type="checkbox"/>
	End	29-Oct-11	8:15 PM		Other	<input type="checkbox"/>

Test Instrumentation	Description	Calibration Checked	Serial Number	Date Calibrated/Certified	Installation Correct
	Dead Weight Pressure Tester		Chandler 26401	7-Jul-2011	<input checked="" type="checkbox"/> Yes
	Pressure Recorder	<input checked="" type="checkbox"/> Yes	Bristol 66W-835	1-Sep-2011	<input checked="" type="checkbox"/> Yes
	Ambient Thermometer	<input checked="" type="checkbox"/> Yes	Acurite 377312	11-Oct-2011	<input checked="" type="checkbox"/> Yes
	Restrained Pipe Temperature Recorder	<input checked="" type="checkbox"/> Yes	Barton AC-24, 242-10881	25-Oct-2011	<input checked="" type="checkbox"/> Yes
	Unrestrained Pipe Temperature Recorder	<input checked="" type="checkbox"/> Yes	Barton 242E-38115	25-Oct-2011	<input checked="" type="checkbox"/> Yes

Nitrogen Pressure Test Log

Log No.	Time	Test Pressure (psig)	Temperature (°F)			Volume		Comments	Model Check: Is test good?
			Ambient	Pipe		<input type="checkbox"/> Ounces	<input type="checkbox"/> Gallons		
				Unrestrained	Restrained	Bleed	Inject		
1	5:45 PM	667	68	58	66			ON RAMP/TEST	
2	5:50 PM	667	68	58	66				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	5:55 PM	666	69	58	66				<input type="checkbox"/> Yes <input type="checkbox"/> No
4	6:00 PM	665	67	58	66			START BLEED	<input type="checkbox"/> Yes <input type="checkbox"/> No
5	6:15 PM	657	67	58	66				<input type="checkbox"/> Yes <input type="checkbox"/> No
6	6:30 PM	648	67	58	66				<input type="checkbox"/> Yes <input type="checkbox"/> No
7	6:45	637	68	58	66				<input type="checkbox"/> Yes <input type="checkbox"/> No
8	7:00 PM	629	64	60	66			ON 1 hr TEST	<input type="checkbox"/> Yes <input type="checkbox"/> No
9	7:10 PM	629	63	60	66				<input type="checkbox"/> Yes <input type="checkbox"/> No
10	7:20 PM	629	62	60	66				<input type="checkbox"/> Yes <input type="checkbox"/> No
11	7:30 PM	629	61	60	66				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
12	7:40 PM	629	60	60	66				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No



Nitrogen Pressure Test Log

Log No.	Time	Test Pressure (psig)	Temperature (°F)			Volume		Comments	Model Check: Is test good?
			Ambient	Pipe		<input type="checkbox"/> Ounces	<input type="checkbox"/> Gallons		
				Unrestrained	Restrained	Bleed	Inject		
13	7:50 pm	629	60	60	66			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
14	8:00 pm	629	59	60	66			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
15	8:15 pm	629	59	60	66		TEST off	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
16	8:20 pm							<input type="checkbox"/> Yes <input type="checkbox"/> No	
17								<input type="checkbox"/> Yes <input type="checkbox"/> No	
18								<input type="checkbox"/> Yes <input type="checkbox"/> No	
19								<input type="checkbox"/> Yes <input type="checkbox"/> No	
20								<input type="checkbox"/> Yes <input type="checkbox"/> No	
21								<input type="checkbox"/> Yes <input type="checkbox"/> No	
22								<input type="checkbox"/> Yes <input type="checkbox"/> No	
23								<input type="checkbox"/> Yes <input type="checkbox"/> No	
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27								<input type="checkbox"/> Yes <input type="checkbox"/> No	
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37								<input type="checkbox"/> Yes <input type="checkbox"/> No	
38								<input type="checkbox"/> Yes <input type="checkbox"/> No	
39								<input type="checkbox"/> Yes <input type="checkbox"/> No	
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42								<input type="checkbox"/> Yes <input type="checkbox"/> No	
43								<input type="checkbox"/> Yes <input type="checkbox"/> No	
44								<input type="checkbox"/> Yes <input type="checkbox"/> No	
45								<input type="checkbox"/> Yes <input type="checkbox"/> No	
46								<input type="checkbox"/> Yes <input type="checkbox"/> No	
47								<input type="checkbox"/> Yes <input type="checkbox"/> No	
48								<input type="checkbox"/> Yes <input type="checkbox"/> No	

Was a leak observed during test Period? Yes No

If "Yes", Explain:

High Test Pressure: 667
 Low Test Pressure: 629

Certification:

Date: 29-Oct-2011

Test Supervisor:

Signature

Company Representative:

Signature



RCP, Inc

801 Louisiana, Ste.200
Houston, Texas 77002

Redacted

October 29, 2011

Pacific Gas and Electric Company

350 N. Wiget

Walnut Creek, CA 94598

Attention: Redacted

Test Contractor:	Pacific Gas and Electric Company -- 41598529
Asset Owner:	Pacific Gas and Electric Company -- 41598529
Construction Contractor:	ARB -- 0629-53-3500 T-122
Test Section:	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68
Test Date:	October 29, 2011
Certificate Number:	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68

To whom it may concern,

This letter is to certify that the nitrogen pressure test performed on pipe owned by Pacific Gas and Electric Company and tested by Pacific Gas and Electric Company met the requirements of the Code of Federal Regulations, Title 49, Part 192, Subpart J (Class 3).

The test segment was subjected to a spike pressure test of 667 psig for 15 minutes. The 15 minute spike test and subsequent pressure reduction with volume bleed was included as part of the 2.5 hour test duration period.

This nitrogen pressure test was completed successfully. Pressure was maintained on the test facilities in excess of 2.5 continuous hours without evidence of a leak failure. Nitrogen was the test medium. At the highest elevation point in the test section, the calculated test pressure was 628 psig and the MAOP per 49 CFR Part 192, Subpart J can be as high as 418 psig. The MAOP established by this test is sufficient to qualify for Pacific Gas and Electric Company's desired MAOP of 400 psig.

Sincerely,

Redacted

cc. file



Nitrogen Test Certification

Company	Pacific Gas and Electric Company	Job Number	41598529
Construction Co.	ARB	Job Number	0829-53-3500 T-122
Hydro. Test Co.	Pacific Gas and Electric Company	Project No.	41598529
Test Section	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68	Test Medium:	Nitrogen
File Name	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68		

Nitrogen Test Pressure

APPLICABLE CODE FOR CERTIFICATION:	Test Date:	29-Oct-11
Code of Federal Regulations, Title 49, Part 192, Subpart J (Class 3)		

This is to certify that the pipeline or pipeline section(s) described below was pressure tested, with nitrogen gas, in accordance with the following procedure:

Pipeline:	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68	
From:	0+00	To: MP 3,659.00

Pipe Data

Segment	Length	Diameter	Wall Thickness	Specification	100% SMYS
1	11 ft	8.625 in.	0.280 in.	API5L-Grade B, SM, Arc Weld, Steel	2,958 psi
2	0 ft	2.375 in.	0.154 in.	API5L-Grade B, SM, Arc Weld, Steel	4,539 psi
3	387 ft	8.625 in.	0.172 in.	API5L-Grade B, SM, Arc Weld, Steel	1,396 psi
4	2,214 ft	8.625 in.	0.219 in.	API5L-Grade B, SM, Arc Weld, Steel	1,777 psi
5	237 ft	8.625 in.	0.188 in.	API5L-Grade B, SM, Arc Weld, Steel	1,526 psi
6	650 ft	8.625 in.	0.219 in.	API5L-X42, ERW-HF, Arc Weld, Steel	2,133 psi
7	147 ft	8.625 in.	0.172 in.	API5L-X42, ERW-HF, Arc Weld, Steel	1,675 psi
8	117 ft	8.625 in.	0.168 in.	API5L-X42, ERW-HF, Arc Weld, Steel	1,831 psi
9	65 ft	2.375 in.	0.154 in.	API5L-Grade B, SM, Arc Weld, Steel	4,539 psi
10	13 ft	6.625 in.	0.280 in.	API5L-Grade B, SM, Arc Weld, Steel	2,958 psi

Initial Test Conditions

Pressure at Test Point:	667 psig	Date/Time:	10/29/11 5:45 PM	Pipe Temperature	
Ambient Temperature:	68.0 °F	Elevation @ Test Point:	(7.0) ft	Unrestrained:	58.0 °F
Pressure @ High Point (Cal/Measure):	666 psig	Elevation @ High Point:	33.0 ft	Restrained:	66.0 °F
Pressure @ Low Point (Cal/Measure):	667 psig	Elevation @ Low Point:	(13.0) ft	Location:	00+00
				Location:	36+59
				Location:	02+50

Final Test Conditions

Pressure at Test Point:	629 psig	Date/Time:	10/29/11 8:15 PM	Pipe Temperature	
Ambient Temperature:	59.0 °F	Elevation @ Test Point:	(7.0) ft	Unrestrained:	60.0 °F
Pressure @ High Point (Cal/Measure):	628 psig	Elevation @ High Point:	33.0 ft	Restrained:	66.0 °F
Pressure @ Low Point (Cal/Measure):	629 psig	Elevation @ Low Point:	(13.0) ft	Location:	00+00
				Location:	36+59
				Location:	02+50

Test Duration: 2.50 hours

Minimum Test Pressure:	629 psig	Max Elevation:	628 psig	Min Elevation:	629 psig
Maximum Test Pressure:	667 psig		666 psig		667 psig
% SMYS:	39.8%		14.7%		47.8%
Test Segment Observed % SMYS:		Minimum	14.7%	Maximum	47.8%

Minimum Test Pressure (Calculated/Measured): 628 psig

Maximum Allowable Operating Pressure: DOT Part 192
 Test Factor= 1.50 418 psig
 % of SMYS 29.9%

The MAOP established by this test is sufficient to qualify for Pacific Gas and Electric Company's desired MAOP of 400 psig.

Were leaks observed?	No	Explain:
Acceptable Hydrostatic Test?	Yes	The test segment was subjected to a spike pressure test of 667 psig for 15 minutes. The 15 minute spike test and subsequent pressure reduction with volume bleed was included as part of the 2.5 hour test duration period. No leaks were observed during the test period. The test section included 3,830 feet of buried and 11 feet of exposed pipe. Pressure lost 38 psi during the test. The buried pipe segment fluid temperature remained steady and the exposed pipe segment gained 2°F. Test pressure did not remain steady even though no leaks were observed.

Remarks
 Redacted



Nitrogen Pressure Test Dead Weight Log Sheet

Owner Company	Pacific Gas and Electric Company	Job Number	41598529
Construction Co.	ARB	Job Number	0629-53-3500 T-122
Testing Co.	Pacific Gas and Electric Company	Project No.	41598529
Test Section	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68	Nitrogen	
File Name	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68		

Date	29-Oct-11	Test Log
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Log No.	Test Period		Test Pressure	Temperature °F			Remarks		
	Date	Time		Ambient	Pipe		Comment		
					Unrestrained	Restrained			
1	10/29/11	5:15 PM	198 psig	67 °F	58 °F	66 °F	Inject		
2	10/29/11	5:20 PM	250 psig	68 °F	58 °F	66 °F	Inject		
3	10/29/11	5:22 PM	300 psig	68 °F	58 °F	66 °F	Inject		
4	10/29/11	5:24 PM	350 psig	68 °F	58 °F	66 °F	Inject		
5	10/29/11	5:26 PM	400 psig	68 °F	58 °F	66 °F	Inject		
6	10/29/11	5:29 PM	450 psig	68 °F	58 °F	66 °F	Inject		
7	10/29/11	5:31 PM	500 psig	68 °F	58 °F	66 °F	Inject		
8	10/29/11	5:33 PM	550 psig	68 °F	58 °F	66 °F	Inject		
9	10/29/11	5:35 PM	600 psig	68 °F	58 °F	66 °F	Inject		
10	10/29/11	5:37 PM	650 psig	68 °F	58 °F	66 °F	Inject		
11	10/29/11	5:38 PM	665 psig	68 °F	58 °F	66 °F	Inject		
12	10/29/11	5:38 PM	670 psig	68 °F	58 °F	66 °F	Inject		
13	10/29/11	5:45 PM	667 psig	68 °F	58 °F	66 °F	Inject		
14	10/29/11	5:45 PM	667 psig	68 °F	58 °F	66 °F	Start Spike	On Test	
15	10/29/11	5:50 PM	667 psig	68 °F	58 °F	66 °F			
16	10/29/11	5:55 PM	666 psig	69 °F	58 °F	66 °F			
17	10/29/11	6:00 PM	665 psig	67 °F	58 °F	66 °F	End Spike		
18	10/29/11	6:15 PM	657 psig	67 °F	58 °F	66 °F	Bleed		
19	10/29/11	6:30 PM	648 psig	67 °F	58 °F	66 °F	Bleed		
20	10/29/11	6:45 PM	639 psig	68 °F	58 °F	66 °F	Bleed		
21	10/29/11	7:00 PM	629 psig	64 °F	58 °F	66 °F	Bleed		
22	10/29/11	7:00 PM	629 psig	64 °F	60 °F	66 °F			
23	10/29/11	7:10 PM	629 psig	63 °F	60 °F	66 °F			
24	10/29/11	7:20 PM	629 psig	62 °F	60 °F	66 °F			
25	10/29/11	7:30 PM	629 psig	61 °F	60 °F	66 °F			
26	10/29/11	7:40 PM	629 psig	60 °F	60 °F	66 °F			
27	10/29/11	7:50 PM	629 psig	60 °F	60 °F	66 °F			
28	10/29/11	8:00 PM	629 psig	59 °F	60 °F	66 °F			
29	10/29/11	8:15 PM	629 psig	59 °F	60 °F	66 °F	End of Test		

Spike Test	
Hydrostatic Test	

Were leaks observed during the test period?	Exposed and buried pipe, no leaks observed.	High Test Pressure: 667 psig	Low Test Pressure: 629 psig
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Comments : Pressure chart recorder indicates pressure spikes when needle valves are opened or closed during bleed operation (to accurately read pressure). Spikes on chart are artificial representing flow differentials for small volume piping near chart recorder and were not experienced by large diameter piping.

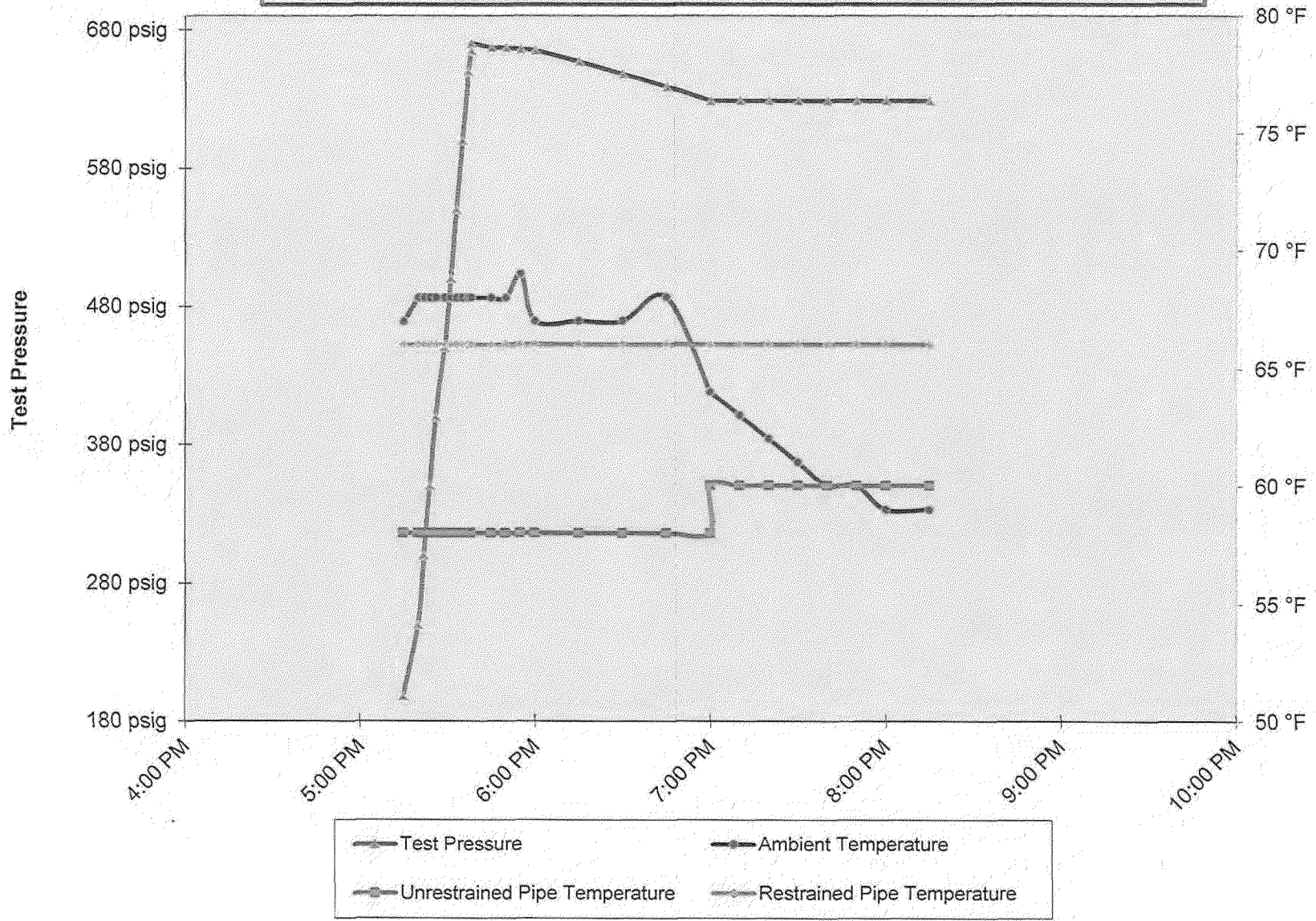
RCP		Nitrogen Pressure Test Pipe Data Table								
Pipe Type	Length	Restrained / Unrestrained	Outside Diameter	Wall Thickness	Specification & Grade	Pipe Yield Pressure	Material	Joint Type	Seam Type	
1	11.00 ft	Unrestrained	6.625 in.	0.280 in.	API5L-Grade B	2,958 psig	Steel	Arc Weld	SM	
2	0.21 ft	Unrestrained	2.375 in.	0.154 in.	API5L-Grade B	4,539 psig	Steel	Arc Weld	SM	
3	387.00 ft	Restrained	8.625 in.	0.172 in.	API5L-Grade B	1,396 psig	Steel	Arc Weld	SM	
4	2,214.00 ft	Restrained	8.625 in.	0.219 in.	API5L-Grade B	1,777 psig	Steel	Arc Weld	SM	
5	237.00 ft	Restrained	8.625 in.	0.188 in.	API5L-Grade B	1,526 psig	Steel	Arc Weld	SM	
6	650.00 ft	Restrained	8.625 in.	0.219 in.	API5L-X42	2,133 psig	Steel	Arc Weld	ERW-HF	
7	147.00 ft	Restrained	8.625 in.	0.172 in.	API5L-X42	1,675 psig	Steel	Arc Weld	ERW-HF	
8	117.00 ft	Restrained	8.625 in.	0.188 in.	API5L-X42	1,831 psig	Steel	Arc Weld	ERW-HF	
9	65.00 ft	Restrained	2.375 in.	0.154 in.	API5L-Grade B	4,539 psig	Steel	Arc Weld	SM	
10	13.00 ft	Restrained	6.625 in.	0.280 in.	API5L-Grade B	2,958 psig	Steel	Arc Weld	SM	

Nitrogen Test Project Owner & Participants		
Owner Company Address	Pacific Gas and Electric Company 350 N. Wiget Walnut Creek, CA 94598 Attention: Redacted	Job Number 41598529
Construction Company Address	ARB 1875 Loveridge Road Pittsburg, CA 94565 Attention: T. Barnes	Job Number 0629-53-3500 T-122
Hydrostatic Test Co. Address	Pacific Gas and Electric Company 350 N. Wiget Walnut Creek, CA 94598 Attention: Redacted	Project No. 41598529
Test Section	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68 From: 0+00 To: 36+59	
File Name	RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68	

Part II – Test Data (TO BE PREPARED BY PERSON SUPERVISING TEST AT TIME OF TEST)				Note: Minimum test pressure and duration are not to be changed without written approval.			
Time and Date Test Pressure Reached	10/29/11 5:45 PM	Elevation at Test Point	(7) ft	Min. Required Test Press At Test Point (1)	617.33 psig	Max. Allowable Test Press at Test Point (4)	687.40 psig
Time and Date Test Ended	10/29/11 8:15 PM	Max. Elevation in Test Section	33 ft	Min. Indicated Test Pressure (2)	629.00 psig	Max. Indicated Test Pressure (5)	667.00 psig
Actual Duration of Test	2 hours 30 minutes	Min. Elevation in Test Section	(13) ft	Min. Test Pressure at Max. Elevation (3)	627.96 psig	Max. Test Pressure at Min. Elevation (6)	667.16 psig
Hydrostatic Test Date:	10/29/11 5:15 PM	Code of Federal Regulations, Title 49, Part 192, Subpart J (Class 3)					
Pacific Gas and Electric Company's desired MAOP				400 psig			
Nitrogen Density at Maximum Test Pressure				3.734 lb/sq. ft.			
Elevation @ Test Point:	(7.00) ft	Location:	00+00				
Elevation @ High Point:	33.00 ft	Location:	36+59				
Elevation @ Low Point:	(13.00) ft	Location:	02+50				
Minimum Test Pressure At Maximum Elevation	600.00 psig		Maximum Test Pressure at Minimum Elevation	690.00 psig			

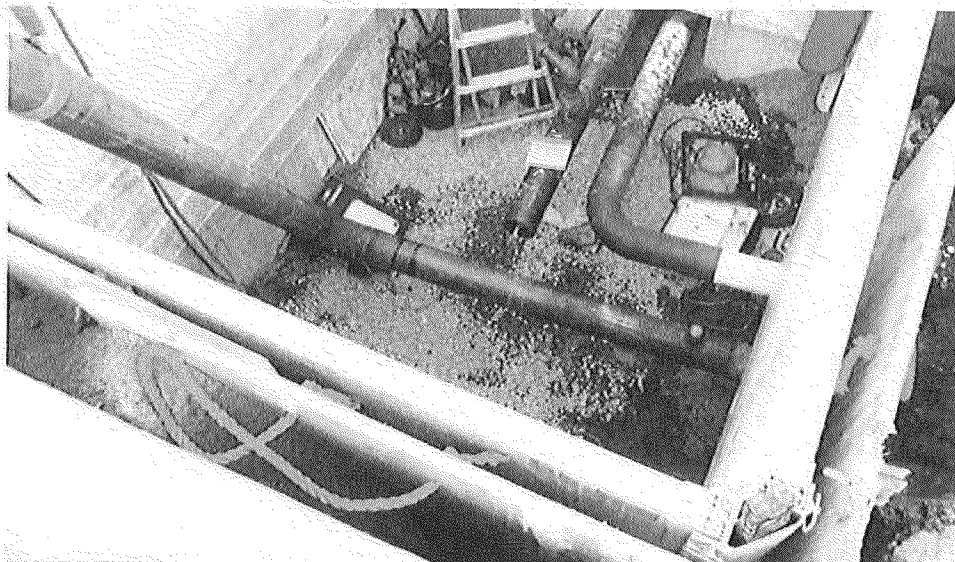
RCP

RCP 61362 - T-122, DFM 0211, MP 0.02 - 0.68

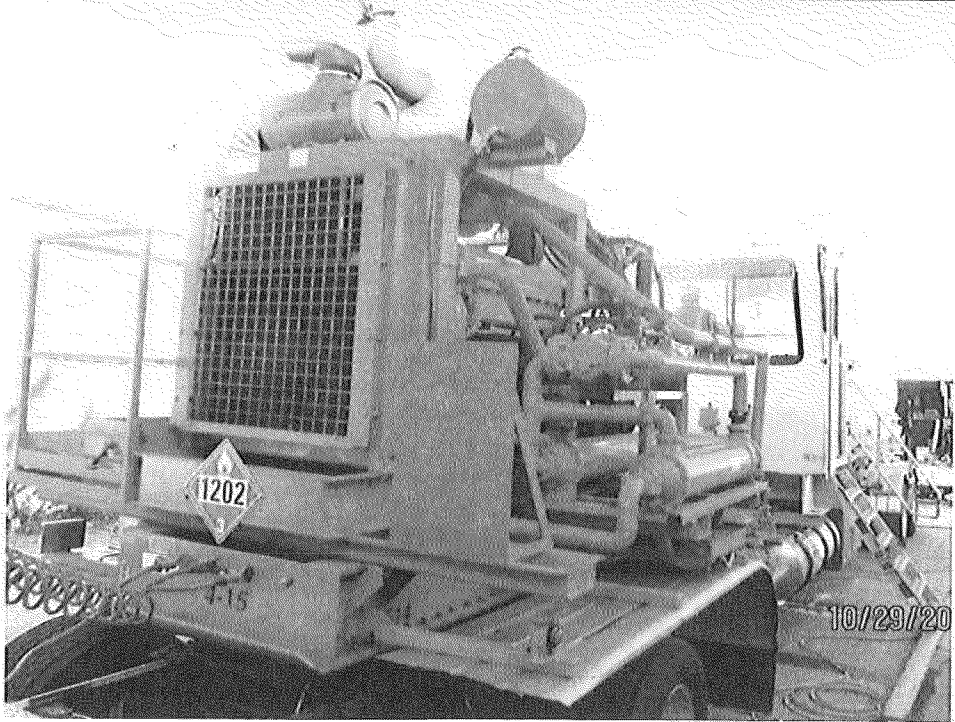


Exh G-95

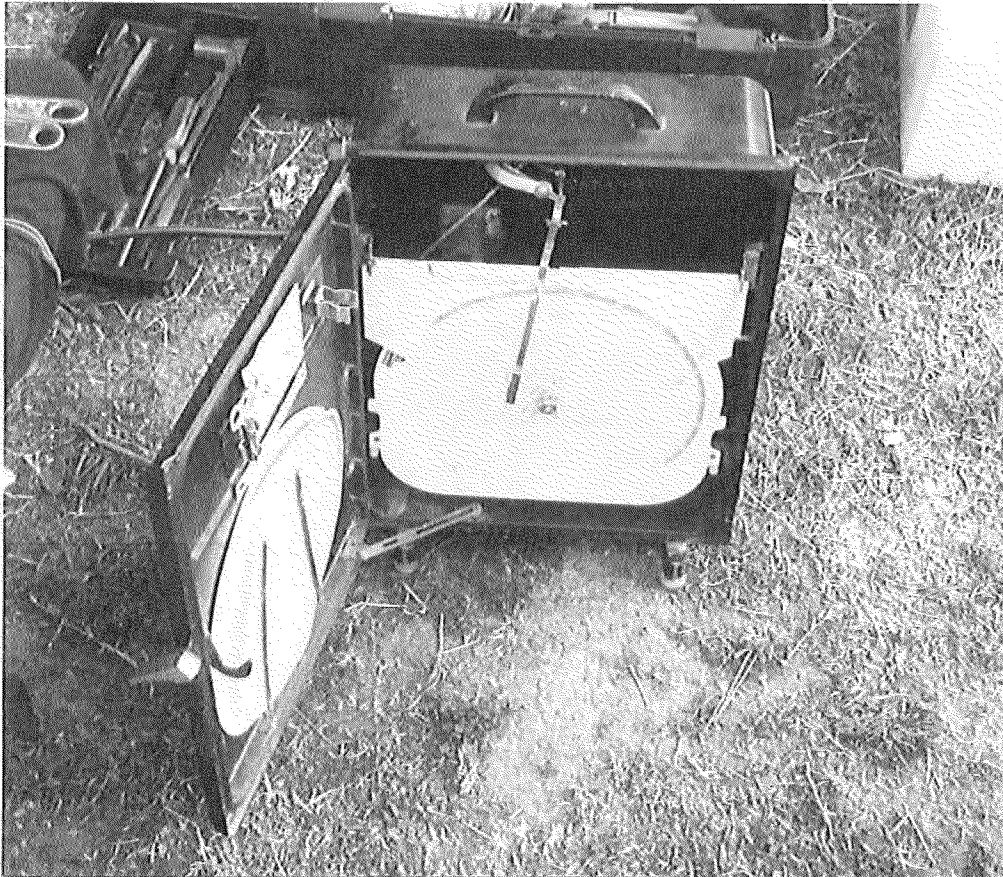
SB_GT&S_0483044



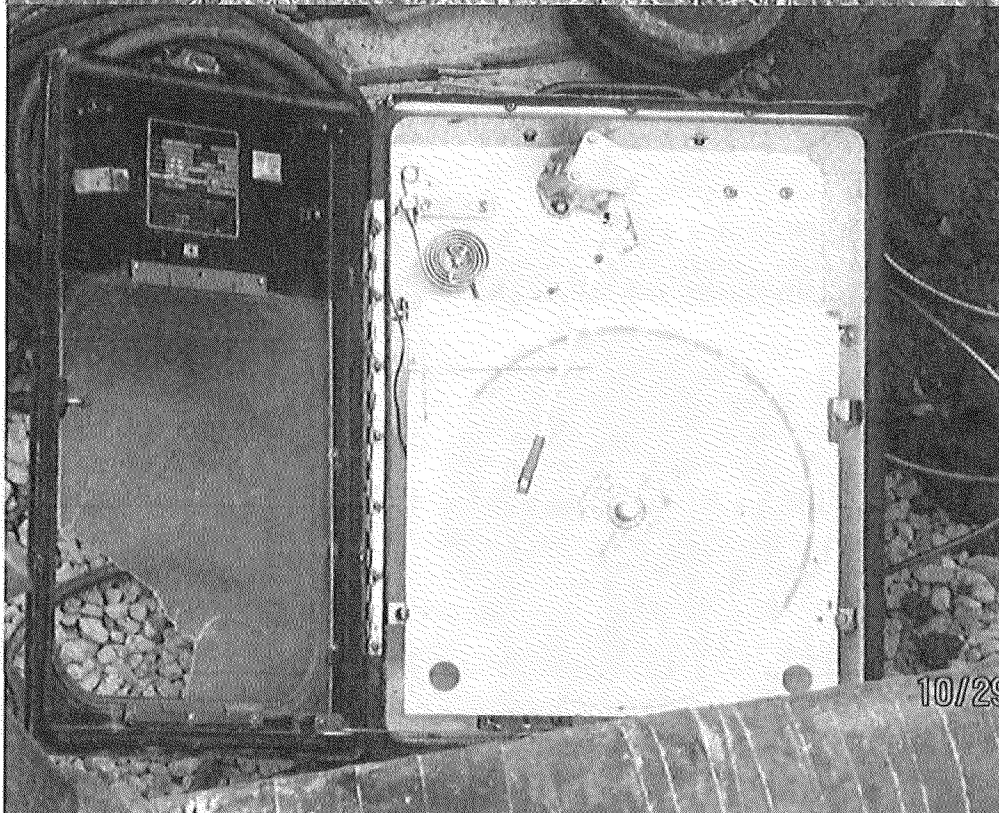
Test Header
and Piping



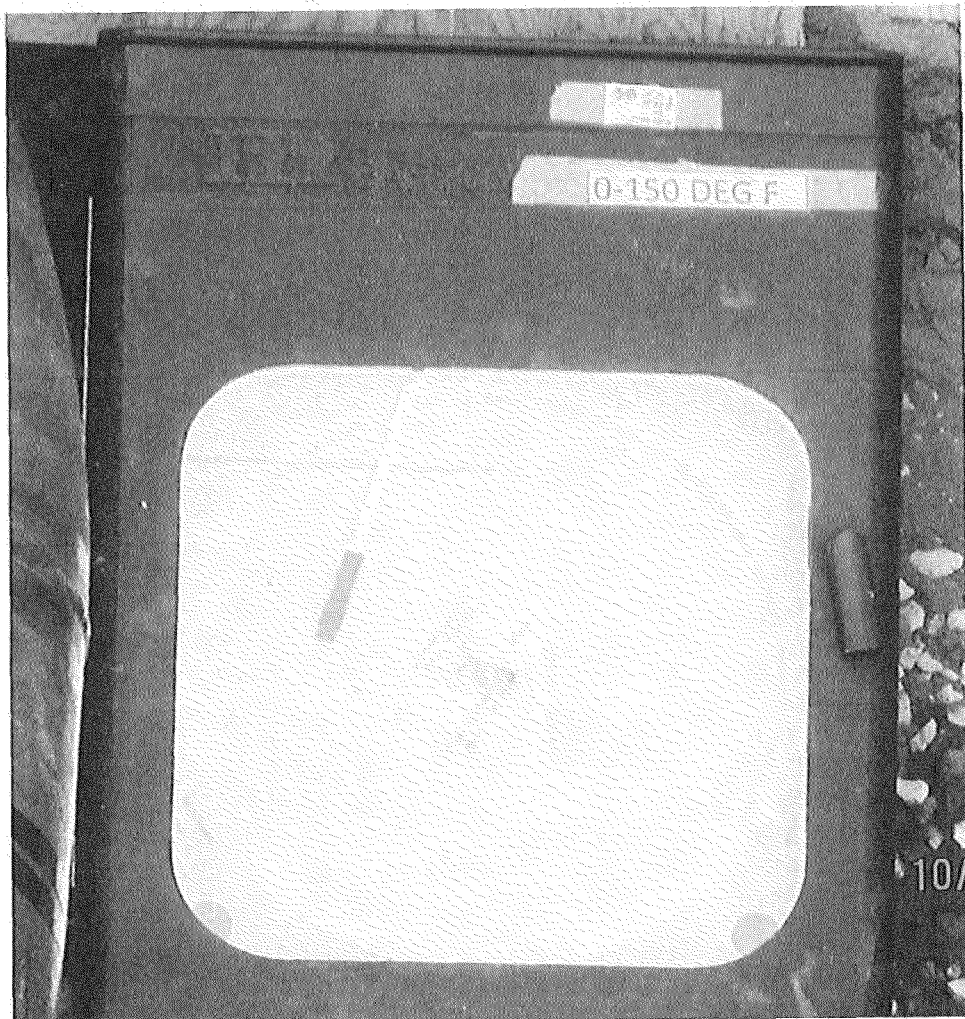
Nitrogen Fill
/ Pressure Truck



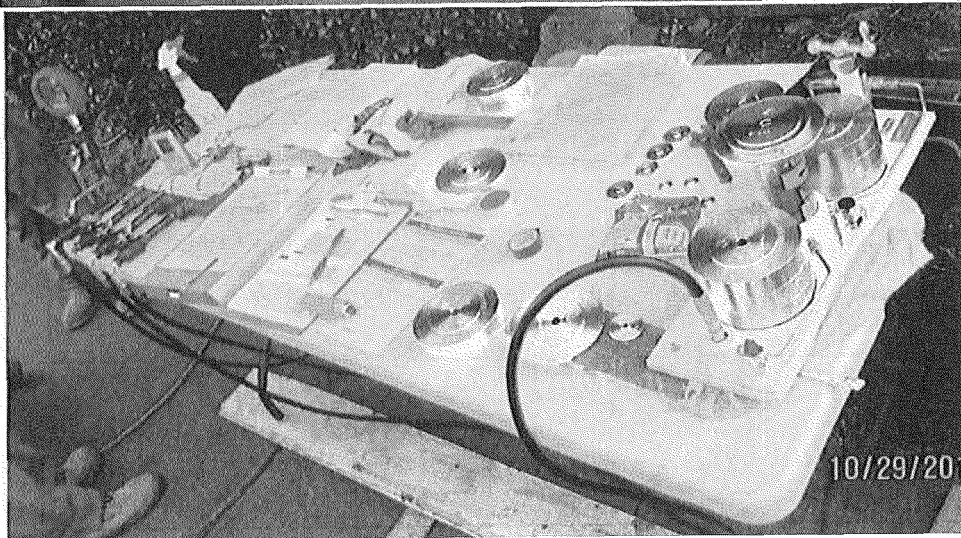
Test Pressure Recorder



Buried Pipe Temperature Recorder



Exposed Pipe
Temperature
Recorder



Dead
Weight
Test
Gage

0 yds 200 400 600 800

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Exh G-99

SB GT&S_0483048

Test Section 122 GENERAL CONSTRUCTION GAS

HYDROSTATIC TEST LOG

Job Number 41598529

Date 10/29/2011

Location: DFM-0211-01, MP 0.02-0.68 BURLINGAME, CA.

Chandler, 26401, 50-5000PSI

Make, Range and Serial Number of Dead Weight Tester

7-7-2011
Date of Last Calibration

Redacted

JRSZ/PGE

Test Supervisor

Time	Dead Weight Pressure	Recorder Pressure	Guage Pressure	Temp.	Remarks
3:50 pm	0	0	0	72°	START FILL
4:15	200.1	200	200.1	72'	Hold point
5:15	198	200	198.3	71'	START up to RAMP
5:45	667	666	666	68	At Ramp-TEST oil
5:50	667	666	665	68	
5:55	666	665	665	69	
6:00 pm	665		664	67	Start Bleed
6:15	657	<i>see comments</i>	657	68	
6:30 pm	648	<i>see comments</i>	648	67	
6:45 pm	639	<i>see comments</i>	639	68	
7:00 pm	629	623	628	64	ON THE TEST.
7:10 pm	629	623	628	63	
7:20 pm	629	622	628	62	
7:30 pm	629	621	628	61	
7:40 pm	629	621	628	60	
7:50 pm	629	621	628	60	
8:00 pm	629	621	628	59	
8:15 pm	629	621	628	59	off TEST 8:15 pm 10/29/11