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	STANDARD: **ASME B31.4 / B31.8 & 49 CFR 195**	AUDIT FREQUENCY: **Per Test Event / Continuous Monitoring**

Pipeline Hydrostatic Pressure Test Log Sop Template

Operational Scope: This standard operating procedure and log template governs hydrostatic pressure testing of high-pressure liquid and gas pipelines to verify structural integrity and prevent catastrophic containment failure. It ensures strict compliance with federal and industry safety codes by establishing rigorous pre-test verifications and real-time monitoring protocols.

MANDATORY PPE:	Hard Hat (ANSI Z89.1), Steel-Toe Safety Boots (ASTM F2413), Flame-Resistant Clothing (FRC per NFPA 2112), Impact-Rated Safety Glasses (ANSI Z87.1), Neoprene or Heavy-Duty Leather Gloves, Hearing Protection (NRR 25+)
PREREQUISITES:	Establish and barricade the designated 100-foot exclusion zone with warning signage posted at all access points. | Verify calibration certificates for all deadweight testers, pressure recorders, and temperature sensors are valid within the last 30 days. | Confirm completion of all line fills, chemical treatments, and air-venting operations prior to pressurization.

PRE-TEST EQUIPMENT AND SYSTEM VERIFICATION

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
1	**Test Manifold and Valves**	All isolation valves, bleeders, and connections rated to at least 1.5x maximum allowable operating pressure (MAOP) with zero visible leaks.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
2	**Pressure Recording Instrumentation**	Dual continuous pressure and temperature charts/digital loggers installed and synchronized with official test start time.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
3	**Overpressure Relief Devices**	Relief valves set, certified, and bled to a secure containment vessel at no more than 110% of test pressure.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
4	**Exclusion Zone Perimeter**	Physical barriers, caution tape, and security personnel deployed to restrict all unauthorized personnel from the test envelope.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A

PRESSURIZATION AND HOLD PHASE MONITORING

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
5	**Initial Stabilization Fill**	Pressurization conducted in staged increments (e.g., 25%, 50%, 75%, 100%) with mandatory hold periods for thermal stabilization.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
6	**Ambient and Water Temperature Logging**	Ground and fill water temperatures recorded hourly to account for thermal expansion or contraction effects on test pressure.	**Standard**	[ ] PASS [ ] FAIL [ ] N/A
7	**Minimum Test Pressure Target**	System successfully reaches and maintains specified test pressure (e.g., 1.25x MAOP) for the duration of the mandated hold period.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
8	**Visual Leak Inspection (Post-Threshold)**	Authorized personnel inspect exposed welds, flanges, and fittings only after pressure is stabilized or reduced to inspection level.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A

POST-TEST DEPRESSURIZATION AND TURNOVER

#	COMPONENT / ITEM	VERIFICATION CRITERIA & ACCEPTANCE STANDARD	SEVERITY	STATUS
9	**Controlled Depressurization**	Pressure bled off systematically through an engineered manifold to an approved containment or disposal facility.	**Critical (Immediate Out of Service)**	[ ] PASS [ ] FAIL [ ] N/A
10	**Test Water Disposal and Dewatering**	Discharge complies with environmental permits, National Pollutant Discharge Elimination System (NPDES), and local regulations.	**Warning**	[ ] PASS [ ] FAIL [ ] N/A
11	**Log Sheet Finalization and Sign-Off**	All pressure charts, deadweight logs, and signatures compiled into the permanent turnover package.	**Standard**	[ ] PASS [ ] FAIL [ ] N/A

Certified Test Supervisor / Hydrostatic Inspector Signature: _____	**Date / Time:** _____	**Badge / Cert #:** _____
Project Safety Manager / Operations Engineer Sign-off: _____	**Review Date:** _____	**Audit Status:** [ ] Approved [ ] Rectify

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