

HALLIBURTON

CASE STUDY

Investigation of remote electrical techniques which may be applied to aid location of a blockage or restriction in a hydrocarbon pipeline

This project required the student to be 'placed' within the company on a full-time basis.

Project outline:

- Hydrocarbon pipelines tend to become restricted by various sands, scales, waxes or can be impacted by external mechanical damage;
- Such restrictions reduce pipeline throughput, require additional pumping energy, can increase corrosion and reduce profitability for the owner;
- This project specifically investigated whether electrical techniques could be used to detect pipeline restrictions.

THE EMPLOYER'S EXPERIENCE

Allan Browne

Halliburton Pipeline & Process Services

This was an opportunity to contribute to university research and to 'give something back', and we were happy to provide the student with this work based experience. This gave the student an insight into what to expect when working in industry.

It was satisfying from a supervisory point of view; being able to include a student in our business, offering insight into what we do, how we operate and function as a team, and providing them with an opportunity to contribute in an area of interest to the business.

The project results helped enhance our understanding of some of the electrical processes and methods that may be applied to detect pipeline restrictions as well as resulting in a piece of academic work for the student.

THE STUDENT'S EXPERIENCE

Eke Abiayi Eke

MSc Oil & Gas Engineering, University of Aberdeen

Industry based projects go a long way in preparing students for work procedures and challenges they will face when they graduate. This is why I decided to do this type of project. It was a good experience: one that every student who gets such an opportunity should savour.

(The project gave me) a good knowledge of what it entails to work in a team, the ability to manage my time, the will power to overcome difficulties and develop good interpersonal skills. In industry, every individual must be willing to learn something new, irrespective of their background, this to me I consider important. Sharing problems and thought ideas with team members helped me to develop a cycle that proved to give good results.

It will definitely help my career, firstly by giving me a good transition from taught University work process to actual industry practice. It is also a tool I can use in the future, applying some of the knowledge and skills I have acquired.



**Making
the Most
of Masters**

"It's symbiotic – both parties benefit; the business benefits from research input, the student sees how we function"

Allan Browne, Halliburton Pipeline & Process Services