Review of drawings and specifications submitted on November 24, 2014 from Meyer Tool for PO 15-P0128
George Biallas, "Responsible Engineer" (Per ES&H Manual Chapter 6151, Appendix T5) 03DEC14

Drawings:
All drawing items are acceptable except for one item:
Drawing 02351-16. Zone B3, "110X Ø.78" should be "126X Ø.78"

Calculations:
All calculations presented are acceptable.
One additional calculation is necessary:
For the end use vacuum vessel configuration, JLab is sealing the 62 inch O.D., open end of Vessel 02351-10 with a JLab built, thin (0.062 thick aluminum) membrane using a 50 mm thick clamp flange (See enclosed drawing titled " Window Clamp" dated Oct 9, 2012). Grade 8 bolts are used to establish a flange clamp force of 30,100 lb. on each bolt to clamp the pre-hydroformed membrane. The membrane launches from the inner ½ R edge of the vessel flange toward the inside of the vessel at 80.5° to the vessel axis and sustains a force along the membrane at the flange of 1381 Lb. per inch Do the stresses on the flange set stay within ASME stress and stability limits?

Note that the Vendor is not required to test the vessel with the above membrane closure in place.

Enclosure: "Window Clamp" by Center for Particle Physics, dated Oct 9, 2012