Task-Based Risk Assessment Table (TRAT)

bpx energy uses a Task Risk Assessment Table (TRAT) to define what approvals are required to conduct high risk activities. If an activity is defined as a TRAT activity, then the bpx energy Field Team Leader/Well Site Leader is accountable for obtaining the required approvals before work proceeds.

TRAT activities require a risk assessment with a relative risk score using the bpx risk matrix. All risk assessments shall include employees who have the task knowledge, experience, and competency for the planned activities. Additionally, risk assessments should include a Risk Reviewer (as identified on TRAT), representatives from the Asset Integrity Process Safety (AIPS) team, Wells Technical authority team (WTA-wells related activity only), Operations and/or wells teams, the Contractor Executing Work, HSE, and Maintenance teams, as appropriate.

Life Saving Rules		**bpx Task Risk Assessment Table (TRAT)** All work performed by contractors will be executed using the Contractor's SMS unless otherwise explicitly stated by the contract. *bpx onsite supervision required for the duration of the task only. Task 17 does not require onsite supervision. ** Activity approval is based on bpx Risk Ranking determined via risk assessment.	**bpx Risk Reviewer** (Refer to the legend below)
	1	Breaking containment without a mechanical barrier	SM, CL, CS
	2	System integrity testing (strength testing) above Maximum Allowable Working Pressure (MAWP) utilizing pneumatic pressure (air or N2). Stored energy to be calculated by Engineering.	HO, HFE
	3	Purging, leak testing, or pigging operations where the pump capacity of the externally supplied fluids is capable of inadvertently exceeding the system MAWP.	HWC, HO
	4	Breaking containment on live flare systems	HO
	5	Abrasive grinding or blasting on energized equipment	SM, HDE, HCE, CL, CS
	6	Use of pipeline stopples, inflatable plugs, engineered plugs, bentonite, or freeze plugs as an isolation barrier during pipeline or wellhead repairs	HO, HDE, HCE, HI
	7	Permit required confined space entry	SM, S(D&C), CL, CS.
	8	Hot bolting / odd bolting	SM, HCE, CL, CS
	9	Welding on pipeline/pipework where energy isolation does not eliminate vapors and lazy gas or residual gas is present while welding is conducted	AM, HDE, HCE, HFE, HWC
	10	Condensate offloading using vacuum transfer pumps	SM, CL, CS
	11	Open flame hot work within 35 feet of a hydrocarbon containing equipment or line	SM, HDE, HCE, CL, CS
	12	Hot oiling with hydrocarbon greater than 35' but less than 150' from any Hydrocarbon source (Hot oiling shall not be done within 75' of the wellbore)	SM, HO
	13	Cadwelding on live hydrocarbon lines	SM, CL, CS

	14	Hot tapping	HO
	15	**Stationary Lifting** which applies to cranes, forklifts, backhoes, track hoes, and boom trucks, etc.: 1) The weight of the load is >80% of the lifting capacity. 2) More than one lifting equipment lifting a common load with shared loading of both pieces of equipment (load shall not exceed 75% of the lifting capacity of lowest rated lifting equipment). 3) Load has questionable structural integrity or irreplaceable or not repairable, if damaged. 4) Lifting around energized power lines within the maximum horizontal boom reach plus required electrical approach clearance (minimum 10 ft.) of any stationary equipment with lifting/ reaching capability. 5) Limited boom clearance (<2feet) or in confined work areas. 6) Load path travels over active work areas, occupied buildings, energized or pressurized equipment. 7) Blind lifts where the crane operator can lose sight of the load.	AM, HDE, HCE, HWC, HFE

	16	**Safe Movement of Mobile Mechanically Extending Equipment**: Operating mobile telescopic or mechanically extending equipment (e.g., forklift, telescopic handler, backhoe, track hoe, side boom, manlift, crane, boom trucks, etc.) within 50ft horizontal distance from an overhead energized power line.	HO, HCE, HWC, HFE, HI, HDE
	17	**Ground Disturbance**: 1) Backfilling on energized non-metallic lines in service, 2) Crossing of energized facilities (110 volts AC or greater), 3) Mechanical excavations within 2 feet of energized underground facilities, 4) Constructing a new facility that parallels within 10 feet of an existing energized facility.	AM, HWE, HFE
	18	Working at heights without the use of ladders, fixed access platforms, walkways, or installed approved scaffolding	AM, HWC, HFE
	19	Activities that occur behind a single block valve isolation where operating pressure can exceed 80% of the equipment MAWP	AM, HWC, HFE
	20	Leaving bleed valves open during energy isolation while the site is left unattended	SM
	21	Energized electrical work that requires Energized Electrical Work Permit (EEWP) or performing work (except testing, troubleshooting, and voltage measuring) within the restricted electrical approach boundary. Excludes the use of a hot stick and remote racking of a breaker outside the arc flash boundary.	HO, HCE
	22	Running wireline without lubricator/pressure control equipment (i.e. open-hole logging)	HDE
	23	Air Drilling operations	HDE
	24	Snubbing operations	HCE
	25	Well intervention on High Consequence (HCO) sites	HI, HCE
	26	Fracturing using energized (gaseous) fluids (N2, CO2)	HCE
	27	Using fluid in place of a mechanical barrier when breaking containment operations (Wells Policy Ref. 5.2.8.3.a)	SM, HDE, HCE
	28	Workover Operations with adjacent (within (<=) 20 feet) wells flowing	HI, HCE
	29	Well testing for measurement validation using a temporary separator	HO

TRAT Legend			
SM	Site Manager (O)	**HCE**	Head of Completions Execution (C)
AM	Area Manager (O)	**HWC**	Head of Wells Commissioning (F)
HO	Head of Operations (O)	**HFE**	Head of Facilities Eng & Construction (F)
S(D&C)	Superintendent (D,C)	**CL**	Construction Lead (F)
HDE	Head of Drilling Execution (D)	**CS**	Commissioning Superintendent (F)
O - Operation, D - Drilling, C - Completion, F - Flowback & Facilities			