Title	Break Out Project					
Target Population	Field Engineers & Field Specialists					
This requirement is applicable to:	✓	JFE	✓	FST		EOT
	✓	FE1	✓	FS1		EO1
	✓	FE2	✓	FS2		EO2
			✓	FS3		EO3
					✓	GEO

Objective:

The objectives of this task are:

- To assess the employee's ability in applying critical thinking and problem solving
- To assess the employee's communication and organizational skills
- To assess the employee's technical, QHSE and management skills
- To assess the employee's ability in the entire DEE cycle; data collection & analysis, complete stages of job executions and job evaluations.
- Create an opportunity for the FE and FS to improve his presentation skills by practicing with a large and critical audience.

Tasks:

- Select an operational subject for the project and obtain approval from respective the Mentor and FSM. Mentoring and management supervision is essential in this technical exercise.
- For FE; collect and analyze all data required to do a complete design of the operation including all applicable Cerberus modules.
- Get involved in the pre-job preparations ie. all resources needed for the operations (personnel, and equipment).
- As the second supervisor on site, the FE / FS is expected to supervise and record the job execution therefore he needs to have a complete understanding of the operation.
- For the FE, prepare a technical evaluation of the actual operation design against the actual job. During this stage the FE must calibrate the job parameters for the upcoming operations (friction coefficient, fluid friction table, fluid rheology, additives concentrations, etc.).
- Prepare a technical presentation (up to 20 slides) supported by a detailed document in SPE paper format (4 pages min); taking into consideration all technical and operational aspects related to the project.
- Finalize the project and present to Line Management and technical team (Operation Engineer). You will have 20 minutes for presentation and 30 minutes for question and answer session.

Notes:

- Project scope: the project is to be based on Coiled Tubing operation - Standard or Advanced services application. The evaluation is focusing on the employee's understanding on technical and operational process and his ability to apply them in the project.
- The FE/FS must be fully involved in the DEE cycle.
- The project should provide detail of all technical tools and/or software used to develop it.

REQUIRED EVIDENCE:

1	Slide Presentation	/
2	CTS-FORM-84 CTS Improvement Project Abstract Template	/
3	CTS-FORM-85 SQIP/Breakout Project Evaluation Form	/
4	Attendance Form	/

MENTOR / ASSESSOR's Comments & Recommendation:			
- All good.			
Signature		Assessment Date	13/5/2025
Name	KUNG YEE HAN	Position	TECH ADVISOR

FSM / OM Comments & Recommendation:			
- The project was done successfully without safety or quality issue. - Personnel shows full understanding on job design and execution.			
Signature		Assessment Date	13/5/25
Name	ROSHAIN AZRAN	Position	FSM

DIMENSION BID

SQIP/BREAKOUT PROJECT EVALUATION FORM

COILED TUBING SERVICES

PERSONNEL DETAILS

FULL NAME	POSITION
Muhammad Hafiz Saharuddin	Field Engineer 2

PROJECT NAME	SCO inside casing section (short string) using deployment method
PROJECT FOCUS LEVEL	Design and Execution
DATE OF PROJECT APPROVAL	15/10/2024
DATE OF PROJECT PRESENTATION	13/5/2025
PROMOTION STEP	FE 2 to GFE
PROJECT OVERALL SCORE	78%

EVALUATION CRITERIA	Rating *(Please √ where appropriate)*									COMMENTS
	STRONG			ADEQUATE			IMPROVEMENT NEEDED			
	10	9	8	7	6	5	4	3	2	
PROJECT PRESENTATION										
1 Audibility & Speech					√					
2 Clarity & Organization				√						
3 Visual Presentation					√					
4 Hand-outs/Publication				√						
PROJECT EVALUATION										
1 Project Objectives			√							
2 Project Implementation		√								
3 Costing Beneficial			√							
4 Project Impact on DB			√							
5 Project Impact on Client			√							
6 Continuos Monitoring and Improvement			√							
OTHERS										
1 Proposal		√								
2 Project Communication					√					
3 Risk Control		√								
4 Resources Management		√								

PROJECT EVALUATOR

Task completed

CANDIDATE'S SIGNATURE	INSTRUCTOR'S SIGNATURE	MANAGER'S SIGNATURE	DATE
			13/5/2025

DIMENSION BID

This project proposal is prepared for the CTS Development Plan (CTS Improvement Project)

Clean-out inside casing through short string

Long Deployment BHA to avoid risk of stuck inside Casing Section

Muhammad Hafiz, CTS, Kemaman
14/10/2024

Abstract

Coiled Tubing (CT) cleanout is a standard procedure performed after a well has been producing for a certain period. Typically, sand accumulation inside the tubing can be cleaned without significant issues when the proper techniques are applied. However, when sand accumulates and restricts reservoir flow or pressure at the perforation interval within the casing or tubing section, a more focused intervention may be needed. To help restore production, a CTU sand cleanout can be performed to remove the sand that has buried the perforation tunnel. In single-string well completions, cleanout operations involving CT strings exiting the tubing usually proceed without complications. However, in multiple-string completions—especially when focusing on the short string—cleanout operations outside the casing become more complex and riskier due to the potential for the CT string to become entangled with the tubing in long-string completions.

Introduction

In line with the abstract, performing Coiled Tubing (CT) cleanout inside the short string, specifically outside the casing section, is typically avoided by many service providers due to the high risk of the CT becoming entangled with the production tubing in the long string. This risk can lead to the CT string and the bottom hole assembly (BHA) being lost inside the casing. Furthermore, if the CT string becomes entangled with the production tubing, the chances of successfully dropping a ball to disconnect at the mechanical head assembly (MHA) are low. This situation would then require the mobilization of additional external or internal cutters to sever the CT string, resulting in additional costs for the client, including standby charges while waiting for the cutter to be delivered offshore—making the operation economically unviable.

Sand accumulation inside the casing is a routine issue faced by clients and has a high potential for recurrence in other wells or fields. To ensure higher success rates for sand cleanout (SCO) operations and to reduce the risk of CT getting stuck during cleanout, this proposal has been developed to meet client objectives effectively. CT strings tend to bend, especially after exiting the End of Tubing (EOT), due to reduced restriction from the tubing wall. This bending can cause the CT string to shift towards a horizontal trajectory, leading to entanglement with the long string completion.

In 2020, DB conducted a CT cleanout through the short string inside the casing section. During the operation, the CT string encountered several issues, including high pulling weight, which indicated that it had likely entangled with the long string. Fortunately, after multiple cycles of reciprocation and overpull over four hours, the CT string was eventually released.

The main idea behind this proposal is to ensure that the lower BHA remains as stiff as possible to guide the CT string downward in a vertical direction towards the perforation interval. It would be best to prevent MHA from exiting the EOT. Using a long, straight bar BHA can help reach the target depth of the perforation interval. In the event of a CT string becoming stuck during the operation, the ability to drop a ball to release the CT from the MHA without deploying additional resources (e.g., external/internal cutters) can significantly reduce standby and mobilization costs for the client.

Problem Definition

To prevent the CT from becoming entangled with the long string in the casing section and to avoid unable to release the CT string in event of CT stuck happen, a long BHA setup is proposed. This will ensure that the BHA remains as stiff as possible, preventing the mechanical head assembly (MHA) from exiting the End of Tubing (EOT). If the distance from the EOT to the perforation tunnel is significant, a longer BHA is needed to ensure the nozzle reaches the target depth. However, there are limitations to deploying a long BHA, such as the main deck height and jacking frame height. To overcome these challenges and proceed with the operation, a specialized deployment package is required for deploying the long BHA into the well.

Benefit to Dimension Bid and to Client

As outlined in the introduction, this project will enable the client to regain production by removing accumulated sand in the casing section, which will result in increased production rates. By reducing the risk of the CT string becoming stuck inside the well, the need to mobilize a cutter to sever the CT string in the event of a release failure is minimized, thus avoiding additional costs. This, in turn, secures a steady stream of work for Dimension Bid, helping to sustain operations at the client's facilities. Moreover, preventing the CT string—especially new strings—from getting stuck and left in the well eliminates the need for Dimension Bid to purchase new strings, allowing the company to continue its operations efficiently at other locations

Project Objectives

The objective of this proposal is to reduce the risk of Coiled Tubing (CT) becoming stuck during interventions inside the short string within the casing section. By minimizing this risk, the company can ensure a continuous stream of potential jobs from

the client, maintaining long-term collaboration and operational efficiency.

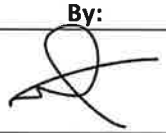
Project Deliverables, Resources and timelines

The project is expected to be executed within three weeks of receiving notice from the client, with support from the PCE in Package #3 for the deployment setup. If the PCE is unavailable, outsourcing to another company, such as Dimension Bid's technical partner, Schlumberger (referencing the Angsi A-25 case study), would be necessary. The additional BHA required for the job includes the straight bars needed to reach the target depth (perforation interval). This requirement can be fulfilled by either renting from another downhole tool service provider or manufacturing through a local fabrication company, with a lead time of less than two weeks. As per the contract with PCSB, the additional cost for the deployment setup is MYR 293,400 per month.

Conclusion

This project will greatly benefit the company by reducing the risk of Coiled Tubing (CT) becoming stuck or entangled, ensuring successful release during interventions inside the casing section through the short string, particularly for cleanout operations. By mitigating these risks, the project will help build client trust, encouraging continued collaboration and future interventions. This, in turn, will contribute to increased revenue for Dimension Bid.

This proposal should be kept to a maximum of 6 pages.
Any supporting documentation should be attached in the abstract

	Prepared and Submitted By:	Verified By:	Approved By:
Sign:			
Name:	Muhammad Hafiz Saharuddin	KUAH YEE HAN	RIDHWAN A21241
Position:	Field Engineer 2	TECH ADVISOR.	PSM
Date:	14th October 2024	15/10/24	15/10/24