

Modification Notice - Regulation 22

If the modification to the regulated activity has already occurred, a regulation 22 modification notice is not applicable.

Interest Holder	CTP	EMP Title	Palm Valley Field	Unique EMP ID No.	N/A	Mod No.	1	Date	11-Apr-2024
Brief Description	<p>The current Palm Valley Field Environmental Management Plan (EMP) was approved on 15 February 2019. The description of activities and scope of works contained in the current EMP and Reservoir Management Plan (RMP) allows for routine in well operations to be conducted. Under this section, the nominated method is to use a wireline unit at surface to deploy the down hole tools.</p> <p>This modification seeks to demonstrate that the same tools can be deployed using a coil tubing unit as opposed to a wireline unit while maintaining the same risk profile and all associated activity risks remain ALARP.</p> <p>Both the coil tubing unit and the wireline unit are used for the purpose of deploying the down hole tools, will use potable water for the operation ensuring there is no additional environmental risk or harm associated with the modification. Further, all well control pressure control equipment principles remain the same for both operations. A detailed analysis of wireline and coil tubing activities along with a risk assessment is provided in Attachment 1 of this modification notice.</p> <p>See attachment 2 for coil tubing surface equipment set up and site layout.</p> <p>See attachment 3 for wireline unit surface equipment set up and site layout.</p>								
Geospatial Files Included?	N/A								



Does the proposed change result in a new, or increased, potential or actual environmental impact or risk?	If an increase in an existing potential or actual environmental impact or risk, is the increase provided for in the approved EMP?	Does the proposed change require additional mitigation measures to ensure it is managed to ALARP and acceptable levels?	Has additional stakeholder engagement been conducted?	Does the proposed change require additional environmental performance standards or measurement criteria?	Does the proposed change affect compliance with Sacred Site Authority Certificates?	Does the proposed change affect any sub-plans to the EMP?	Will the environmental outcome continue to be achieved?
<i>Attach supporting information to support all answers to the above questions</i>							
No. As demonstrated in the analysis and risk assessment.	N/A	No additional mitigation measures are considered necessary. The planned works are aligned with the scope of the current activities and approved controls.	No. Routine operations are already part of our day-to-day activities and adequate stakeholder engagement has been conducted previously.	No additional environmental performance standards and measurement criteria are required. A review of the existing standards and criteria in the EMP identified that all elements will be able to be met and the proposed works will not impact compliance.	No. All works are conducted on existing operational areas and aligned with existing approvals.	See note 1.	See note 2.
Current EMP Text				Amended EMP Text			
<u>Executive Summary</u> The operational activities covered by this FEMP include: <ul style="list-style-type: none"> ▪ Routine wireline activities as identified in the approved Reservoir Management Plan (RMP) 				<u>Executive Summary</u> The operational activities covered by this FEMP include: <ul style="list-style-type: none"> ▪ Routine in well operations with a wireline unit or coil tubing unit. 			
<u>1.5 Scope</u> The operational activities covered by this FEMP include: <ul style="list-style-type: none"> ▪ Routine wireline activities as identified in the approved Reservoir Management Plan (RMP) 				<u>1.5 Scope</u> The operational activities covered by this FEMP include: <ul style="list-style-type: none"> ▪ Routine in well operations with a wireline unit or coil tubing unit. 			

Note 1

No, it does not affect the current plans in place:

- Rehabilitation – all works are being conducted on existing operational areas. No rehabilitation of this area is planned whilst the field is operational.

- Weeds – monitoring and treatment activities will continue as planned
- Fire – fire management controls in place and will cover the proposed scope of works.
- Wastewater – potable water will be utilised for planned activities. Controls and facilities in place cover the proposed scope of works.
- Erosion and sediment – monitoring of the area is covered by existing inspections. Remedial action will be taken if necessary.
- Spill – spill response plans are in place and will cover the proposed scope of work.
- Emergency response plans – these plans are valid, and plans address risks associated with routine activities.

Note 2

The environmental outcomes outlined in the EMP will continue to be achieved. In addition, all of the impacts and risks will be managed to ALARP. The risk assessment included in the EMP has been revalidated for each potentially impacted element to determine whether potential environmental risks are 'acceptable'. This assessment concluded that there was no increased risk as a result of the use of a coil vs wireline unit.

Attachment 1: Wireline vs Coil tubing risk analysis

Methodology, variance, risk assessment				
Category	Wireline	Coil Tubing	Variance	Risk assessment
Surface Hardware	Combi (dual drum) wireline truck + package: <ul style="list-style-type: none"> ▪ 1 x rigid trailer with wireline and semi-trailer. ▪ Support trailer with tools and accessories. ▪ 1 x 10 bbl. (1590 ltrs) tank for water storage. ▪ bunding as required. 	Coil tubing unit truck including 2" coil tubing spool: <ul style="list-style-type: none"> ▪ 1 x rigid trailer with coil and semi-trailer. ▪ Support trailer with tools and accessories. ▪ 1 x 60 bbl. (9,540 ltrs) tank for water storage. ▪ bunding as required. 	<ul style="list-style-type: none"> ▪ Virtually identical footprint with all areas containing diesel (trucks) and or hydraulic systems – fully bunded. ▪ Increase in stored volumes 50bbbls (7950 ltrs), however the fluid will be potable water with no chemical usage. 	<ul style="list-style-type: none"> ▪ No increase in environmental risk.
Pressure Control	Wireline Pressure control equipment including: <ul style="list-style-type: none"> ▪ Hydraulic Ram Blow Out Protection) (BOP) ▪ Quick test sub ▪ Lubricator ▪ Grease injection control head ▪ Grease and hydraulic control module ▪ Bunding for hydraulic control lines ▪ Hydraulic hose management systems ▪ Full pressure test prior to use 	Coil tubing Pressure control equipment including: <ul style="list-style-type: none"> ▪ Hydraulic ram BOP ▪ Injector ▪ Side door stripper ▪ Test sub ▪ Lubricator ▪ NO grease injection ▪ Bunding for hydraulic control lines ▪ Hydraulic hose management systems ▪ Full pressure test prior to use 	<ul style="list-style-type: none"> ▪ The pressure control equipment is the identical in design, pressure rating and functionality. There are variances for the differences in sizes between wireline and coil tubing. ▪ Coil does not need a grease injector which is a lower risk for coil versus wireline. 	<ul style="list-style-type: none"> ▪ Reduction in environmental risk.
Support Equipment	16 tonne crane.	16 tonne crane.	<ul style="list-style-type: none"> ▪ Nil 	<ul style="list-style-type: none"> ▪ No increase in environmental risk
Pressure test Fluid requirements.	Potable water 50 litres	Potable water 100 litres	<ul style="list-style-type: none"> ▪ 50 litres, however potable water. 	<ul style="list-style-type: none"> ▪ No increase in environmental risk

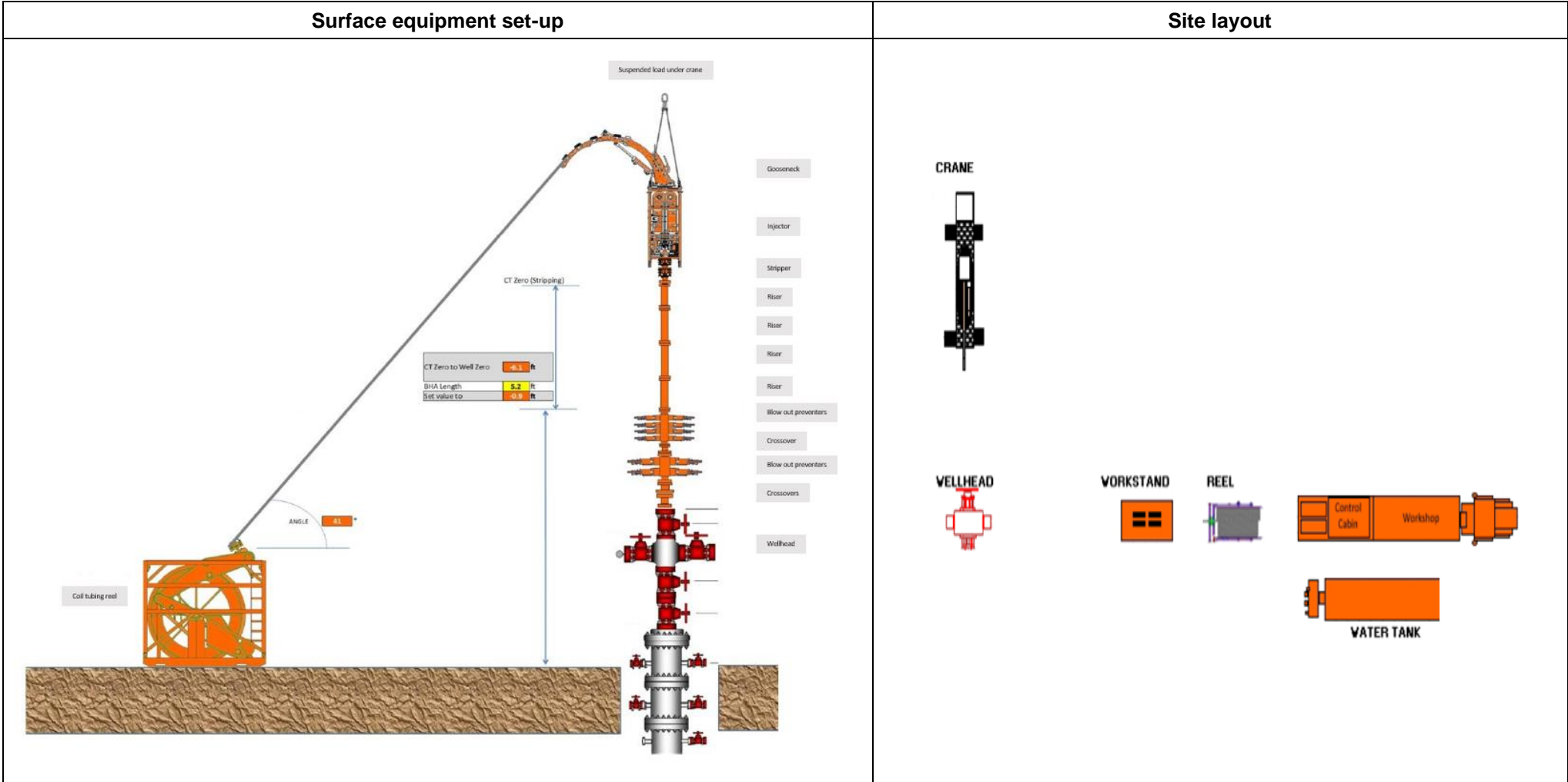
Methodology, variance, risk assessment				
Category	Wireline	Coil Tubing	Variance	Risk assessment
Personnel	Requirements on site: <ul style="list-style-type: none"> ▪ On site company rep (OCR) ▪ Wireline supervisor ▪ Wireline operators ▪ Bridge plug engineer 	Requirements on site: <ul style="list-style-type: none"> ▪ OCR ▪ Coil Tubing supervisor ▪ Coil Tubing operators ▪ Bridge plug engineer 	<ul style="list-style-type: none"> ▪ No change in personnel requirements or safety. ▪ All personnel will be housed in the existing Palm Valley camp. 	<ul style="list-style-type: none"> ▪ No increase in environmental risk
In hole pressure testing and Pressure Control Equipment (PCE)	Function test / pressure test PCE using potable water.	<ul style="list-style-type: none"> ▪ Function test / pressure test PCE using potable water. ▪ Pressure test coil using potable water 	<ul style="list-style-type: none"> ▪ Coil tubing requires one additional pressure test and higher volumes of potable water. 	<ul style="list-style-type: none"> ▪ Given potable water is utilised there is no increase in environmental risk.
Run packer in hole (RIH)	Existing well barriers are not removed, and the down hole tools are Run in Hole (RIH) though the lubricator and BOP. Any flowback of displaced fluid is processed through the existing production flow lines (not removed).	Existing well barriers are not removed, and the down hole tools are RIH though the lubricator and BOP. Any flowback of displaced fluid is through the existing production flow lines (not removed).	<ul style="list-style-type: none"> ▪ Nil 	<ul style="list-style-type: none"> ▪ No increase in environmental risk
Packer Inflation	The packer is inflated by applying pumping pressure from an electrical submersible pump that is within the wireline down hole assembly. Approximately 38 litres of potable water used	The packer inflated using potable water pumped through the coil to the packer with pressure applied at the of the surface of the well. Approximately 4770 litres of potable water are used. The majority of this volume is, however contained within the coil and retrieved at surface upon completion of works.	<ul style="list-style-type: none"> ▪ A larger volume of water is required for setting the packer with coil tubing; however the fluid is potable water with no chemical additives. 	<ul style="list-style-type: none"> ▪ Given potable water is utilised there is no increase in environmental risk.

Methodology, variance, risk assessment				
Category	Wireline	Coil Tubing	Variance	Risk assessment
Pull Out of Hole. (POOH)	POOH wireline and running tools once packer is set. Grease injection controls well bore fluid.	POOH coil and running tools once packer is set, stripper rubber ensures no discharge.	<ul style="list-style-type: none"> No grease injector used. 	<ul style="list-style-type: none"> Lower environmental risk.
Fluid volume post operation	Nil	A vacuum is maintained on the coil so that any water contained in the coil tubing is not released. Once at surface the potable water inside the coil is discharged to the holding tank at surface and removed through the normal production systems in place at PV.	<ul style="list-style-type: none"> The are 3000 litres of potable water remaining post the coil operations which will be disposed as per normal production operations. 	<ul style="list-style-type: none"> No increase in environmental risk
Evaluate flow once bridge plug set	Flow back well to production system and determine if the packer has met objectives.	Flow back well to production system and determine if the packer has met objectives.	<ul style="list-style-type: none"> Both systems flow back to the production system, i.e., no flows to surface, flaring or flow to temporary well test package. Evaluation conducted via monitoring of the SCADA system. 	<ul style="list-style-type: none"> No increase in environmental risk.

Given potable water is utilised for each activity, despite coil tubing requiring slightly more water, the environmental risk associated with each activity is:

- aligned with existing assessment
- results in the same or lower assessment.

Attachment 2 – Coil tubing Unit



Attachment 3 – Wireline Unit

