# Standard Operating Procedure – Inspection Requirements for 5,000 PSI Flowback Manifold & Flow Lines

## 1. Purpose

To establish inspection requirements necessary to ensure that proper safety and function of equipment is maintained.

## 2. Scope

This procedure is applicable only to field inspection of flow back manifolds & flow lines and all necessary pressure containing or controlling hardware for field installation.

## 3. Prerequisites

Personnel covered by this SOP should have a good working knowledge of our equipment, our services and our customer’s needs.

## 4. Responsibilities

This SOP covers employees that are classified as Field Service Technicians.

## 5. Procedures

1. **ASSEMBLY INSPECTION**
   1. The assembly inspection shall be performed after every well except when complete tear down is required.
   2. A visual inspection shall be performed on all the components.
   3. All valves and chokes shall be manually cycled to ensure proper operation.
   4. All damage components shall be replaced or repaired. The repair process in not part of the scope.
   5. All valve shall be greased with the proper lubricant, all exposed seal areas shall be protected from damage during storage and shipment.
2. **COMPONENT INSPECTION**
   1. The component inspection process shall be performed after the completion of every third well. This frequency may be reduced but shall not be extended.
   2. All assemblies shall be disassembled and parts cleaned.
   3. All components shall be visually inspected for excessive wear and erosion.
   4. All flow lines shall be visually inspected for internal and external damage. If any major internal wear or erosion is seen a UT inspection of the pipe shall be performed. Any pipe with wear or erosion greater than 12-1/2% of wall thickness shall be replaced.
   5. All gaskets and seal removed during disassembly hall be replace.
   6. Reassemble all the components per the applicable procedures.
   7. Install appropriate test flanges to-allow for working pressure shell test of 5,000 PSI to be completed on all components.
   8. Working pressure shell test shall be performed per TS814 PSL-1.
   9. Upon a successful shell test each valve shall undergo a seat test per TS814 PSL-1
   10. All valves shall be greased with the proper lubricant, all exposed seal areas shall be protected from damage during storage and shipment.

## 6. Records

A log either electronically or manually shall be maintained to account for the number of wells each manifold has been installed and operated. This log will determine what type of inspection is required

## 7. Definitions

Visual inspection- An inspection process that consist of visually evaluating all seal areas, contract surfaces, threads, and seals looking for pitting, scaring, corrosion, deformation, cuts, or any other signs of physically damage.