

On behalf of our client in the oil and gas sector, Aldelia and HR Beyond Limits Limited is looking for competent individuals to fill the following position:

Job Position: Data Engineer
Department: Field Crew
Employment Status: Exlog Staff or Contractor, Full time

Role Summary

The Data Engineer's role is to ensure all Mud logging geological and surface drilling data are accurately measured and recorded at the wellsite. He / She acts as the focal point for drilling services crew and client personnel; advising them of any operational event that has a direct effect on drilling or work-over operations. The Data Engineer monitors, evaluates activities and immediately reports unexpected well behaviour to minimise operational risks and environmental damage. He / She provides data interpretation and quantitative & qualitative real time services using mud logging data.

Relationships

- Data Engineers report to their Operations Manager, collaborating with client representatives and taking direction from them relative to client's operational requirements.
- The Mud Logger reports hierarchically to a Data Engineer.

Responsibilities and Principal Duties

- **General**
- For continual, 24hr coverage, the mud logging unit must always be occupied and fully operational. For acceptable breaks, of short duration, emergency repairs, meals etc. the customer must be aware of and have agreed to a nominal routine when a unit may have reduced crew present.
- Job requirements are identified and communicated by the Operations Manager according to the Excellence Logging approved Service Delivery Plans (SDP). This includes both customer and regulatory requirements, operational conformity checks and customer satisfaction. Pre job briefing and debriefings must be given by Excellence Logging Operations Management and by the drilling contractor management during briefings and through daily pre-job task risk assessments (TRA).
- State of Requirements (SOR) for Mud Logging operations is identified and communicated by the client's representatives
- **Geological Monitoring**
- Validate the mud log produced by the Mud Logger is comprehensive.
- Use industry and client provided gas interpretation methods to evaluate the quality of reservoirs and source rocks.
- Cross check Mud Logging data with seismic data, lagged LWD data or post drilling open hole logging data.
- Perform gas sampling as required and monitor lag-time and validate correlations.
- Wellsite Monitoring
- Accurately measure and record all drilling and static operations including hole enlarging, reaming, cementing, casing, bit or wiper trips, logging operations.
- Perform close monitoring of gas levels, lag time,

drilling fluids and drilling parameters and report any anticipated or observed anomalies to the appropriate persons for immediate action or for closer surveillance. Identify and report immediately all drilling hazards like kicks, well ballooning, stuck pipe, lost circulation, shallow water flows, mud losses, drilling breaks, etc.

- Perform optimisation diagnostics on mechanical drilling parameters, well hydraulics to improve drilling efficiency and reduce catastrophic failure.
- Cross check theoretical and actual mud returns correspond to expected well behaviour or surface activities.

Check depth, drilling and logged data against rig recorded data.

- Confirm or adjust the formation pore pressure gradient estimates by analysing the Dxc along with other qualitative mud logging parameters like gas, flowline temperature, caving's etc. obtained during drilling. Confirm or adjust estimates of formation fracture gradient from well planning against values obtained during leak-off or well integrity tests.
- Assist well site personnel determine the mud densities required for primary and secondary well control. Ensure primary well control by anticipating pressure imbalances.

Reporting

- Determine with operations and wellsite management teams the standard and emergency reporting process and procedures.
- Manage the well database and ensure the quality and integrity of the well data annotating digital logs and records clearly and correctly and ensure confidentiality of any 'tight hole' requirements.
- Ensure the design of computer-generated logs meets required specifications.
- Submit accurate daily reports concerning geological and drilling parameters.
- Ensure the unit diary, spare parts inventory, equipment status reports, calibration reports and other specified equipment monitoring reports are kept up to date and available for audits.
- Perform or assist in correctly filling out of weekly, monthly, service activity and customer satisfaction reports and dispatch to Operations Manager by the first of the following month.
- Maintain regular contact with the Operations Manager to report the current work situation and remedy any potential or ongoing non-conformances.
- Prepare and submit the Final Well Report as per customer's specifications
- Properly organise, file and dispatch reports, trip sheets, data, charts and plots for later use by customer according to SDP.

Equipment

- Perform and supervise rig-up and rig-down in a safe manner of the ML unit and all ML equipment conforming to the scope of work as directed by Operations Management.
- Responsible for maintaining adequate equipment/stock inventory/consumables including calibration and operating gases and hydrogen supply verifying validity dates and specifications.
- Maintain and service all equipment and sensors according to Standard Work Instructions (SWI)
- Escalate to technical support items or services that cannot be put into service with a detailed report

submitted to Operations Management or their support team.

- Perform or supervise regular calibration checks, maintenance and necessary repairs on all equipment, particularly gas instruments to ensure correct functioning of data acquisition systems.
- Propose to Operations Management innovative ideas for improvement of techniques or equipment used in the mud logging process.
- Ensure customers are aware of services / techniques available to improve their operations.

Previous Experience and Competencies

- **Education/Experience**
- Ideally a technical or Bachelor education level. Preference is given to persons with an undergraduate degree in Engineering or an Earth Science or have the relevant knowledge or experience to perform the job. Preference is given to candidates who have worked with a minimum of 7 years' experience in performing Field services as Data Engineers.
- Experience with all advanced mud logging equipment, sensors, hardware and software.
- Exlog Anax and Xview system experience is mandatory.
- **Certification**
- All Corporate Ethics, Code of Conduct, Trade and relevant compliance certification as outlined in: Group Training Matrix.
 - o Job Skills/ Competency Certification for DE Competency
 - o Job Skills/ Competency Certification for Senior DE Competency
 - o Job Skills/ Competency Certification for Advanced DE Competency
- IFP certification is mandatory.

The Data Engineer will ensure commitment to and the awareness of Excellence Logging business strategies and relevant group directives compliant with Operations Management System (OMS) and all policies, standards, guidelines, instructions, forms, reference documents and training material contained therein. They are responsible for performing Local Risk Assessments to ensure hazardous operations are minimized or controlled and Mud Logging Crew are aware of safety regulations and procedures at the wellsite and during travel to and from the well site. Ensuring all safety equipment in the mud logging unit is kept in good condition and safety records are maintained for audit purposes

How to Apply:

All Qualified and interested applicants should submit via email detailed Curriculum Vitae containing contact details and telephone numbers of work-related reference persons to: shamim.walusimbi@aldelia.com.

Files should be submitted in standard file types like MS Word(.doc) and Adobe Acrobat (.pdf)

Deadline: 09nd September 2022 at 5.00pm

Please indicate the position for which you are applying in the subject line of your E-mail
 Kindly note that only shortlisted applicants will be contacted.