



WELLESLEY
PETROLEUM

Onshore Rig Intake Verification Report

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Internal					
Revision history					
Revision	Date	Reason for issue:			
01	17.01.2024	For use			
01	17.01.2024	For review			
Registration Codes					
Contract No:		External Doc No:		Facility:	
Project Code	Originator Code	Discipline Code	Document Code	Sequence No.	
TOP	WLSLY	D	RA	0900	

Security Classification	
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1 EXECUTIVE SUMMARY

As a part of the rig intake and preparations for the Toppand East Exploration well and Gnomoria Appraisal well, Wellesley petroleum (Wellesley) performed an onshore review of COSL Drilling Europe AS (CDE) on both HSE- and technical aspects.

The verification was held at CDE's premises at Vestre Svanholmen 4, in Sandnes, 13-14th of December.

The review was held in a good atmosphere, the CDE participants were very open and willing to explain and share information.

The verification team identified two (2) non-conformances, zero (0) observations, three (3) improvement suggestions and 33 actions. None of the findings are considered critical for operation. The findings are listed in Section 4.

CDE is requested to respond within two weeks of receiving this report on how they intended to handle the findings and sending Wellesley the required information.

The verification team's impression is that CDE is a rig company that has a well-functioning business management system. CDE is ISO 9001, 14001, ISO 45001 and 50014.

A separate competence review meeting will be scheduled closer to spud.

2 INTRODUCTION

2.1 BACKGROUND

Wellesley has selected the semi-submersible drilling rig COSL Promoter for the Toppand East exploration well 35/11-29 S and Gnomoria Appraisal well 35/10-12 S. COSL Promoter (COPR) is operated by COSL Drilling Europe AS (CDE). The Rig Intake Team (RIT) has coordinated the verification activities. Technical and HSE personnel have been involved in executing the scope of work.

COPR is currently on contract for Equinor and due to a vacant time slot for the rig, Wellesley will use COPR to drill the Toppand East Exploration well in PL 248 C and Gnomoria Appraisal Well in PL 1184 S.

As a partner to the Toppand East prospect and on behalf of Equinor, Wellesley will plan, coordinate, and execute the exploration drilling project. For the Gnomoria Appraisal well, Wellesley is the operator and Equinor licence partner (50%).

CDE was given an AoC for COPR by the Petroleum Safety Authority (PSA) on 6th November 2012.

2.2 PURPOSE

The purpose of this report is to document and capture relevant actions from the Rig Intake Verification meeting with the CDE organisation; day 1 addressing QHSE related topics (13th December) and day 2 addressing technical topics (14th December). Summary of reviewed topics can be found in [Appendix C](#).

2.3 VERIFICATION PROCESS

The mandate of the Rig Intake Team (RIT) was to ensure that the drilling rig COPR is fit for purpose for drilling the Toppand East exploration well and Gnomoria Appraisal well. A rig intake plan has been established, including all planned meetings/verifications, ref. [1]. The rig intake QHSE and technical meetings are part of the verification activities in the rig intake plan.

2.4 SCOPE

The scope for the verification can be found in Appendix A – Notification letter and Appendix C – Summary of Reviewed Topics.

2.5 ABBREVIATIONS

AHD	Active Heave Drawworks
AoC	Acknowledgement of Compliance
API	Application Programming Interface
AMU	ArbeidsMiljøUtvalg
ALARP	As Low As Reasonably Practicable
ARV	Audit Review and Verification
ATC	Automatic Tank Cleaning
BMS/CMS	Business Management System
BOP	Blowout Preventer
BSR	Blind Shear Ram
CBT	Computer Based Training
CCB	Coast Center Base AS
CDE	COSL Drilling Europe AS
COPR	COSLPromoter
COSL	COSL Drilling AS
CO ₂ e	Carbon Dioxide equivalents
CSR	Casing Shear Ram
CV	Curriculum Vitae
CWO	Corrective Work Orders
DNV	Den Norske Veritas
DSHA	Defined Situation of Hazard and Accidents
DP	Dynamic Positioning
DROPS	Dropped Objects
DSV	Drilling Supervisor
EnPI	Energy Performance Indicator
EPA	Emergency Preparedness Analysis
ESD	Emergency Shutdown System
ESG	Environmental, Social and Governance
EX	Explosion
FHI	Norwegian Institute for Public Health (Folkehelseinstituttet)
FMCA	Failure Mode and Criticality Analysis
GPS	Global Positioning System

HAZID	Hazard Identification
HAVS	Hand ARM Vibration
HR	Human Recourse
HSEQ	Health, Safety, Environment and Quality
HVAC	Heating, Ventilation, and Air Conditioning
HWDP	Heavy Weight Drill Pipe
IADC	International Association of Drilling Contractors
ICT	Information Communication Technology
IFS	Name of Maintenance System
ILO	International Labour Organisation
IMP	Improvement Suggestion
ISM	International Safety Management
ISO	International Organization for Standardization
ISPS	International Ship and Port Facility Security Code
KIMS	Kongsberg Information Management System
KPI	Key Performance Indicator
LBL	Long Base Line
M	Minor
MA	Major
MAH	Major Accident Hazard
MD	Measured Depth
MoC	Management of Change
MOU	Mobile offshore unit
NC	Non-Conformance
NDT	Non-Destructive Testing
NGO	Non-governmental Organization
NMA	Norwegian Maritime Authorities
NOG	Norwegian Oil & Gas (Norsk olje & gass)
NORSOK	Norsk Søkkel Konkurransesepisjon
NOV	National Oilwell Varco
NPT	Non-Productive time
O	Observation
OCS	Competence Management System

OEL	Occupational Exposure Limit
OEM	Original Equipment Manufacturer
OIM	Offshore Installation Manager
OJT	On the Job Training
PDO	Potential Dropped Object
PGB	Permanent Guide Base
PIMM	Project Interface Document
PO	Purchas Order
POB	Personnel On Board
PPE	Personal Protective Equipment
PPM	Parts Per Million
PSA	Petroleum Safety Authority (Petroleumstilsynet)
RUG	Risiko Utsatte Grupper)
PSV	Platform Supply Vessel
PWL	Planned Well Location
QA	Quality
QRA	Quantitative Risk Assessment
RIT	Rig Intake Team
RMR	Riserless Mud Recovery
ROV	Remotely Operated Vehicle
S	Significant
SCE	Safety Critical Elements
SCR	Silicon Controlled Rectifier
SCT	Safety Critical Task
SDBN	Single Dynamic Bottle Neck
SDS	Safety Data Sheet
SECE	Safety and Environmental Critical Elements
SJA	Safe Job Analysis
SSBL	Super Short Base Line
SWB	Switchboard
TD	Target Depth
UPS	Uninterruptable Power Supply
USEMP	Unit Specific Energy Management Plan

VDL	Variable Deck Load
VDR	Voyager Data Recorder
WE	Working Environment
WEAC	Working Environment Area Chart
WO	Work Orders
WT	Wall Thickness

2.6 DEFINITIONS

Barrier	Technical, operational, and organizational elements that individually or together to reduce the possibility that specific error, hazard and accident occurs, or restrict or prevent damage/inconvenience.
Improvement proposals	A finding based on facts and data that shows a potential improvement opportunity.
Non-Conformance	Non-fulfilment of a requirement.
Observation	A deviation where evidence for breach of the requirements is lacking.
Synergi	Electronic system for incident reporting and capturing of lessons learned.
Verification	Confirmation, through the provision of objective evidence, that specified requirements have been fulfilled.

3 VERIFICATION MEETING

3.1 GENERAL

The verification meeting was held at Vestre Svanholmen 4, in Sandnes, and personnel participated in person. CDE presented the requested topics and the review team asked questions. Documents were reviewed in advance.

The Notification Letter and Verification meeting Agenda can be found attached in section [Appendix A – Notification letter](#).

The topics addressed in the meetings were selected by reviewing previous verification and audit activities (performed by the current operator Equinor) and risks identified in the separate Rig Intake Risk assessment.

CDE gave a series of presentations on the topics requested by the RIT followed by questions, answers and discussions per. topic presented.

Clarifications from these two parts of the meeting were made and actions noted, ref. section 4.4.

Subsequent rig intake activities will focus on follow up and closure of the identified actions in the verification meeting.

3.2 PARTICIPANTS

Name and position of the participants is listed in Table 3-1. A signed participant list can be found in [Appendix B – Participants List](#).

Table 3-1 Participant list

Participant	Role	Company	Day One	Day Two
Kine Surdal Nilsen	Rig Manager	CDE	X	X
Morten Anthun	Ass. Rig Manager	CDE	X	X
Rune Evjen	Tech. Support Manager	CDE		X
Jarle Helle	Tech. Superintendent	CDE		
Torgeir Silseth	HVO (Derrickman)	CDE	X	X
Kjetil A. Tangen	QHSE Director	CDE	X*	
Ole Arne Lien	Subsea Manager	CDE		X
Jarle Haugum	Ops. Performance Mgr.	CDE		X
Terje Olsen	Eng. Manager	CDE		X
Silje Knudsen	Competence & Training Mgr.	CDE	X*	
Torfinn Kalstø	ICT & OT Manager	CDE	X*	

Participant	Role	Company	Day One	Day Two
Åshild Larsson	Quality Manager	CDE	X*	
Stig Seland	Rig Intake Lead	Wellesley/WE	X	X
Morten Laget	Drilling Superintendent	Wellesley/WE		
Åse Pettersen	HSEQ Coordinator	Wellesley/WE	X	X
Callum Smyth	Ops. & HSE Manager	Wellesley	X	X
Helge Hamre	Snr. Ops & HSE Advisor	Wellesley	X*	X
Lars Lilledal	Drilling Advisor	Wellesley		X
Tommy Skjolde	Observer	Wellesley/WE	X	X
Christina Rødne	ESG Manager	Wellesley/WE	X	
Helene Folkvord	Observer	Wellesley/WE	X	
Rune A. Smenes	Sr. Marine Advisor	Wellesley/WE		X

*Not present the whole day

3.3 VERIFICATION PROCESS

The verification was conducted according to the agenda in Table 3-2 and Table 3-3.

Table 3-2 Agenda 13th of December - QHSE

Time	Agenda
09:00-09:15	Presentation of attendees, Wellesley introduction to the Toppand East and Gnomoria projects
09:15-10:15	CDE Presents AoC Exemptions and compensating measures
10:15-14:00	CDE Presents QHSE related topics according to QHSE scope given in Appendix A. (Note! Lunch and break when convenient)
14:00-14:30	Wellesley Internal work meeting
14:30-15:00	Wellesley presents summary of observations and/or improvements

Table 3-3 Agenda 14th of December - Technical

Time	Agenda
09:00-15:00	CDE presents technical related topics according to technical scope given in Appendix B. (Note! Lunch and break when convenient)
15:00-15:30	Wellesley Internal Work meeting
15:30-16:00	Wellesley present summary of observations and/or improvements

4 FINDINGS

Findings are categorised as:

- Non-conformance (NC)
- Observation (O)
- Improvement Suggestion (IMP)

Non-conformances are classified as:

- Major (MA)
- Significant (S)
- Minor (M)

The reported non-conformances, improvement suggestions and observations shall be followed up as soon as possible and CDE is requested to **respond within 2 weeks** of receiving this report on how they intend to handle the findings and send Wellesley the needed information.

4.1 NON-CONFORMITIES

Two (2) non-conformities were identified during the review, shown in 4.1.

Table 4-1 Non-conformities

NC No.	Description	Requirement	Ref. to scope	Classification	Responsible
NC-1	Lack of documentation regarding chemicals used on the rig. Measurement program is lacking information regarding water treatment chemicals, hydraulic fluids, and lubricants (Vaptreat, Jet-Lube Kopr-Kote, Jet-Lube Alco 73, Houghto-Safe NL1).	Aktivitetsforskriften §70	6.2	Minor (M)	S. Giljebrekke
NC-2	A HAZID for pipe handling was performed in 2019.	The Offshore Norge recommended guidelines for remote pipe handling operations, section 5. Handling procedures shall be established for all planned manual pipe handling	11	Minor (M)	K. S. Nilsen

		operations marked "M" in the matrix. These procedures must be based on risk analysis (HAZID). HAZID shall be repeated <u>at least every 3 years</u> and in relation to changes that will affect the pipe handling.			
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4.2 OBSERVATIONS

Zero (0) observations were identified during the review.

4.3 IMPROVEMENT SUGGESTIONS

Three (3) improvement suggestions were identified during the verification and are summarised in *Table 4-2*. For more information regarding the improvement suggestions see Appendix C – Summary of Reviewed Topics.

Table 4-2 Improvement suggestions

IMP No.	Description	Ref. to scope	Responsible
IMP-1	Some of the references to NORSOK was not updated in Synergi. This should be corrected.	2 (HSE)	S. Giljebrekke
IMP-2	The RIT recommends preparing a L3 procedure for handling of drones that lands on the rig.	5 (HSE)	S. Giljebrekke
IMP-3	Working environment requirements from 3 rd party equipment should be included in CDE checklist.	1 (Technical)	J. Helle

4.4 ACTIONS

Thirty-two (32) actions were noted during the meetings (ref. Table 4-3 and Table 4-4) , for more information related to the actions see Appendix C – Summary of Reviewed Topics.

Table 4-3 Actions – HSE Topic

No.	Description	Ref. to HSE Scope	Responsible	Status
HSE Topics				
1.	CDE to send CDE presentation including updated org. chart.	1	M. Arthun	Closed
2.	Forward list of internal deviations.	2	S. Giljebrekke	
3.	CDE to send information regarding compensating measures.	2	M. Arthun	Closed
4.	CDE to send a copy of a daily HSE rapport.	3.1	S. Giljebrekke	Closed
5.	CDE to forward the 2024 QHSE Program	3.2	S. Giljebrekke	
6.	CDE to forward Promoters 2024 QHSE Plan	3.2	S. Giljebrekke	
7.	Forward agenda for Bi-weekly HSE meeting and suggest time for meeting.	3.2	M. Arthun	Closed
8.	CDE to forward plan for Operational and Organisational barrier monitoring.	3.3	S. Giljebrekke	
9.	Inform RIT how the results from the QRA have been communicated to the Rig Personnel.	3.3	S. Giljebrekke	
10.	CDE to forward a copy of the letter to Havtil regarding the last audit.	3.4	S. Giljebrekke	
11.	CDE to forward a Synergi report with open findings from audits.	3.4	S. Giljebrekke	
12.	CDE to forward External Audit plan for 2024.	3.4	S. Giljebrekke	
13.	CDE to forward COPR internal audit plan for 2024.	3.4	S. Giljebrekke	
14.	Plan for a joint audit of Subsea7 in January/February 2024.	3.4	S. Giljebrekke	
15.	CDE to send a copy of the competence requirements	3.5	S. Giljebrekke	
16.	Schedule a competence review meeting close to spud.	3.5	Å. Pettersen	
17.	Risk Exposed Group matrix to be forwarded.	4	S. Giljebrekke	
18.	WEACHs to be forwarded.	4	S. Giljebrekke	
19.	CDE to forward procedure for temporary equipment.	4	M. Arthun	

No.	Description	Ref. to HSE Scope	Responsible	Status
HSE Topics				
20.	A new safety representative should be elected from the service companies	4	M. Laget	
21.	Forward list of safety delegates and status on courses.	4	S. Giljebrekke	
22.	How are recommendations from the EPA communicated to the rig personnel?	5	S. Giljebrekke	
23.	WE to send risk assessment of 3rd party chemicals, and all SDS to CDE QHSE Engineer.	6.2	H. Folkvord	
24.	Rename "COSLPromoter kjølemedium Log" or "DM#6003507 Kuldemedium log COSLPromoter" to match each other and avoid confusion.	6.3	J. Helle	
25.	Remove R-404A from rig and log if not in use	6.3	J. Helle	
26.	Please forward the Synergi report for Contained rig and sustainability inspection carried out in May 2022.	6.6	S. Giljebrekke	Closed

Table 4-4 Actions - Technical Topics

No.	Description	Ref. to Technical Scope	Responsible	Status
Technical Topics				
27.	CDE to provide info on how to get NOV to improve performance with regards to NPT.	1	K. S. Nilsen	
28.	Wellesley to set up a separate meeting with Enhanced drilling regarding RMR and to include CDE.	1	M. Laget	
29.	CDE to provide latest result related to ESD test	5	J. Helle	
30.	CDE to provide specification for the crane hook.	8	M. Anthun	Closed
31.	CDE to provide Wellesley with new helicopter certificate once obtained.	9	M. Anthun	
32.	CDE to provide pit overview	15	K. S. Nilsen	
33.	Wellesley to look into the best comms solution for both Toppand East and Gnomoria.	17	M. Laget	

5 CONCLUSION

The verification team's impression is that CDE is a rig company that has a well-functioning business management system. CDE is ISO 9001(Quality Management), 14001(Environmental management), ISO 45001 (Occupational Health and Safety Management) and 50001(Energy Management) certified.

The verification team identified two (2) non-conformances, zero (0) observations, Three (3) improvement suggestions and 33 actions. The findings are listed in Section 4. None of the findings are considered critical for the drilling operation.

CDE is requested to respond within two weeks of receiving this report on how they intend to handle the findings and send Wellesley the required information.

A separate competence review meeting will be scheduled closer to spud.

6 REFERENCES

[1] Wellesley, "Rig Intake Plan, Doc. No. TOP-WLSLY-D-TA-0900," 2023.

7 APPENDICES

[Appendix A – Notification Letter](#)

[Appendix B – Participants List](#)

[Appendix C – Summary of Reviewed Topics](#)

APPENDIX A – NOTIFICATION LETTER



Verification Notification Letter

DATE and TIME: 13.12.2023, at 09:00 – 15:00 & 14.12.2023 at 09:00 -16:00
 WHERE: Vestre Svanholmen 4
 NO-4313 Sandnes
 TO: CDE Drilling Europe AS
 ATT.: Kine Surdal Nilsen
 E-MAIL: kine.s.nilsen@CDE.no
 OUR REF.: Toppand East & Gnomoria Exploration Well Projects
 COPY TO: Callum Smyth, Morten Laget, Lars Lilledal, Helge Hamre, Åse Pettersen,
 Helene Folkvord, Tommy Skjold, Rune Smenes and Christina Rødne.
 FROM: Stig Seland
 E-MAIL: Stig@wellexpertise.com
 MOBILE: +47 970 66 458

NOTIFICATION OF RIG INTAKE VERIFICATION OF CDE DRILLING FOR THE TOPPAND EAST AND GNOMORIA DRILLING OPERATIONS

Dear Kine,

As a part of the rig intake and ongoing preparations for the Toppand East and Gnomoria exploration wells, Wellesley Petroleum (Wellesley) is planning to perform a verification of CDE Drilling Europe (CDE). Topics that will be covered is QHSE related as well as technical.

Scope

Wellesley plans to split the verification into two days. On the 13th of December we will go through the QHSE according to scopes and timings given in Appendix A, and the 14th of December we will focus on technical topics as set up in Appendix B. In addition, the plan is to perform a rig inspection(s) when we get access to the rig. The rig inspection scope will be sent separately.

Timing

13th December (QHSE topic) at CDE offices. Indicative time plan:

09:00-09:15 Presentation of attendees, Wellesley introduction to the Toppand East and Gnomoria projects.
 09:15-10:15 CDE Presents AoC Exemptions and compensating measures.
 10:15-14:00 CDE Presents QHSE related topics according to QHSE scope given in Appendix A. (Note! Lunch and break when convenient)
 14:00-14:30 Wellesley Internal work meeting
 14:30-15:00 Wellesley presents summary of observations and/or improvements

14th of December (Technical topic) at CDE's premises. Indicative time plan:

09:00-15:00 CDE presents technical related topics according to technical scope given in Appendix B. (Note! Lunch and break when convenient)
 15:00-15:30 Wellesley Internal Work meeting
 15:30-16:00 Wellesley present summary of observations and/or improvements

Please invite relevant CDE personnel.



Request for information

Please forward the requested information/documentation within 30th of November.

- All customer audits/internal audits/inspection reports for 2020-2023 (Until most recent)
- Class status report (most recent- last received was from 24.08.2022)
- ISM Document of Compliance (DOC) for CDE
- Safety Management Certificate (SMC) for COSLPromoter
- ISSC certificate for COSLPromoter
- Last ISM/ISPS audit report from COSLPromoter carried out by DNV/Class Society
- PSA Audit reports last three years
- Stretcher Plan/Assessment
- Procedure for management of Exhaust
- Procedure for management of Drones
- Material Handling plan
- Yearly DROPS inspection report
- Pipehandling matrix (ref. ON Guideline 081)

Verification team

Stig Seland	Rig Intake Lead	Verification Team Leader
Åse Pettersen	HSEQ Coordinator	QHSE
Christina Rødne	ESG Manager	Environmental, ESG and Sustainability
Morten Laget	Drilling Superintendent	Technical
Rune Smenes	Marine Advisor	Marine
Callum Smyth	Operations & HSE Manager	Wellesley Representative
Lars Lilledal	Snr. Drilling Advisor	Wellesley Representative
Helge Hamre	Snr. Operations and HSE Advisor	Wellesley Representative
Helene Folkvord	Environmental Coordinator	Observer
Tommy Skjölde	Sr. QHSE Advisor	Observer

Reporting

The verification team will present a summary with observations and/or improvement items in a closing meeting both days, at the end of the verification. A draft report will be issued within two (2) weeks after the verification.

Please confirm by e-mail (stig@wellexpertise.com) that date and timing for this verification is OK for required CDE personnel.

If need for clarifications related to this notification or the verification activity, please contact the undersigned. We look forward to meeting CDE personnel and hope that this verification will be of mutual benefit.

Kind Regards



Stig Seland
 Verification Team Leader
 Well Expertise AS
Stig@wellexpertise.com
 +47 970 66 458



Appendix A – QHSE Scope (Day 1 – 13th of December)

1. ORGANISATION

- Onshore organisation chart
- Offshore organisation chart

2. CDE PROMOTER'S NON-CONFORMANCES

Please prepare a short summary of:

- AoC exemptions
- Compensating measures
- Other Non-Conformances (internal)

3. HSE MANAGEMENT

• 3.1 Management System

- How does CDE maintain the AoC and stay updated on regulatory changes
- How does CDE ensure that the changes are reflected in company procedures/plans/instructions.
- How does CDE ensure onshore and offshore personnel's familiarity with governing documentation?
- How does CDE ensure personnel are familiar with prevailing PSA regulations?
- Follow up of (operators) service supplier "deviations" (avvik) on the rig; How does the rig document issues related to service company equipment, logistical issues, NPT? Will the operator receive any form of documentation (i.e. synergi report?) when this happens?
- How will the morning QHSE report look like?

• 3.2 QHSE goals and plans 2023

- Present CDE/ COSLPromoter HSE focus areas (goals) for 2023
- Current routines on the rig with respect to HSE meetings with operator (onshore-offshore)? Does CDE have any improvement suggestions to the HSE-meeting agenda/content?

• 3.3 Risk/Operation/Barriers

- Major Accident monitoring - Describe strategy and performance standards and how do you monitor organisational, operational, and technical barrier elements.
- Tools for use in daily assessment of risk during operations?
- Control of work. What systems are in place (permits, barriers etc.) and how does it work?
- QRA
 - How are recommendations from the QRA been handled and have they been subjected to an ALARP treatment
 - Has the risk reducing measures been implemented?
 - How are the results communicated to the crew?

• 3.4 Audits and improvements

- COSLPromoter Audit and verification plan for 2023
- External audits and outstanding actions (PSA, NMA, Operators, etc)
- Present CDE's/ COSLPromoter's Goals and activities for 2023
- How does CDE handle improvement suggestions



- Does CDE have a competence assurance system?
- Competence matrix including familiarisation (on the job training)
- Induction process
- What is minimum requirement for going offshore and how do you handle deviations
- How do you inform the managers offshore of changes to rotation plan and gaps in competence? How do you inform operator?
- Present rotation plan and mark the different personnel according to these colours:
 - Blue: New on CDE Promoter but more than 3 years in position
 - Yellow: New on CDE Promoter and less than 3 years in position
 - No colour: Experienced crew

4. WORKING ENVIRONMENT

- Health and Working Environment Plan
- Status on current working environment issues (Exhaust, noise, ergonomics, oil vapour, etc)
- Present Risk Exposed Groups matrix – Is service included in this? How does CDE follow up on working environment risk for personnel working on COSL Promoter?
- WEACH status
- What are the roles and responsibilities relating to working environment mapping for service company units (3rd party vs CDE responsibilities)?
- How does CDE verify that 3rd party equipment is according to working environment requirements?
- How are routines for registering working hours? Do you use DaWinci?
- Any issues with catering not staffed properly and unable to perform their job properly.
- FS – AMU – who is elected to participate?
- Which company does CDE use for occupational health services?
- Present the Safety delegate arrangement and familiarisation

5. EMERGENCY PREPAREDNESS

- Present the emergency response organisation
- Emergency preparedness training plan
- Data and results of last drill of performance requirements related to “rig move off” – related to ship on collision course or well release?
- Show system for monitoring of training plan and recording of improvements and results for exercises.
- How does CDE ensure that people are aware of their Safety Critical Tasks?
- How are recommendations from the EPA handled and how are they communicated to the crew.
- Do you have a stretcher plan/Assessment. Copy of training.

6. EXTERNAL ENVIRONMENT

- External environment goals/objectives, how are they operationalized and followed up (environmental impact/aspect register)?
 - **6.2 Chemical management**
 - Chemical management system (list of chemicals and risk assessments, SDS, storing of chemicals, reporting and accountancy)
 - Can you explain the process toward choice of rig chemicals (BOP fluids, dopes etc.)?
 - Which criteria has been used to secure the most environmentally friendly products?
 - Which routines are in place onboard on chemical procurement?
 - What routines do you have to secure that the chemicals taken onboard are approved?
 - What are the routines in between wells?
 - Are 3rd party chemicals HSE assessed?
 - Substitution of chemicals

**6.3 F-gases/cooling medium**

- Please present an overview of equipment containing fluorinated gases (f-gases), including GWP classes and CO2 equivalents, and maintenance interval for these.
- Is there any equipment containing f-gases that are required to be phased out/substituted? Plan for substitution for these?

6.4 Waste management

- Please present COSLPromoter's waste management plan
- What does the statistics show? Routines on securing the right focus on waste sorting by the crews.

6.5 Energy management

- Please present how CDE ensures energy efficient operations on COSLPromoter.
- Please present status on relevant KPIs on energy management (Energy Performance Indicators)
- Please present status on technical initiatives in CDE with aim to reduce fuel consumption?
- Any suggested improvement proposals from offshore organization? If so, please present Synergies

6.6 Other

- Have any external environment verifications been performed?

7. ESG (IF NOT INCLUDED IN ABOVE TOPICS)

- Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII) Requirements
- ESG and sustainability KPIs
- Ongoing work related to sustainability

8. DROPPED OBJECTS

- Please present the DROPS management system (manuals, routines, etc.)
- Working at heights
- CDE dropped object observation programs/awareness
- Routines for sea fastening and securing cargo?

9. NGO'S

- General principles/procedure
- Any previous experience?



Appendix B – Technical Scope (Day 2 – 14th of December)

1. MAINTENANCE

- a. COSLPromoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. Please provide an overview/description on how the maintenance system works
 - Tagging status
 - How does CDE ensure that Safety critical equipment is "tagged" as safety critical with the relevant priority and criticality (Ref West Phoenix audit)?
 - Explain routines for handling safety/high critical jobs
- c. When was the last audit of the maintenance system performed? Inhouse or external? Status of same? Please provide the latest audits.
- d. Status on the rig's maintenance? The WO's below will be tracked during the rig intake.

Please provide current status on:

- Total overdue corrective work orders (CWO) that are safety critical elements (SCE)
 - Total overdue planned work orders (WO) that are SCE

 - Total open CWO that are SCE
 - Total open planned WO that are SCE

 - Total open CWO that are not SCE
 - Total open planned WO that are not SCE
- e. Give an update on NPT's > 3 hrs. on the rig and root causes
 - Riser/slip joint
 - Top drive
 - Pipe handling
 - Etc.
 - f. Any 3rd party service inspections done recently? Please provide an overview.
 - g. Any identified repair, overhaul or replacements planned prior to and/or subsequent to the Toppand East and Gnomoria exploration wells?
 - h. Please provide a list of drilling and well related equipment installed and identified as temporary equipment.
 - i. Any procedures in place on how to preserve spare parts on the rig

1.2 CRITICAL SPARES

- a. What is considered critical spares and what is the philosophy behind it? Please provide a list.
- b. Location of the critical spares?

2. STRUCTURAL INTEGRITY

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. Please provide most recent information
- c. Please provide status and documentation related to Air gap and wave loading.
- d. Compliance to regulations

3. VDL CAPACITY & DECK STORAGE AREA

- a. Has there been carried out any modifications, added weight's affecting the VDL?
- b. Please provide realistic numbers



- c. Wellesley intends to maximize fluid stored onboard to limit transfer frequency. Any issues with this approach?

4. MARINE

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of main elements (including General Arrangement drawings, design standards and performance)
 - Ballast System
 - Watertight doors
 - Tanks & Vents
 - Sea water Pumps
 - Bilge Pumps
 - Fire Pumps
 - Compressors & Air
 - Water Makers
 - HVAC
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig.
- d. When was the last inspection of the loading hoses and loading station performed?
 - All transfer procedures in place?
- e. Certification expiry / Renewal
 - Copies of all Class, Flag State and IMO certificates and documents
 - FMEA
- f. Any marine related incidents or issues?
- g. Status on marine critical eqm. – spares and backup
- h. MOB – boat deployment with crane vs davit, weather limitation and risk assessment
- i. Competence
 - Marine crew competence requirements

5. POWER GENERATION & ELECTRICAL SYSTEMS

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including design standards and performance)
 - Main Engines
 - Emergency generator
 - Rig saver & Other safety functions
 - Purifiers
 - Supply & Exhaust Fans
 - Generators
 - Power management & distribution
 - ESD system
- c. When was last audit verification performed and by whom?
- d. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- e. Incidents, Downtime & Corrective actions
 - Any recent "black outs" and why?
 - DP and/or Power management related incidents?
 - Power Management testing. Rig savers approved.
- f. Certification expiry / Renewal
 - Verification ESD testing and results since 2020.
 - Arc Flash mapping performed – any issues?
 - ESD Levels / Cause & Effect.



g. Any issues?

6. STATION KEEPING

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including design standards and performance)
 - Thrusters
 - DP system
 - Acoustic and other position reference systems
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- d. Certification expiry / Renewal
 - DP Trials
 - FMEA
- e. Competence
 - DP crew competence requirements

7. SAFETY EQUIPMENT

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including design standards and performance)
 - Fire & Gas Detection
 - PA & Alarms
 - Fixed firefighting systems
 - Portable firefighting systems
 - Lifeboats
 - Mob boats
 - Life Rafts
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- d. Certification expiry / Renewal
 - Chemical-foam analysis.
 - Pressure test certificates of BA and Halon/CO₂ bottles.
 - Life-raft certificates.

8. CRANES & MATERIAL HANDLING

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including, load radius charts, general arrangement drawings, design standards and performance)
 - Main Cranes
 - Auxiliary
 - Deck Space
 - Sack store
 - Forklift
- c. Crane reach and capacity for heavy lifts.
- d. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- e. Certification expiry / Renewal
 - NDT records
 - Crane Load test
 - Loose lifting equipment
- f. Competence
 - Communication when lifting.



- Clear responsibility during lifting operations

9. AVIATION

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including General arrangement drawings design standards and performance)
 - Helideck
 - Refueling
 - Fire fighting
 - Weather monitoring
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- d. Certification expiry / Renewal
 - Certification

10. DRILLING & HOISTING EQUIPMENT

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including General arrangement drawings, design standards and performance)
 - Derrick & Setback
 - Rotary Table
 - Draw works
 - Crown and traveling equipment
 - Drilling Control System (including description of anti-collision or Zone Management System)
- c. Any issues with drilling instrumentation? – volume, flow, pressure, torque etc.
 - What calibration program is used? When last checked?
 - What system is used for alignment with 3rd party systems?
 - What system is used if different readings?
- d. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
 - Upgrades on drilling controls?
- e. Certification expiry / Renewal
 - Has the Critical load path been exposed to loads greater than 70 % of rated load?
 - Last Drops inspection
 - Last NDT
 - Certificate of Compliance

11. PIPE HANDLING

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including design standards and performance)
 - Pipe Racking Equipment
 - Iron Rough neck
 - Elevators & Inserts
 - Power slips
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- d. Certification expiry / Renewal
 - Last Drops inspection



- Last NDT
- e. Any gaps from 081 remote pipehandling matrix?

12. DRILLING TUBULARS

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (design standards and performance)
 - Rig provided tubulars & XO
 - Fishing tools
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- d. Certification expiry / Renewal
 - Pipe inspection class.
 - In field inspection or pipe rotation?

13. DRILLING FLUIDS STORAGE, AGGREGATION AND PUMPING CAPABILITIES

- a. Any issues with the system?

14. HP MUD SYSTEM

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including piping diagrams, design standards and performance)
 - Mud pumps
 - Standpipe manifold
 - Pressure relief
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- d. Certification expiry / Renewal
 - Piping WT inspection reports.
 - Pressure relief certs

15. LP MUD SYSTEM

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including General arrangement drawings, design standards and performance)
 - Shale shakers
 - Vacuum Degasser
 - Mud pits
 - Trip / Strip Tanks
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- d. Certification expiry / Renewal
 - Calibration of sensors for Mud pits and tanks.

16. WELLCONTROL & SUBSEA EQM

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (including General arrangement drawings, design standards and performance)
 - Pipe Rams
 - Shear rams
 - Annular
 - Connectors



- Fail safes
- Accumulator unit and controls system (Accumulator drawdown test results)
- BOP guidance
- Bop Handling system
- Bop Test Pump & Stump
- Emergency Disconnect Sequence Functions
- Riser (quantity of serviceable riser sufficient for 490m)
- Riser tensioning system
- Riser running Tools
- Coflexips
- Choke & Kill Manifold
- Diverter
- Poor Boy
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- d. Is the cement unit available as backup to the mud pumps in a well control situation?
- e. Has CDE done any exercises/ tabletops related to connecting up to the cement unit in a well control situation?
- f. Certification expiry / Renewal
 - Piping WT inspection reports.
 - CoC expiry Dates
 - 3. party audits/survey reports conducted to be submitted.
 - Accumulator calculations for the planned water dept, included shearing of pipe.
 - Compliance Gap analysis for the latest applicable standards (API std 53. DNV OS-E101. Etc.)
- g. Competence
 - Compliance towards IOGP 476
 - Explain the rig contractor and service personnel involvement in offshore planning and well control training for the following personnel:
 - Mud/Data Logger
 - Mud Engineer
 - Cementer
 - Derrick Man/ Pump Room Operator
 - Stability Systems Operators
 - Subsea operational and maintenance procedures.
 - Competency and training matrix for the subsea engineers, including the list of planned subsea personnel.

17. COMMUNICATION & IT

- a. CDE Promoter/ CDE Focal Point: INSERT NAME & EMAIL
- b. System Description of Main Elements (design standards and performance)
 - Who is the comms provider?
 - Status on the equipment?
 - Backup considerations if VSAT fails?
 - Verify sufficient number of UHF radios on the rig
 - How is cyber security handled?
- c. Upgrades or Modifications performed (including associated MOCs)
 - List/report of safety bulletins/product alerts etc. from OEM's captured by the rig
- d. Certification expiry / Renewal
- e. UPS Verification of draw down test. Battery capacity

APPENDIX B – PARTICIPANTS LIST

Meeting: Rig Intake Verification
Meeting COSL promotor, HSE & Technical

Location: COSL Office, Forus

Date: 13 December 2023

 **WELLESLEY**
PETROLEUM

HSE TOPICS

Participants

Name	Role	Company	Mail
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Participants

Name	Role	Company	Mail
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TECHNICAL TOPICS

Participants

Name	Role	Company	Mail
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APPENDIX C – SUMMARY OF REVIEWED TOPICS

DAY 1 HSE SUMMARY

The summary of the reviewed HSE topics is presented in Table 6-1. The scope is highlighted by using blue text.

Table 6-1 Summary of reviewed HSE Topics

Main Topic	Description	Answer/Comment /Notes	Follow-up
1 Organisation	Onshore organisation chart Offshore organisation chart	CDE presented org. charts for COSLPromoter onshore and offshore organization (list from PowerPoint). CDE organizations were presented in detail, and key positions were highlighted.	Action 1. CDE to send CDE presentation including updated org. chart.

[illegible]

3. HSE Management	3.1 Management System How does CDE maintain the AoC and stay updated on regulatory changes? How does CDE ensure that the changes are reflected in company procedures/plans/instructions? How does CDE ensure onshore and offshore personnel's familiarity with governing documentation? How does CDE ensure personnel are familiar with prevailing PSA regulations? Follow up of (operators) service supplier "deviations" (avvik) on the rig; - How does the rig document issues related to service company equipment, logistical issues, NPT? - Will the operator receive any form of documentation (i.e. synergis report?) when this happens? How will the daily QHSE report look like?	3.1 Management System As a member of the Regulatory forum of the Norwegian Shipping Association, CDE have access to latest update in the industry. CDE is also utilizing the <i>Adept Compliance software</i> , which provides alerts on changes in relevant regulations and news. A built in AI function in the software provides a live search on selected topics and changes. CDE is planning to implement a new position as "Compliance advisor" to ensure close follow up on regulatory requirements, and that changes are handled in the CDE procedures and plans. CDE is compliant with relevant regulations and standards such as ISO 9001, 14001 45001 and 50001, CDEs <i>Zero incident</i> policy is stated to be " <i>100% compliance to 100% of our policies & Procedures, 100% of the time</i> ". All inspections, verifications, observations, and incidents are registered and handled in Synergi. Wellesley will get access to the observations and incidents, on a daily HSE report. And more detailed information and documentation on handling of incidents will be provided on dedicated safety bulletins. Synergi is used for deviation handling. Quality Deviations are registered for suppliers / 3.party companies. CDE has Computer Based Training (CBT) for Company Management System course for all employees. This is stated in the competence matrix. All managers have a requirement for 40 hours HSE course, this course includes regulatory requirements. A CBT course for regulatory requirement is available for other positions, ref. competence matrix. Operator will receive Synergi report upon request. COSL does not document NPT for 3.party companies.	Action 4. CDE to send a copy of a daily HSE rapport.
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3. HSE Management	3.2 QHSE goals and plans 2023 Present CDE/ COSLPromoter' s QHSE focus areas (goals) Current routines on the rig with respect to HSE meetings with operator (onshore offshore)? Does CDE have any improvement suggestions to the HSE-meeting agenda/content?	Focus areas: • No incidents • Proactive • Value added HSE Statistics: • No personal injuries • No uncontrolled environmental discharges • Offshore sick leave is 9,5% (goal is <5) • No dropped objects >40 joule • Dropped object <40 joule is 3 (goal is 0) The CDE proactive KPIs are: • Number of Safety Observations reported per month/ unit is 2971 (goal ≥ 1000) • Number of Proactive PDO inspections/checks per month is 603 (goal ≥ 300) • Number of Safety Talks per month per unit is 867 (goal ≥ 300) • Number of HSE inspections performed onboard per. month is 5,9 (goal ≥ 4) • Number of senior management visits offshore per unit per year is 2 (goal 3) • Number of Rig management visits offshore per unit per year is 13 (goal ≥ 3) The rig crew have participated in an Observation technique course. Three sessions have been facilitated on the rig. A yearly CDE QHSE Plan is issued for COSLPromoter, which aims to reflect continuous QHSE performance improvement. Targets in the plan are to meet identified performance objectives. <i>COSLPromoter presented the QHSE Plan for 2023</i> - Compliance with CDE Safety Standards - Visible Leadership - Safety Focus	Action 5. CDE to forward the 2024 QHSE Program Action 6. CDE to forward Promoters 2024 QHSE Plan. Action 7. Forward agenda for Bi-weekly HSE meeting and suggest time for meeting.
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Main Topic	Description	Answer/Comment /Notes	Follow-up
		- Red zone management - Monitoring and follow-up of Occupational Health and Work Environment - Energy Management - Environmental Management - Compliance with Internal MOC routines in Synergi CDE Safety Standards & LSR-tool used on contract for Equinor in order to implement "<i>Best practices</i>". Including 1-pager guidelines for selected processes and access to handbooks, both in print and electronic versions. CDE has previously had monthly HSE meetings onshore/offshore with Equinor but not lately.	

3. HSE Management	3.3 Risk/Operation/Barriers - Major Accident monitoring - Describe strategy and performance standards and how do you monitor organizational, operational, and technical barrier elements. - Tools for use in daily assessment of risk during operations?	A Barrier management system is implemented to manage MAHs. CDE presented the barrier management system. - Defines critical technical systems (Barriers/ SECE), procedures and competence essential to control hazards - Performance standards established and monitored for Barriers/ SECE - Condition of Barriers/ SECE shall be known to relevant personnel at all times System consists of: - Star maintenance system - Criticality analysis and risk-based maintenance philosophy - Performance standards - Bow-ties - Barrier monitoring tool and KPI portal COPR has 18 performance standards. SECE= Safety and Environmental Critical Elements Technical barrier elements are visualized in SharePoint and connected to the maintenance system (STAR). A project is ongoing with a British company to visualize operational and organisational barriers. Relevant personnel are trained in barrier Management as part of “on the job training”. L2-HSE-56062 Risk Management Procedure is according to ISO 31000 and describe the process. Other documents are: - L2-HSE-20683 Risk Acceptance Criteria - ALARP - L2-HSE-85449 Risk Assessment Tools - FO-COSL-83255 Task Risk Assessment Form - FO-COSL-87276 Risk Assessment Form - FO-COSL-28280 Safe Job Analysis Form - L3-HSE-254261 Operational Risk Assessment (ORA) - FO-COSL-306113 Operational Risk Assessment Form L2-HSE-85449 Risk Assessment tools describes different tools for risk assessment: - RISK card	Action 8. Forward plan for Operational and Organisational barrier monitoring.
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Main Topic	Description	Answer/Comment /Notes	Follow-up
	Control of work. What systems are in place (permits, barriers etc.) and how does it work? Quantitative Risk Analysis (QRA) - How are recommendations from the QRA been handled and have they been subjected to an ALARP treatment - Has the risk reducing measures been implemented? - How are the results communicated to the crew?"	- SJA - Task Risk assessment - Risk Assessment The work permit system is used to control and manage risk. The procedure L2-HSE-21236 Work Permit describes the system. CDE use an electronic system called Smart Permit. The system is not connected to STAR and does not contain SJA module. Recommendations and measures are registered and handled in Synergi 247023, but not specific ALARP treatment. CDE has not informed the RIT how the results from the QRA are communicated to the rig personnel.	Action 9. Inform RIT how the results from the QRA have been communicated to the Rig Personnel.

Main Topic	Description	Answer/Comment /Notes	Follow-up
3. HSE Management	3.4 Audits and improvements - COSLPromoter Audit and verification plan for 2023 - External audits and outstanding actions (PSA, NMA, Operators, etc) - Present CDE/ COSLPromoter Activities for 2024 - How does CDE handle improvement suggestions	L2-QUA-61303 Audit Procedure describes how to plan and perform an audit. All audit reports are recorded in Synergi for follow up. Annual activity plans are established for each unit in synergi (241064). COPR was audited by Havtil (previous PSA) in: 2020 Marine systems - Synergi 169988 – All findings closed 2021 Logistics, work at height, safe use, and maintenance of lifting equipment- Synergi 177218 – All findings closed 2023 Helicopter deck operations - Synergi 244099 three findings overdue and still open 2023 Working environment - Open Improvement suggestions are recorded in synergi. Three supplier Audits conducted in 2023: - CCB – Synergi 242889 – Findings is not recorded? - Wartsila – Synergi 242890 – Findings is not recorded? - Neway Oil Equipment – Synergi 284071- The heading of the report says audit, but the content says that it was a quality visit. One action is recorded but the report does not reflect this. CDE have used Mærsk Training (previous ResQ) for several years but never conducted an audit. Subsea7 is contracted through CDE and supply the ROV services on COPR. Wellesley have never used Subsea7 before and is therefore included in the ARV plan for Toppand East and Gnomoria. Wellesley requested to perform a joint audit before spud.	Action 10 . CDE to forward a copy of the letter to Havtil regarding the last audit. Action 11. CDE to forward a synergi report with open findings from audits. Action 12. CDE to forward External Audit plan for 2024. Action 13. CDE to forward COPR internal audit plan for 2024. Action 14. Plan for a joint audit of Subsea7 in January/February 2024.

3. HSE Management	3.5 Competence Management Present Competence management system Does COSL have a competence assurance system? Competence matrix including familiarization (on the job training) Induction process What is minimum requirement for going offshore and how do you handle deviations How do you inform the managers offshore of changes to rotation plan and gaps in competence? How do you inform operator?" Present rotation plan and mark the different personnel according to these colours: - Blue: New on COSLPromoter but more than 3 years in position, - Yellow: New on COSLPromoter and less than 3 years in position, - No colour: Experienced crew	The CDE Competence and Training Management system, L1-ADM-3957 HR & Admin. Management Manual, was presented with underlying procedures: • Recruitment L2-HR-272299 • Competence & Training Management L2-ADM-272298 • On the Job Training Offshore L3-HR-211895 Training requirements are specified in matrices and organised in Spreadsheets. Each role in the organisation is specified. Example matrices were presented. Training matrices with requirements for Offshore roles were presented. The matrices are updated regularly and is part of the overall HR system. A crew plan was presented with colour coding as requested; however, it was decided to review the crew plan closer to spud. Only three people had less than 3 years on the rig. The OCS Competence and Course Administration module, is utilised to document, organise and to ensure each employees compliance to competence requirements. IOGP 476, Level 1 is not part of the matrices, but CDE is evaluating if these requirements should be implemented. A separate competence review meeting will be scheduled closer to spud. Subsea7 is a ROV service contractor through CDE and should be verified against IOGP476. The onboarding tool Preppio, is used to follow up a unified introduction to new employees. An important part of the introduction to work is also the On-the-Job training program, organised with a set of modules. The OJT programs are divided into Critical and General OJT. Documentation of the OJT process is done in the OCS. All new crew members are followed up by a designated mentor as part of the introduction to work on COPR. Before personnel are qualified to travel offshore, there's a set of minimum training requirements. 100% compliance of the following is defined: • Minimum training requirements	Action 15. CDE to send a copy of the competence requirements Action 16. Schedule a competence review meeting close to spud where rotation plan is presented.
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Main Topic	Description	Answer/Comment /Notes	Follow-up
		• OJT Critical Training program • Emergency Preparedness Organisation Minimum training requirement for new personnel is a mandatory electronic Safety course performed before travel offshore and on arrival to the rig, a safety induction is organised. BOP operations are example of work process requiring critical training OJT. OIM is responsible for checking the status of mandatory courses and required training, and subsequently granting an all-clear to arrive to the rig. A status displaying all personnel is provided with the Cloud Crew report, which is provided to all Section Leaders. The report is issued once each month for management review. Any deviation to the requirements is handled in Synergi. The Safety officer or Toolpusher is responsible for ensuring documentation of Safety training and of potential deviations. Rig Manager is used to record Emergency training and exercises. Service personnel participation is also logged. Only CDE Employees have a digital course before going offshore. CDE have not a competence assurance system working on Norwegian Continental Shelf.	



4. Working env.	• Health and Working Environment Plan • Status on current working environment issues (Exhaust, noise, ergonomics, oil vapor, etc) • Present Risk Exposed Groups matrix – Is service included in this? • How does CDE follow up on working environment risk for personnel working on COSLPromoter? • Present WEACH status • What are the roles and responsibilities relating to working environment mapping for service companies? • How does CDE verify that 3rd party equipment is according to working environment requirements? • How are routines for registering working hours? Do you use DaWinci? • Any issues with catering not staffed properly and unable to perform their job properly.	Relevant documents for working environment are: • L2-HSE-2128 Health & Working Environment manual. • L3-HSE-30965 Working Environment Committee • L3-HSE-203156 Risk Assessment of chemicals • Mask and Glove Guide • Health and WE program The Health and WE program was presented. The program is prepared in cooperation with the Occupational Health Service provider Medco. The psychosocial working environment on board is very good according to HVO. Both between CDE employees, client and 3rd party. There are no sick leaves that indicate an unhealthy working environment. CDE is working with the working environment survey and analysing trends. There are some challenges related to the surveys since the rig is off and on contracts. Exhaust is a challenge mainly on drillfloor and pipe deck. Have not received any reports that this is a problem in the cabins. Sensors are placed in exposed areas and on personnel. A local Exhaust survey was completed in September 2023 by Aeron. Planning to measure elementary carbon. Equipment will be sent out for medic to measure. A noise dosimeter survey was carried out in June 2023. Area noise surveys have not been carried out yet. Planning to get Sinus offshore for area noise mapping in March 2024. HAVS – Tools have been marked with exposure time according to guideline. CDE have no routines for checking equipment towards working environment requirement (NORSOK S002) for 3rd party equipment (Service companies). Working hours are registered in OCS/Rig Manager. Catering services is supplied by ESS. AMU consist of five representatives from the employer and five from the employees. Drilling supervisor is representing the employer and SLB from the	Action 17. Risk Exposed Group matrix to be forwarded. Action 18. WEACHs to be forwarded. Action 19. CDE to forward procedure for temporary equipment
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Main Topic	Description	Answer/Comment /Notes	Follow-up
	• FS - AMU – who is elected to participate? • Which company does CDE use for occupational health services? • Present the Safety delegate arrangement and familiarisation	employee. A new representative from the employee will be elected since SLB cementing will not be used for Toppand East and Gnomoria. Medco is the Occupational Health Service. Safety delegate arrangement was not presented. CDE has a L3-HSE-54146 Safety Delegate Manual. The manual explains the role and tasks for the safety delegates. Medic has POB as an additional task.	Action 20. A new safety representative should be elected from the service companies. Action 21. Forward list of safety delegates and status on courses.

Main Topic	Description	Answer/Comment /Notes	Follow-up
5. Emergency preparedness	• Present the emergency response organisation • Emergency preparedness training plan • Data and results of last drill of performance requirements related to “rig move off” – related to ship on collision course or well release? • Show system for monitoring of training plan and recording of improvements and results for exercises. • How does CDE ensure that people are aware of their Safety Critical Tasks? • How are recommendations from the EPA handled and how are they communicated to the crew. • Do you have a stretcher plan/Assessment. Copy of training.	CDE presented the emergency response organisation offshore and onshore. CDE's 2nd line is supplied by Mærsk Training (ResQ). The central control room is the emergency control centre offshore. A one- page Safety Alert will be sent to the client when there is an incident. Experience/bulletins transfer shall be sent to dedicated email address. This address is Bulletins@Cosl.no. An Emergency Preparedness Training plan was presented. The training plan was dated 03.01.2022. Rev. 10. Drills are logged in Kongsberg's “Rig Manager”. Last drill, ship on collision course was carried out 15.10.2023. Results and debrief were logged. A «on the job training» program is prepared for Safety Critical Roles. The recommendations/actions from EPA are recorded in Synergi 24074. CDE did not inform the RIT how the result from the EPA is communicated to the rig personnel. A stretcher plan is prepared and tested. CDE did not have a procedure for handling drones on the rig. The rig should know what to do if a drone lands on the rig. The Emergency preparedness bridging document will cover reporting.	Action 22. How are recommendations from the EPA communicated to the rig personnel? IMP-2: The RIT recommends preparing a L3 procedure for handling drones.

Main Topic	Description	Answer/Comment /Notes	Follow-up
6 External Env.	6.1 External environment goals/objectives • How are external environment goals/objectives operationalised and followed up (environmental impact/aspect register)?	Environmental goals are part of the QHSE Program and QHSE Policy. The rig has no history of spill to sea. CDE has not used Loss of Primary Containment as a Key Performance Indicator.	

	6.2 Chemical management • Chemical management system (list of chemicals and risk assessments, SDS, storing of chemicals, reporting and accountancy) • Can you explain the process toward choice of rig chemicals (BOP fluids, dopes etc.)? • Which criteria has been used to secure the most environmentally friendly products? • Which routines are in place onboard on chemical procurement? • What routines do you have to secure that the chemicals taken onboard are approved? • What are the routines in between wells? • Are 3rd party chemicals HSE assessed? • Substitution of chemicals	6.2 Chemical management Management of chemicals are described in the Chemical Management procedure L2- HSE-216219. The database EcoOnline is used for chemical risk assessments and storage of SDSs. Chemicals must be approved in STAR maintenance program before procured and storekeeper is responsible for checking that the chemical is approved in this system before distributing the chemical on the rig. If chemical is not already in the system, an application needs to be submitted to section leader and subsequently risk assessed. Chemical reports are sent monthly by QHSE Engineer, and accountancy of measurements are described in the Environmental Measurement Program – COSLPromoter, 201—0336--225044. Choice of chemicals are based on technical, health and environmental criteria. Substances with high concerns according to attachment XIV in REACH shall be avoided. Chemicals listed on Norway's priority list must be minimised if possible. The priority list contains substances that are easily degradable, bio accumulative and have serious long-term effects or is harmful to the environment. Use of substances and products classified as highly toxic, toxic, cardiogenic, allergenic, mutagenic, substances that can affect reproduction and substance that is highly corrosive must be minimised. Use of this type of material and products should be limited and preferably replaced by other less dangerous alternatives. If limitation or substitution is not possible this must be documented. CDE has a risk-based approach to substitution of chemicals. Chemicals classified with health hazard 4 or 5 and chemicals classified with red and black HOCNF have highest priority for substitution. The chemicals are evaluated continuously, and the substitution plan has been updated on a regularly. However, no procedure/information of how often and which chemicals was evaluated was available. Furthermore, it was not evident how chemicals not prioritized for substitution was handled. Better and more environmentally friendly can be available even though they are categorized as yellow.	Action 23: WE to send risk assessment of 3rd party chemicals, and all SDS to CDE QHSE Engineer. NC-1: Update measurement program according to <i>Activity Regulations §70</i>.
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Main Topic	Description	Answer/Comment /Notes	Follow-up
		The verification team has received the rig specific measurement program prior to the verification. Some chemicals, e.g. Vaptreat, used on the rig are not included in measurement program, as it should according to the <i>Activity Regulations §70</i>. The storekeeper is responsible for checking all chemicals that arrive on the rig if they are marked correctly and have the correct documentation. Furthermore, it is checked if they have been properly risk assessed. If not, chemical must be quarantined. CDE does not have any routines for checking chemicals between wells, and the verification team suggest implementing such routine. The chemical procedure says that 3rd party service companies are responsible for removing chemicals and manuals with documentation when leaving the rig. The medic shall be informed. The medic is responsible for verifying chemicals recorded in Eco Online and the chemicals stored on the rig, bi-weekly. In addition, a 6 monthly work order for verification of chemicals are registered in the maintenance system (STAR). A report from the verification shall be logged in STAR. CDE requires all 3rd party chemicals to be approved before arriving on the rig. The operator is responsible for acquiring information (SDS, risk assessment, etc.) from service companies. The documentation shall be sent to the QHSE Engineer for evaluation. The evaluation will be carried out by the chemical committee. Once approved the operator Environmental Advisor sends the information to the COPR medic.	
	6.3 F-gasses/cooling medium Please present an overview of equipment containing fluorinated gases (f-gases), including GWP classes and CO2 equivalents,	6.3 F-gasser Management of f-gases is described in "L3-TEC-294941 F-gas management". The procedure describes relevant rules, regulations and requirements, responsibilities related to leak testing, labelling and also a list of Global Warming Potential (GWP) for various f-gases.	Action 24: Rename "COSLPromoter kjølemedium Log" or "DM#6003507 Kuldemedium log COSLPromoter" to match each other and avoid confusion.

Main Topic	Description	Answer/Comment /Notes	Follow-up
	and maintenance interval for these. • Is there any equipment containing f-gases that are required to be phased out/substituted? Plan for substitution for these?	The Technical Assistant is responsible for maintaining the F-gas register and for annual regulatory reporting of F-gas emissions to air. As the technical assistant is responsible for maintaining equipment containing f-gases, he/she shall maintain a valid certificate (not verified during onshore verification). An overview of refrigerants is available in "COSLPromoter kjølemedium Log". The document is called "DM#6003507 Kuldemedium log COSLPromoter" in the f-gas management procedure and these two should be called the same. CDE has presented an overview of equipment containing f-gases, with type of medium and GWP in CO₂e. CDE also informed that AC LIR and ACPilot house, will be substituted in 2024 with glycol. The Kuldemedium log shows that R-404A is present on the rig, but it is not listed in the overview of equipment containing f-gases R404-A has a GWP factor of 3922, ref. L3-TEC-294941 F-gas management. The verification team would like to remind CDE that from 1 January 2020, it has been prohibited to use f-gases with a GWP factor of 2500 or more for service and maintenance on cooling systems with a filling quantity of 40 tonnes of CO₂ equivalents or more. If the medium is not in use, the verification team recommends removing it from the rig. The leak testing for equipment containing f-gases is scheduled in the STAR maintenance system. However, the procedure, F-gas management, shows testing should be carried out based on amount of kg gas, or GWP in CO₂e. Leak detection was previously based on kg gas, but according to the updates in the <i>Product Regulations §6a</i>, detection shall be based on GWP in CO₂e, not kg gas.	Action 25: Remove R-404A from rig and log if not in use
	6.4 Waste management • Please present COSLPromoter's waste management plan • What does the statistics show? Routines on securing the right	The OIM has the overall responsibility for waste management on board the rig. Section leaders are responsible for waste sorting/handling in their respective departments/areas. The waste is classified as hazardous/non-hazardous and then into further subcategories. Hazardous waste is classified by the EU system's EWL codes and the current Norwegian waste substance number system.	

Main Topic	Description	Answer/Comment /Notes	Follow-up
	focus on waste sorting by the crews.	COPR has a Waste Management Plan L4-HSE-COSLPromoter-58477. The plan shows the locations of waste segregation equipment and outlines the strategy for segregation onboard. Appendix 2 in the plan shows a garbage disposal plan. All waste is stored securely to prevent loss/leakage/spills. COPR keeps a Garbage Record book and when on contract all waste is manifested and sent onshore via Operators logistics system and monthly reports are generated to the receiver. Hazardous waste is declared by ADR (avfallsdeklarering) rules. CDE was not able to present waste sorting statistics as they have not received reports from Equinor. Information on waste segregation given to all personnel during safety induction.	
	6.5 Energy management • Please present how CDE ensures energy efficient operations on COSLPromoter • Please present status on relevant KPIs on energy management (Energy Performance Indicators) • Please present status on technical initiatives in CDE with aim to reduce fuel consumption? - o “Energy Control Dashboard” dashboard been implemented on COSLPROMOTER? • Any suggested improvement proposals from offshore	6.5 Energy management CDE has an ambitious goal of reaching net zero emissions within 2025. CDE has established objectives and relevant targets consistent with the Low Emission & Energy Policy (DM#351970). Objectives and targets are essential in improving the energy performance and action plans are established and maintained with identified responsible person and a due date for completion. In order to reach the goals, the company has developed a “Energy and Carbon Efficiency Plan” (DM# 349445) and has identified three major areas to improve energy efficiency: 1. Administrative measures 2. Energy Control 3. Energy Saving solutions All measures for (1) Administrative measures and (2) Energy control is either ongoing or implemented on COPR. Several measures are identified within the area of (3) Energy saving solutions, and the status for each measure for all CDE rigs are listed in the document.	

Main Topic	Description	Answer/Comment /Notes	Follow-up
	organization? If so, please present Synergies	To apply knowledge and skills to achieve intended results, all employees are introduced to the Energy Management awareness training via the Training portal and Introduction to CDE. Following the installation of CDEs Energy Control System together with Kongsberg Maritime and NOV, it is possible to differentiate between the main energy consumers on the rigs where the upgrades have been completed. The Energy Control Dashboard is used for live monitoring, logging, and review of historical data. Thereby enabling CDE to identify significant energy users, set new baselines and establish energy performance indicators (EnPI) for continuous improvement of the energy performance. Monitoring of total fuel consumption is established through the Monthly QHSE Report for each rig. The monitoring will also include the established EnPI(s) relevant for each rig. The historical daily average diesel consumption for COPR shows 20,8 tons/day, right above the EnPI which is set to below 20 tons/day. CDE has defined Green Operations, ref. Energy Management Manual, and aim to operate the rigs in accordance with the Green Operations criteria as much as possible. The defined percentage of Green Operations is evaluated during the Management Review meetings. CDEs Energy Review is conducted 3 times per year and provides an analysis of energy efficiency, energy use and energy consumption, needed to identify the SEUs and opportunities for energy performance improvement. The results from the review are used as input to the established Management Review meetings. COPR does not have a rig specific energy management plan, but the Energy and Carbon Efficiency Plan (DM#349445), Guidelines for Energy Control (L3-MAR-358069) and the KIMS system are considered to be adequate as according to the requirements in the <i>Activity Regulations §61a</i>. CDE's management system has been verified by DNV to conform to the Energy Management System standard, ISO50001:2018.	

Main Topic	Description	Answer/Comment /Notes	Follow-up
	6.6 Other Have any external environment verifications been performed?	OKEA performed a Contained rig and sustainability inspection in May 2022.	Action 26: Please forward the Synergi report for Contained rig and sustainability inspection carried out in May 2022.
7. ESG	• Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII) Requirements • ESG and sustainability KPIs • Ongoing work related to sustainability	KPIs related to ESG is included in the company specific KPIs, described in the QHSE Program, e.g. environmental discharges, energy consumption and worker health and safety practices. CDE has established a Sustainability policy which defines the Company's overall ambitions in sustainability and serves as a broad framework for all the business processes and decision making. CDE have a solid owner with stable ratings in China Oilfield Services Limited, which is listed at the Shanghai Stock Exchange. Evaluation of how the ESG reporting requirements will influence the company is ongoing, latest a part of Management Review held in December 2023. CDE has carried out a due diligence Assessment related to human rights, ref. Human Rights Due Diligence 2023, with the purpose to describe the company's and its subsidiaries policies, processes and activities related to human rights in accordance with the Norwegian Transparency Act. Drilling rigs are currently exempted from the EEXI and CII requirements, however, the regulations are becoming stricter, and the verification team suggest that this regulation is monitored.	
8. Dropped objects	• Please present the DROPS management system (manuals, routines, etc.) • Working at heights	CDE presented the DROPS management system. The system consists of several documents: • L3-HSE-98572 DROPS procedure • CH-COSL-278894 Drops Inspection (PDO Sjekking I arbe.omr.) • Picture books established for preventative checks of high-risk areas DROPS inspections are recorded in the STAR maintenance system.	

Main Topic	Description	Answer/Comment /Notes	Follow-up
	• CDE dropped object observation programs/awareness • Routines for sea fastening and securing cargo?	DROPS inspection shall also be conducted before and after tophole drilling, jarring and bad weather. Documents for working at heights: • L3-HSE-36397 Working at height procedure • L3-HSE-215007 Routines for work at heights and PFAS equipment • CH-COSL107723 Check list for work at height • FO-COSL-314104 Work at height emergency rescue plan • CH-COSL-228386 Adverse weather checklist Weather restrictions for working at height are 3m significant wave height and 30 knots. Procedures for Sea fastening and securing of cargo: • L3-MAR-207342 Sea fastening • L3-MAR-34830 Adverse Weather Procedure • L4-MAR-104921 Marine Operations Manual • CH-COSL-68389 Hurricane Preparation Checklist • CH-COSL-228386 Adverse Weather Checklist Equipment for sea fastening and securing: • Winches and wire for sea fastening. • Guide rollers for guiding. • Welded on D-links lashing points. • Hummervoll high-end antiskid deck coating • Bumper bars • Heavy duty securing equipment Last DROPS inspection carried out in January 2023. All findings are closed.	
9. NGO's	• General Principles/procedure • Any previous experience?	L2 - HSE – 335532 NGO Security and Communications Plan	

Main Topic	Description	Answer/Comment /Notes	Follow-up
		Experience from New Zealand: COSLProspector bordered by Extension Rebellion.	

DAY 2 TECHNICAL SUMMARY

The summary of the reviewed technical topics is presented in Table 6-1. The scope is highlighted by using blue text.

Table 6-2 Summary of reviewed technical topics

Main Topic	Description	Comment/notes	Actions
1. Maintenance	a. COSLPromoter/ CDE Focal Point: b. Please provide an overview/description on how the maintenance system works: • Tagging status • How does CDE ensure that Safety critical equipment is "tagged" as safety critical with the relevant priority and criticality (Ref West Phoenix audit)?	Jarle Helle & Jarle.helle@cosl.no Description of the Maintenance system was provided. CDE uses the maintenance system STAR IPS and have used the system for a long time. CDE explained referred to the following two documents: 1. Maintenance procedure manual - L2-MAI-29916 Maintenance management manual - L3-MAI-28994 CDE has a Tag procedure: L3-TEC-70777 Tagging status – no safety critical or essential open tags. CDE believes they are à jour when it comes to tagging. Detail level in tag management, is down to a small parts level, i.e. tag on parts within a machine. Criticality: The priority rank of a failure mode, based on some assessment criteria such as operational and HSE (Health, Safety, Environment) consequences, and the likelihood of failure occurrence. A Criticality Analysis was performed for COPR in 2010 and a new review in 2018. A Criticality analysis is a method for identifying product or process criticality for the purpose of prioritizing activities like design and maintenance. It is a process of decomposing product or process into hierarchical components, followed by study of their failure modes and effects, and (where appropriate) their causes. Criticality is the combined measure of the failure mode probability and the severity of its effects. Ref maintenance procedure manual and maintenance management manual. Follow up daily onboard to close out high critical jobs. Need to make a non-conformative Synergi if any work orders are overdue. CDE explained that status	

	• Explain routines for handling safety/high critical jobs c. When was the last audit of the maintenance system performed? Inhouse or external? Status of same? Please provide the latest audits. d. Status on the rig's maintenance? e. Give an update on NPT's > 3 hrs on the rig and root causes f. Any 3rd party service inspections done recently? Please provide an overview. g. Any identified repair, overhaul or replacements planned prior to and/or	on safety/high critical jobs are presented to top management in monthly meetings as well. Inhouse quarterly, external annual by DNV. Verification by Equinor and OKEA before rig start up 2022 and 2023. • Total overdue corrective work orders (CWO) that are safety critical elements (SCE): Zero • Total overdue planned work orders (WO) that are SCE: 13 (low and medium priority WO's) • Total open CWO that are SCE: 117 • Total open planned WO that are SCE: 319 • Total open CWO that are not SCE: 189 • Total open planned WO that that are not SCE 225 - "BOP issues" • BOP leak on 5000psi Boost line (221hrs) • BOP Maintenance: During pressure test of BOP observed leak and unable to proceed BOP test. Split LMRP from BOP body, and change out annular element (14,5hrs) • Leakage on Blue POD . Pulled LMRP (65,75 hrs) - "BOP Surface Running/ Handling" • Riser Yoke (15 hrs) "Mud Pumps" • Leaking valves on MP1 (7,25 hrs) Please see presentation attached for more details. All annual done before rig start up in February 2023 such as Loose drilling, Loose lifting, DROPS, PSV/Instrument, FIFO etc BOP maintenance early January and annular element to be changed	Action 27. CDE to provide info on how to get NOV to improve performance with regards to NPT. Action 28. Wellesley to set up a separate meeting with Enhanced Drilling regarding RMR and to include CDE.
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	subsequent to the Toppand East and Gnomoria Appraisal wells? h. Please provide a list of drilling and well related equipment installed and identified as temporary equipment. i. Any procedures in place on how to preserve spare parts on the rig (ref West Phoenix audit)?	Wireline, Flair, Automatic Tank Cleaning (ATC), TH reel, Stand Alone Control unit (SACU). L3-MAI-327972	
1.2 Critical Spares	a. What is considered critical spares and what is the philosophy behind it? Please provide list. b. Location of the critical spares?	All critical spares are set with min/max level in Star IPS. This is set based on the criticality, consumption, and delivery time. 4900 spare parts are stored onboard. In addition, since three rigs are identical, we have a common spare of drilling equipment stored at Mongstad such as hydratong, gripperhead XY racker, tail arm Catwalk, topdrive, tension cylinders, knuckle boom cylinders etc.	
2. Structural Integrity	a. COSL Promoter/CDE Focal Point: b. Please provide most recent information c. Please provide status and documentation related to Air gap and wave loading. d. Compliance to regulations	Morten Anthun & morten.anthun@cosl.no - Model test performed in Ocean basin Laboratory, of wave simulation performed on 100-year wave. Resulted in knowledge on Air gap and wave load. - Actions – enforced structure according to OTG 13/14 guidelines, removed windows and doors. Evaluated watertight doors on the slamming forces, which was dimensioned for less forces. Turned doors to face outwards instead of inwards, established shelters. Max wave height with a direction from behind(aft) equals 4 m. Airgap at operational draft 11.5m, Airgap at survival draft 13.5m.	

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4. Marine	a. COSL Promoter/CDE Focal Point: b. System Description of main elements (including General Arrangement drawings, design standards and performance) • Ballast System • VDL • Watertight doors • Tanks & Vents • Sea water Pumps • Bilge Pumps • Fire Pumps • Compressors & Air • Water Makers • HVAC c. When was the last inspection of the loading hoses and loading station performed? • All transfer procedures in place? d. Certification expiry / Renewal • Copies of all Class, Flag State and IMO certificates and documents • FMEA e. Any Marine related incidents or issues? f. Status on marine critical eqm. – spares and backup. g. MOB – boat deployment with crane vs. davit, weather limitation and risk assessment	Jarle helle & Jarle.helle@cosl.no Ref. presentation “Marine system” • Ballast System – DM 377523 and 377524 • VDL covered under point 3 above. • Watertight doors – DM 383471 page 3 • Tanks & Vents – Tankplan DM 20811 / Vents DM 6009914 • Sea water Pumps – DM 6005518 / 6005519 • Bilge Pumps – DM 25882 (8x47m3 + emergency bilge) • Fire Pumps – DM 25132 (2x300m3/hr) • Compressors & Air – DM 137401 (2x460m3/hr) • Bulk air – DM 227242 (2x1392m3/hr) • Water Makers – DM328744 (2x75t/day – only one in use) • HVAC – Utility system and accommodation Done in August 2023, procedures in CMS Online Veracity DNV Done on SPS 2022 No Yearly certification on critical equipment, min/max on critical spares Ref procedure 104922: 4 Weather limitations Launching of MOB boat for training purpose: - Maximum wind; 20 knots (10min./10m) - Wave height; Hs 2-meter. The	
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	h. Competence • Marine crew competence requirements	Emergency preparedness in connection with work over sea - Maximum wind; 30 knots (10 min./10m) - Wave height; Hs 3 meter at an actual man overboard situation : As the Crane Operators decision. A separate competence review will be performed closer to startup of operations, ref. action 16.	
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5. Power generation & Electrical systems	a. COSL Promoter/CDE Focal Point b. System Description of Main Elements (including design standards and performance) • Main Engines • Emergency generator • Rig saver & Other safety functions • Purifiers • Supply & Exhaust Fans - • Generators • Power management & distribution • ESD system c. When was last audit verification performed and by whom? d. Incidents, Downtime & Corrective actions • Any recent "black outs" and why? Control • DP and/or Power management related incidents? • Power Management testing. Rig savers approved e. Certification expiry / Renewal • Verification ESD testing and results since 2020 • Arc Flash mapping performed – any issues? • ESD Levels / Cause & Effect f. Competence	Jarle helle & Jarle.helle@cosl.no • Main Engines - 6xWartsila • Emergency generator - 1xMitsubishi • Rig saver & Other safety functions - Rig saver on all Main engines and EMG • Purifiers – 3xAlfa Laval fuel oil and 1xWestfalia oily water • Supply & Exhaust Fans • Generators – 6xSiemens and 1xEMG • Power management & distribution – DM 313323 • ESD system – Procedure 104885 and KM DM 5047765 DNV annual in June 2023 No No Yes • FMEA/ESD done on SPS 2022, DP annual to be done in December 2023 • Done in 2018 ref WO 2018-50485 ESD Levels / Cause & Effect. Done 02.02.23 ref WO 2023-01530 next test February 2024, planned after next operation.	Action 29. CDE to provide latest result related to ESD test
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6. Station Keeping	a. COSL Promoter/CDE Focal Point: INSERT NAME & EMAIL b. System Description of Main Elements (including design standards and performance) • Thrusters • DP system – K-pos DPM-22 (Main control system) K-Pos DP-12 (Back-up system) • Acoustic and other position reference systems c. Upgrades or Modifications performed (including associated MOCs) • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig d. Certification expiry / Renewal • DP Trials • FMEA	Morten Anthun, morten.anthun@cosl.no Ref. presentation "Station Keeping" 6x Azimut thrusters, 2 in bow, 2 in middle and 2 astern. All ar of Wärtsilä/Lips and of type Lips FS3500-563 NU. Each thruster has a capacity of 3800KW. IMO Equipment Class 3 DP control system consisting of the following components with its sensor and reference systems: • K-Pos DPM-22 (Main control system) • K-Pos DP-12 (Backup control system) • IJS system (Independent Stand-alone Joystick System) The K-Pos DPM-22 system is an integrated and dual redundant position control system. It has functionality for combined thruster controlled and moored vessel operations. The main control system will be the primary control system for dynamical positioning and position mooring operations. It is integrated with, and share information with, the Kongsberg K-Chief and K-Thrust systems. – 3x GPS, 2xHIPAP (one port and one Stbd), 2x LTW (one aft and one foreward) – Modification made to GPS & wind sensor EDS function installed at the DP desk DNV MO-37; Before commencing Dynamic Positioning operations, a survey with survey scope "Annual Survey" as detailed in DNV-RU-OU-0300 Ch.3 Sec.4 [5.3] to be carried out. Annual DP Trials 2023: Trials planned for after completing current well. Est. December 2023. 1st anniversary trials program established by Global Maritime and approved by DNV. Kongsberg Safety Bulletin DP01-2023 also planned for during this test period	
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7. Safety Equipment	a. COSL Promoter/CDE Focal Point: INSERT NAME & EMAIL b. System Description of Main Elements (including design standards and performance) • Fire & Gas Detection • PA & Alarms • Fixed firefighting systems / Deluge helideck and bridge • Portable firefighting systems • Lifeboats • Mob boats • Life Rafts c. Certification expiry / Renewal • Chemical-foam analysis. • Pressure test certificates of BA and Halon/CO₂ bottles. • Life-raft certificates.	Jarle Helle, Jarle.helle@cosl.no • Fire & Gas Detection – DM 5047913 • PA & Alarms – DM 5047913 • Fixed firefighting systems – Water mist DM 303140 / Deluge helideck and bridge DM 5044071 / Tripple deluge drillfloor, Heli fuel area and mud treatment area / Dual agent helideck DM 5044071 • Portable firefighting systems – Fire control plan • Lifeboats – 4x60 passengers (Safety control plan 263610) • Mob boats – 2x8 persons (Safety control plan 263610) • Life Rafts – 12x20 persons (Safety control plan 263610) • Chemical-foam analysis – DM 388745 (main service report 393517) • Pressure test certificates of BA and Halon/CO₂ bottles – DM 388745 (BA expire 2028 / CO₂ 2033) • Life-raft certificates – 30 monthly swap, due 03.11.24	
8. Cranes & Material handing	a. COSL Promoter/CDE Focal Point: INSERT NAME & EMAIL b. System Description of Main Elements (including, load radius charts, general arrangement drawings, design standards and performance) • Main Cranes • Auxiliary • Deck Space • Sack store • Forklift Unit c. Crane reach and capacity for heavy lifts.	Morten Anthun, morten.anthun@cosl.no Ref. presentation “Cranes & Material handling” Deck pedestal cranes The deck pedestal cranes are located on the starboard and port side of the rig. The crane covers all general lifting, maintenance work and mechanical handling within the platform including lay down and storage areas as well as material transfer to and from the supply vessel. The cranes are NOV, Molde Crane with the following lifting capacities: Whip Hook: 17MT at 49.6m Main Hook: 33MT at 47m, 80MT at 20m CDE was requested to check the type of hook used. This was for Wellesley to check compatibility with the Supply vessels FRC hook. The dynamic rated load capacity for the main hoist is as follows: • 1.5m significant wave - 80.0MT SWL at 20.0m radius	Action 30. CDE to provide specification for the crane hook.

		• 2.0m significant wave - 48.5MT SWL at 22.5m radius • 4.0m significant wave - 25.0MT SWL at 22.5m radius The dynamic rated load capacity for the whip hoist is as follows: • 1.0m significant wave - 17.5MT SWL at 49.6m radius • 3.0m significant wave - 11.2MT SWL at 40.0m radius • 4.0m significant wave - 9.3MT SWL at 20.0m radius The cranes have a maximum working radius of 47.5m and a minimum working radius of 7.8m. Pipe and Riser Handling Crane The pipe handling crane is located 6.5 m port of the rig centreline and on frame 0. The crane covers the pipe and riser storage areas, as well as most of the aft part of the rig including the aft lifeboats. The crane is a NOV product. The crane consists of a pedestal, king, main boom, knuckle boom and operator's cabin. The gripper and riser yoke hang in the boom tip. The crane handles tubulars and risers from the pipe deck to catwalk machine and from the catwalk machine to the pipe deck. It is also possible to use sling in lifting lugs on the gripper yoke or on boom tip to lift other items than pipes. Lifting capacities: Pipe handling - SWL 7T/26,6m Riser handling - SWL 15T/17,7m Hook handling gripper yoke - SWL 7T/26,6m Hook handling boom tip - SWL 25T/17,1m BOP Overhead Crane The BOP Overhead Crane is designed as a conventional gantry crane, located at the starboard end of the moonpool running in the forward / aft direction on beams supported under the drill floor. The overhead crane winches are designed to lift the LMRP and X-mas trees. The winches have a SWL rating of 2 x 60T. There is also one auxiliary winch with a SWL of 12T. Utility Overhead Crane	
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	d. Upgrades or Modifications performed (including associated MOCs) No upgrades have been performed on the cranes : • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig e. Certification expiry / Renewal f. Competence • Communication when lifting • Clear responsibility during lifting operations.	The Utility Overhead Crane is designed as a conventional gantry crane, located at the port end of the moonpool running in the forward / aft direction on the facility to run the 2 off trollies in a port/starboard direction. The overhead crane winches are designed for lifting the baseplate and for maintenance work on equipment stored on the casing hang-off trolley. The winches have a SWL rating of 2 x 15T. The rig has two electrical forklifts one at drill floor and one on main deck. Most of the main deck is accessible by forklift. This includes sack store. No modifications have been performed on the cranes - Inspection report DNV-8188-2021 • NDT records – requirements met • Crane Load test – requirements met • Loose lifting equipment – yearly verification performed by Axxess. Management of lifting equipment is the system Onyx Per NORSOK R-003 Annex B. A separate competence review will be performed closer to startup of operations. Communication according to NORSOK R-003 section 4.7. Roles and responsibilities per NORSOK R-003 Annex A. Material handling is described in material handling plan.	
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9. Aviation	a. COSL Promoter/CDE Focal Point: INSERT NAME & EMAIL b. System Description of Main Elements (including General arrangement drawings design standards and performance) • Helideck • Refuelling • Fire fighting • Weather monitoring c. Upgrades or Modifications performed (including associated MOCs) • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig d. Certification expiry / Renewal • Certification	Morten Anthun, morten.anthun@cosl.no Ref. presentation "Aviation-Helideck" Max weight 12.8t Heli fuel Tank skid 2x 2900L Tank w/Pump Unit and Deluge system. Dispensing Unit OLF Helideck Foam Monitor System 3x Monitors with EX motors for Helideck 1x Foam mixing unit 1x Foam tank 1x Foam pump 1x Central control panel for Helideck 1x Central control panel for Bridge deck Dual agent skid is a stand-alone with a dual hose reel link together in a sleeve. The hose reel had a separate foam tank and dry powder tank. The equipment is fitted inside an insulated and heated cabinet. Kongsberg helideck monitoring system HMS300 None mentioned Last helideck certificate issued 13 February 2023 Last helicopter refuelling system certificate of compliance issued 19/01/2023 and expires 19/01/2024.	Action 31: CDE to provide Wellesley with new helicopter certificate once obtained.
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10. Drilling & hoisting equipment	a. COSL Promoter/CDE Focal Point: INSERT NAME & EMAIL b. System Description of Main Elements (including General arrangement drawings, design standards and performance) • Derrick & Setback • Rotary Table • Draw works • Crown and traveling equipment • Drilling Control System (including description of anti-collision or Zone Management System) c. Any issues with drilling instrumentation? – volume, flow, pressure, torque etc. • What calibration program is used? When last checked? • What system is used for alignment with 3rd party systems? • What system are used if different readings? d. Upgrades or Modifications performed (including associated MOCs) • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig	Kine S. Nilsen, kine.s.nilsen@cosl.no System Description of Main Element Derrick & Setback: 160 ft. derrick. 650 tons. Setback, Fingerboard for 270 stand 5 7/8" tubulars with belly board. 12 fingers for drill collar. Rig can transit in transit draft with full derrick. Rotary Table: 60 1/2" rotary table with National profile. 60 1/2"x49 1/2" solid ring adapter bushing, 49 1/2"x37 1/2" split ring bushing Draw works: NOV AHD-650-4600 Drawworks. 1 5/8" drillline. 659 tons with 12 lines. 550 tons with 10 lines Crown and traveling equipment: Rated for 650 tons with 12 lines. 60" sheaves Drilling control System including anticollision system – NOV Cyberbase. None Yearly calibrated by 3de party (IKM). Last calibrated Jan. Star job: UZ013 for upcoming job. Report DM #387990 and DM #387995 Geoservice use same system as CDE, which has backup sensors in each pit and tanks. Installation of NOVUS version 4.4.3. ongoing. Planned finished December 2023. NOV portal (portal.mynov.com) product bulletins and safety alerts.	
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	e. Certification expiry / Renewal / Certification expiry • Has the Critical load path been exposed to loads greater than 70 % of rated load? Critical • Last Drops inspection – Jan 2023 • Last NDT • Certificate of Compliance	NO. Last Drops inspection: Jan 2023 (report sent to Åse Kristin by email 13.12). All findings closed. Last NDT: Axsess Jan/feb 2023 DM#389548 Field Service Report - DREQ NDT 2023	
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11. Pipe handling	a. COSL Promoter/CDE Focal Point: b. System Description of Main Elements (including design standards and performance) • Pipe Racking • Iron Rough neck • Power slips c. Upgrades or Modifications performed (including associated MOCs) • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig. d. Any gaps from 081 remote pipehandling matrix?	Kine S. Nilsen, kine.s.nilsen@cosl.no Pipe Racking Equipment NOV (Hydralift) Hydraracker column X-Y racker. Fingerboard for 270 stand 5 7/8" tubulars with belly board. 12 fingers for drill collar. Rig can transit in transit draft with full derrick. Iron Rough neck NOV Hydratong MPT 200 3 1/2" – 9 3/4". M/U 140 kNm, B/O 270 kNm Elevators & Inserts BX-4 elevator with inserts for tubulars and running tool Power slips NOV PS-21 and Power Jaws None DM #111940, Synergi 17821 HAZID for pipehandling expired. Last HAZID was performed in 2020.	NC-2: HAZID not performed within time requirement in Guideline
12. Drilling Tubulars	a. COSL Promoter/CDE Focal Point: b. System Description of Main Elements (design standards and performance) • Rig provided tubulars: • Fishing tools c. Upgrades or Modifications performed (including associated MOCs) • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig	Kine S. Nilsen, kine.s.nilsen@cosl.no As per contract 4600025793 (Equinor FLX) Ref "Drilling Tubular" presentation Wellesley are planning to use 5 1/2" DP, S-135 with HT connections so need to rent some more since CDE only provide 3000m of this pipe. CDE will supply necessary fishing eqm. to fish drill string components obtained by them. None	

	d. Certification expiry / Renewal • Pipe inspection class. • In field inspection or pipe rotation?	• Pipe inspection class NS-2/DS-1 • Pipe rotation, inspection 6 monthly	
13. Drilling fluid storage aggregations and pumping capabilities	a. Any issues with the system?	None - Pump pressure: 310-325 bar over time, end of sections possible to have 330-350 bar	
14. HP mud system	a. COSL Promoter/CDE Focal Point: b. System Description of Main Elements (including piping diagrams, design standards and performance) • Mud pumps • Standpipe manifold • Pressure relief c. Upgrades or Modifications performed (including associated MOCs) • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig d. Certification expiry / Renewal • Piping WT inspection reports. • Pressure relief certs	Kine S. Nilsen, kine.s.nilsen@cosl.no 3x NOV HEX mud pumps. 7500 psi. capacity each 1034 GPM (3915 l/min). Fixed piston size 4 ½ ", max 212RPM Std pipe manifold: P&ID EDOCS #135588 3 ea. NOV Retsco Titan RX Reset Relief Valves. Setat close to 7500 psi. NOV Cyberbase control system has "Electronic pop-off" that stop the mud pumps at a set pressure. None Piping WT inspection reports. Annual RBI report 2023. DM#398762. Pressure relief certs DM#390718	

15. LP mud system	a. COSL Promoter/CDE Focal Point: INSERT NAME & EMAIL b. System Description of Main Elements (including General arrangement drawings, design standards and performance) • Shale shakers • Vacuum Degasser • Mud pits • Trip / Strip c. Upgrades or Modifications performed (including associated MOCs) • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig d. Certification expiry / Renewal - • Calibration of sensors for Mud pits and tanks.	Kine S. Nilsen, kine.s.nilsen@cosl.no 4 each NOV Brandt Thule VSM 300 shale shakers 1x MI Swaco CD 1400 Degasser Ref. Tank plan. EDOCS #20811, 20813, 5033723 Tanks 2x trip tanks 5 m3 each None Calibration of sensors for Mud pits and tanks – New sensors no need for calibration	Action 32: CDE to provide pit overview
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16. Well Control & Subsea Equip.	a. COSL Promoter/CDE Focal Point: INSERT NAME & EMAIL b. System Description of Main Elements (including General arrangement drawings, design standards and performance) • Pipe Rams 3 ea. (9 5/8", 3 1/2"-5 7/8", 5"-7", 5 - 7 5/8") • Shear rams 2 ea. (CVX-W) • Annular 1 Ea (Shaffer Nitrile, Max WP10K Psi, Max TP 7K Psi) • Connectors 2 Ea (LMRP H4 ExF HAR, WHC H-4 SHD) • Fail safes 5 Dual, 3 single (DB, HB & Dual HB) • Accumulator unit and controls system (Accumulator drawdown test results) • BOP guidance 4 Ea Guidewire • Bop Handling system NOV BOP skid & Elevator • Bop Test Pump & Stump Glover test Unit, WHC & LMRP Stump • Emergency Disconnect Sequence Cut, Disconnect and seal well) • Riser (quantity of serviceable riser sufficient for 500m) NOV FT-E • Riser tensioning system 8 x Rucker tensioners (3 Dual , 2 single units) 120 Kips • Riser running Tools NOV FT-E 2 Hyd 1 Manual • Coflexip's Flex loops • Choke & Kill Manifold Anson	Kine S. Nilsen, kine.s.nilsen@cosl.no NOV 15k Compact modern BOP 18-3/4 15K • API 16A 3rd edition • DNV-OS-E101 Oct.2006 • API S53 5th edition Control system: • API 16D 2nd edition • API S53 5th edition (EDS – sealing well 220 sec. not 90 sec. NC Synergi #304944) Emergency systems - ADS (Automatic Disconnect System) - EDS (Emergency Disconnect Sequence) - Auto Shear - Dead Man Secondary system - Acoustic - ROV ctrl EDS (Emergency Disconnect Sequence) Cut Disconnect Seal well	
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	• Diverter NOV Shaffer 21 1/4" • Poor Boy NOV c. Upgrades or Modifications performed. • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig d. Is the cement unit available as backup to the mud pumps in a well control situation? e. Has CDE done any exercises/ tabletops related to connecting to the cement unit in a well control situation? f. Certification expiry / Renewal. • Piping WT inspection reports. • CoC expiry Dates • 3. party audits/survey reports conducted to be submitted. • Accumulator calculations for the planned water dept, included shearing of pipe. • Compliance Gap analysis for the latest applicable standards (API std 53. DNV OS-E101. Etc.)	The BOP has been upgraded to increase shearing capacity as well as modifications to be according to regulatory requirements. The cement unit is available as backup to the mud pumps in a well control situation, the cement unit can be used to pump thru choke & kill manifold or standpipe manifold. Work instruction 388277 Yes, cementer is pumping from cement unit to std pipe and or K/C. COC re*-certification of well control equipment January 2022(SPS) Piping WT inspection reports. Annual RBI report 2023. DM#398762. Accumulator calculations for the planned water dept, included shearing of pipe – Submitted to project place: https://service.projectplace.com/#direct/document/1263258754 & https://service.projectplace.com/#direct/document/1262883336 Compliance Gap analysis for the latest applicable standards (API std 53. DNV OS-E101. Etc.) Bridging document well control DM#878419 Subsea operational and maintenance procedures: CMS: https://cosldrilling.sharepoint.com/sites/cms/SitePages/CMS.aspx#	
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	g. Competence • Compliance towards IOGP 476 • Explain the rig contractor and service personnel involvement in offshore planning and well control training for the following personnel: - Mud/Data Logger - Mud Engineer - Cementer - Derrick Man/ Pump Room Operator - Stability Systems Operators • Competency and training matrix for the subsea engineers, included the list of planned subsea personnel.	A separate competence review will be performed closer to startup of operations, ref. Action 16. Involvement in offshore planning is normally done like this: Offshore planner go through draft DOP's and identify requirements. If things are unclear, he will contact relevant service personnel for clarification. When final DOP review is carried out all involved personnel will be invited to attend DOP meeting. Well control training: Equinor DSV invite and host a well control forum each week. Topic is usually related to upcoming operation and relevant service personnel is invited to attend. Well control drills include all relevant personnel.	
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17. Communication & IT	a. COSL Promoter/CDE Focal Point: b. System Description Of Main Elements (design standards and performance) • Who is the comms provider? • Status on the equipment? • Backup considerations if VSAT fails? • Verify enough UHF radios on the rig c. Upgrades or Modifications performed (including associated MOCs) • List/report of safety bulletins/product alerts etc. from OEM's captured by the rig d. Certification expiry / Renewal • UPS Verification of draw down test. Battery capacity	Torfinn Kalstø, torfinn.kalsto@cosl.no Ref. presentation "Communication & IT" Speedcast Norway Operational - Network 1-3 years, VSAT antennas are 5 years, hardware and software undergo continuous monitoring, regular updates, and thorough maintenance. All critical hardware is protected by the manufacturer's warranty 2 LTE modems for LTE links 3 ea 4G/5G modems for Mobile network connectivity Note: It is under considerations to add StarLink and/or OneWeb as well - UHF radios – min. 60 EA - Iridium Satellite telephone - Cyber security, NOG104/ L2-HSE-354986 Cyber Security Management Manual. All employees must conduct a cyber security CBT course. Fishing campaigns are performed to test employees. None PM 30 min Radio UPS. Min annual test	Action 33: Wellesley to look into the best comms solution for both Toppand East and Gnomoria.
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