1.0 Scope

1.1 The system shall measure pressure.

1.2 The system shall communicate to external devices via industry standard two-wire, 4-20 mA protocol.

1.3 The sensor shall fit inside 1-inch, schedule 40 and schedule 80 PVC casing or larger.

1.4 The system shall be delivered fully assembled and custom-sized for each well.

1.5 The system shall be an **Seametrics PS9800 Submersible Pressure Transmitter**, manufactured by Seametrics.

2.0 Sensor Design

2.1 The sensor shall measure pressure.

2.2 Pressure measurements shall be accurate to ± 0.1% FSO at 20° C (static, B.F.S.L.).

2.3 The sensor shall be available in absolute or gauge pressure versions.

2.4 The sensor shall be no larger than 0.75" in diameter.

2.5 The sensor shall terminate with either a flat, sealed end cone, or with a 1/4" NPT inlet.

3.0 Cable Assembly Design

3.1 The cable shall be polyurethane, ETFE, or polyethylene jacketed.

3.2 The cable shall be vented to atmosphere, with a desiccant assembly at the well-head to prevent buildup of moisture in the vent tube, for gauge version sensors.

3.3 The cable shall be continuous with no splices.

3.4 The cable shall terminate with either

a) 2 wires plus shield

or

b) An M6 connector

3.5 The cable connection to the sensor shall be waterproof up to a pressure of at least 325 psi to prevent leakage of fluid inside the sensor housing.

3.6 The cable shall have a breaking strength of at least 138 lbs.

3.7 All connecting fittings shall be capable of supporting a working tensile load of 50 lbs.

Acceptable sensors shall be Seametrics PS9800 Pressure Transmitter or approved equal.

3/29/18