

Memorandum

Date: 12MAY10
By: Justin Farrelly, Research Manager
For: FCC Licence Application Process – GPS Re-Radiator
Project: VL-07-006-RDS
Copied To: Mike Scott (Vercét Research Lead)
File

Subject: Application for GPS Re-Radiator Licence

Confidentiality: None

Other:

Vercét LLC, a research and development company in the area of electronics and materials sciences, is working on a project for a client (RDSeismic, LLC) to determine methods for the deployment of autonomous seismic recording nodes. As part of this work it is necessary to test the functionality in real time of the synchronisation process between the then existent real time GPS signal domain and our research facilities GPS locked Rubidium time source (Stanford Research Systems). “Real” GPS signals within our facility are substantially shielded and therefore unavailable due to the metal roof structure. Our current external roof based GPS antenna requires physical coaxial connection to the acquisition units, which when potted or encased is not possible. (Please see: www.rdseismic.com for a picture of the unit in question – the GPS receiver sub-assembly is contained therein).

This request for a licence will allow our research and development program to proceed, and further promote the use of light weight, low impact seismic recording instrumentation in the oil and gas industry, addressing concerns in relation to the impact of the currently common cable based systems.

The only current method of carrying out the tests we need to do, on the number of units in question is to work out side, which is not practical for us or our lab equipment for more than a short period.

Any questions you may have about the use of the repeater, our clients development work, or Vercét LLC's work as a whole in the research and developmental field may be directly addressed to my self at our Carrollton facility.

Justin Farrelly
Manager
Vercét LLC.

