***Shaft Area Profile Evaluator (SHAPE) Specifications\**** November 2019

\*Patent Pending

**SHAPE Body:**

Size: 355 x 914 mm (14 x 36 inches)

Weight: 45.36 Kg (100 lbs.)

Material: Stainless Steel and Aluminum

Standard Kelly Bar Connection Sizes: 101.6 mm (4 in), 152.4 mm (6 in), 203.2 mm (8 in)

Temperature Range: -20 to +55°C Operating; -40 to +85°C Storage

Power: 6-hour continuous usage with external 12V battery

Continuous real time wave-speed calibration during collection

Sensors: 8 Receivers and 8 Transmitters

Sampling Rate: 1 MHz Sampling Frequency

**SHAPE Tablet:**

Size: 320 X 250 X 68 mm (12.6 x 9.8 x 2.7 inches)

Weight: 5 Kg (11 lbs.)

Temperature range: 0 to 40°C operating; -20 to 65°C storage

Display: 26.4cm (10.4”), sunlight readable, resolution 1024 X 768; capacitive touch screen

Video Outputs: HDMI, VGA

Battery Power: 4-hour continuous data collection 12 V battery + back-up battery standard

Charging time: 6-hour max; 120/240 charger input voltage

Operating System: Microsoft Windows® 10 IoT Enterprise LTSC

Data storage and ports: 128 GB or larger SSD internal drive; Ethernet port; 4 USB ports

Optional external accessories: USB keyboard and mouse

Remote Operation: SHAPE Tablet is equipped for high speed internet access and remote operation

Technical support: SHAPE Tablet is equipped for remote error checking and updating

Units of operation: Traditional US, SI, or Metric

Full one-year warranty on parts and labor

**Shaft Criteria:**

Minimum Shaft Diameter: 760 mm (30 in)

Maximum Shaft Diameter: 3600 mm (144 in)

Maximum Shaft Length: 150 m (492 ft)

Data Collection in Water, Polymer Slurry, and Bentonite Slurry

Maximum sand content during data collection: 10%