Remote Downhole Pressure Monitoring (DPM) Technical Questionnaire

1. Please demonstrate Contractors ability to complete general remote downhole pressure monitoring (Remote DPM) objectives including the following:

* Describe pressure gauge specifications, including:
  + Maximum/minimum working pressure
  + Maximum/minimum working temperature
  + Gauge accuracy and sensitivity
  + Data collection and transmission rate
  + Battery life (during active and inactive periods)
  + Data memory capacity
  + Service environment (sour/sweet/etc)
  + Programmable features;
* Gauge carrier physical properties, including:
  + Pressure and temperature ratings
  + Physical dimensions,
  + Service environment (sour/sweet/etc)
  + Deployment method;
* Describe data transmission system, including:
  + Gauge to wellhead / mudline (electromagnetic, acoustic, etc.), data transmission rate, relay / repeater spacing (if applicable),
  + Data storage;
  + Wellhead / mudline to data recovery unit (after MODU is off location)
* Other equipment requirements as needed for job execution (ie. Contact centralizers, repeaters, tubing clamps, subsea transmitter / receiver / data logger, battery housing, battery packs, etc)
* ROV interface requirements for installation;
* System reliability discussion with examples;
* Well barrier discussion with examples;

1. Please demonstrate Contractors ability to provide engineering support, including, but not limited to, the following:

* Prepare an installation recommendation and operational installation program, based on the information supplied by Company;
* Computer monitoring of the operations, real time acquisition of data for possible subsequent processing of the data recorded;
* Prepare load-out diagrams and documentation as needed (data packs, commissioning documents and QA/QC records) for sending relevant equipment offshore;
* Provide final job reports and on-going support for data transmission / retrieval and relevant evaluation; and
* Provide calculations, drawings and charts, i.e. duration of well flow and shut-in periods, Remote DPM running string diagrams and well barrier diagrams.

1. Please demonstrate Contractors ability to provide the following equipment:

* Remote DPM gauges and all required accessories;
* Remote well monitoring systems;
* Onshore and offshore personnel for planning / execution; and
* Supply base / workshop

1. Please demonstrate Contractor’s experience with Remote DPM system installation operations from a MODU and data recovery / method used in a harsh environment.