

FESHM 5031.1 PIPING ENGINEERING NOTE FORM

Prepared by: Erik Voirin

Preparation Date: 10-13-2014

Piping System Title: g-2 mandrel LHe Tubing

Lab Location: MC1 Building

Location code: 209

Purpose of system: Supply Two-phase Helium to cool superconducting coils in mandrel.

Piping System ID Number: none assigned

Appropriate governing piping code: ASME B31.3

Fluid Service Category (if B31.3): Normal Fluid Service

Fluid Contents: Two-phase Helium

Design Pressure: 295 psid @ 4.4K,

(relief valves set lower (100 psi set point) since pressure rises during a relief scenario)

Piping Materials: Aluminum 6063-T52

Drawing Numbers (PID's, weldments, etc.): g-2 Doc 1830 - Attachment C

Designer/Manufacturer: Brookhaven National Laboratory

Test Pressure: 325 psig

Test Fluid: Nitrogen

Test Date: TBD

Statements of Compliance

Piping system conforms to FESHM 5031.1, installation *is not* exceptional: Yes

Piping system conforms to FESHM 5031.1, installation *is* exceptional and has been designed, fabricated, inspected, and tested using sound engineering principles: N/A

Reviewed by: MARK ADAMOWSKI (Print Name)

Signature: Mark Adamowski Date: 11/20/14

D/S Head's Signature: [Signature] Date: 6/2/15

The following signatures are required for exceptional piping systems:

ES&H Director's Signature: _____ Date: _____

Director's Signature or Designee: _____ Date: _____