

Completions

END OF WELL REPORT







|  |  |
| --- | --- |
| **Well** | **`{{well\_name}}`** |
| **Client** | **`{{client}}`, `{{country}}`** |
| **GeoUnit** | **`{{geounit}}`** |
| **Location** | **`{{location}}`, `{{country}}`** |

**End of Job Report**

CPL FDP Job Number: **{{job\_number}}**

|  |  |
| --- | --- |
| Rig: | **`{{**Rig \_Name**}}`** |
| Job Type: | `{{**Installation\_Type**}}` |
| Job Installation Period: | `{{start\_date}}` - `{{end\_date}}` |
| Client Representatives: | `{{client\_representatives}}` |
| SLB Representatives: | `{{psd\_team}}` |
| SLB Job Coordinators: |  |
| SLB Job Supervisors: | `{{job\_supervisors}}` |
| SLB Crew: | `{{**Crew\_Members**}}` |

REVISION HISTORY:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rev | Issue Date | Prepared by: | Reviewed By: | Approved By: |
| {00} | `{{issue\_date}}` | `{{prepared\_by}}` | `{{reviewed\_by}}` | `{{approved\_by}}` |
|  |  |  |  |  |

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# LIST OF ACRONYMS

|  |  |
| --- | --- |
| **TERM** | **DEFINITION** |
| L/D | Lay Down |
| M/U | Make Up |
| N/U | Nipple Up |
| N/D | Nipple Down |
| RIH | Run In hole |
| OH | Open Hole |
| PBR | Polished Bore Receptacle |
| PCE | Pressure Controlled Equipment |
| POOH | Pull Out of Hole |
| PUW | Pick Up Weight |
| P/U | Pick Up |
| RB | Rack Back |
| RHT | Right Hand Turn |
| SBE | Seal Bore Extension |
| SOW | Slack Off Weight |
| S/O | Slack Off |
| TH | Tubing Hanger |
| THA | Tubing Hanger Adapter |
| THS | Tubing Head Spool |
| TRSV | Tubing Retrievable Safety Valve |
| TTQC | Torque Through Quick Connect |
| WDS | Wash Down Shoe |

# EXECUTIVE SUMMARY

* 1. INTRODUCTION

This report describes `{{installation\_type}}`installation with `{{screen\_type}}` on `{{well\_name}}` Oil producer well.

* 1. JOB OBJECTIVES

The main objectives of `{{well\_name}}` were the following:

* Conduct all operations safely and efficiently without service and delivery concerns, accidents, or incidents.
* Run and install lower completion in the `{{open\_hole\_size}}` drilled Open Hole with a washdown system, swell packers, wire wrap screens `{{screen\_size}}`, blank pipe, Quantum Packer with MFIV and deploy to TD using `{{drill\_pipe}}` work string.
* Set and test the packer.
* Displace the `{{casing\_size}}` above the MFIV to `{{completion\_fluid}}` Densitypacker fluid.
* Suspend well with kill string.
  1. HSE OBJECTIVES

The HSE objectives for the well were to perform all operations without incidents, injury, or environmental issues. Taking into consideration the safety of the workers as the foremost goal in conducting operations, specific safety-related issues are highlighted as follow:

* Operate within design or environmental limits.
* Follow safe work practices and procedures.
* Ensure HARC/ JSA is in place during the entire job and plan job accordingly.
* Comply with all applicable rules and regulations.
* Ensure that the job is conducted safely and promptly.

# WELL DATA

|  |  |  |  |
| --- | --- | --- | --- |
| **Well Information** | | **Casing Data** | |
| **Well name** | `{{well\_name}}` | **Casing Description** | `{{casing\_description}}` |
| **Well Type** | `{{well\_type}}` | **Casing ID (in)** | `{{casing\_id}}` |
| **Field Name** | `{{field\_name}}` | **Casing Drift (in)** | `{{casing\_drift}}` |
| **Total Depth (m) MDRT** | `{{total\_depth}}` | **Casing Length (m)** | `{{casing\_length}}` |
| **Maximum deviation (deg)** | `{{maximum\_deviation}}` | **Reservoir Information** | |
| **Max DLS (deg/30m)** | `{{max\_dls}}` | **Reservoir Temperature (deg C)** | `{{reservoir\_temp}}` |
| **Casing Shoe (m)**  **MDRT** | `{{casing\_shoe}}` | **Reservoir Pressure (psi)** | `{{Reservior\_pressure}}` |
| **Open Hole Size (in)** | `{{open\_hole\_size}}` | **Zones MD (m)** | `{{zones\_md}}` |
| **Open Hole Interval (m)** | `{{open\_hole\_interval}}` |
| **Rig name** | `{{rig\_name}}` |
| **Rotary Table – Ground level elevation (m)** | `{{rotary\_table\_ground}}` |
| **Tubing data** | |
| **Lower Completion** | |
| **Tubing Description** | `{{tubing\_description}}` |
| **Tubing ID (in)** | `{{tubing\_id}}` |
| **Tubing Drift (in)** | `{{tubing\_drift}}` |

# WELL TRAJECTORY

PLOT [XXXXXX] PDF

|  |
| --- |
| `{{well\_trajectory}}` |

DATA {XXXXXX} XLXS

|  |
| --- |
| `{{data}}` |

# FINAL COMPLETION SCHEMATIC

{XXXXXX} XLXS

|  |
| --- |
| `{{schematic}}` |

# DOWNHOLE EQUIPMENT INSTALLED

* 1. LOWER COMPLETION

QUANTUM PACKER

|  |  |
| --- | --- |
| **QUANTUM PACKER** | |
| **DESCRIPTION** | `{{quantum\_description}}` |
| **PN** | `{{quantum\_pn}}` |
| **SN** | `{{quantum\_sn}}` |
| **OD (in)** | `{{quantum\_od}}` |
| **IN (in)** | `{{quantum\_in}}` |
| **DIFFERENTIAL PRESSURE RATING (PSI)** | `{{diff\_pressure\_rating}}` |
| **GRADE** | `{{grade}}` |
| **MATERIAL /ELEMENTS** | `{{Material\_elements}}` |
| **ASSEMBLY NO.** | `{{assembly\_no}}` |

SEAL BORE EXTENSION

|  |  |
| --- | --- |
| **SEAL BORE EXTENSION** | |
| **DESCRIPTION** | `{{seal\_bore\_description}}` |
| **PN** | `{{seal\_pn}}` |
| **SN** | `{{seal\_sn1}}`  `{{seal\_sn2}}` |
| **OD (in)** | `{{seal\_od}}` |
| **IN (in)** | `{{seal\_in}}` |
| **INTERNAL WORKING PRESSURE (PSI)** | `{{internal\_working\_pressure}}` |
| **ASSEMBLY NO.** | `{{assembly\_no}}` |

MECHANICAL FORMATION ISOLATION VALVE

|  |  |
| --- | --- |
| **MFIV** | |
| **DESCRIPTION** | `{{mechanical\_description}}` |
| **PN** | `{{mechanical\_pn}}` |
| **SN** | `{{mechanical\_sn}}` |
| **OD (in)** | `{{mechanical\_od}}` |
| **IN (in)** | `{{mechanical\_in}}` |
| **INTERNAL WORKING PRESSURE (PSI)** | `{{mechanical\_internal\_working\_pressure}}` |
| **MATERIAL/ELASTOMERS** | `{{mechanical\_material\_elastomers}}` |
| **SHIFTING FORCE (LBS)** | `{{shifting\_force}}` |
| **SHIFTING PROFILE** | `{{shifting\_profile}}` |
| **ASSEMBLY NO.** | `{{assembly\_no}}` |

POLISHED BORE RECEPTACLE

|  |  |
| --- | --- |
| **2.688” PBR** | |
| **DESCRIPTION** | `{{polished\_description}}` |
| **PN** | `{{polished\_pn}}` |
| **SN** | `{{polished\_sn}}` |
| **OD (in)** | `{{polished\_od}}` |
| **IN (in)** | `{{polished\_in}}` |
| INTERNAL WORKING PRESSURE (PSI) | `{{polished\_internal\_working\_pressure}}` |
| **ASSEMBLY NO.** | `{{assembly\_no}}` |

WASH DOWN SHOE

|  |  |
| --- | --- |
| **FLOAT SHOE** | |
| **DESCRIPTION** | `{{washed\_down\_description}}` |
| **PN** | `{{washed\_down\_pn}}` |
| **SN** | `{{washed\_down\_sn}}` |
| **OD (in)** | `{{washed\_down\_od}}` |
| **IN (in)** | `{{washed\_down\_in}}` |
| VALVE TYPE | `{{valve\_type}}` |
| **ASSEMBLY NO.** | `{{assembly\_no}}` |

* 1. MATERIAL CONSUMPTION - LOWER COMPLETION

[XXXXXX] Material Consumption PDF

|  |
| --- |
| `{{material\_consumption}}` |

# JOB CALCULATION - TDAS TORQUE AND DRAG

TDAS [XXXXXX] PDF

|  |
| --- |
| `{{tdas}}` |

# OPERATIONAL REVIEW

* 1. EQUIPMENT RECEPTION AND OFFLINE PREPARATION

All equipment, including primary and secondary assemblies, was loaded out to location, and inspected upon arrival. All blank tubing, screens and wash pipes were strapped, drifted, and inspected. All handling tools were inspected prior to RIH LC.

* 1. RIH OPERATION

On 5th August 2024, the Lower Completion was RIH after a PJSM was conducted with all BHA and handling equipment checked and final approved tally issued. BHA consisted of Quantum packer assembly with 2 seal bore extensions and a MFIV assembly with MFIV for fluid isolation, blank tubing joints, `{{screen\_size}}` wire wrap screens and a wash down system completed the string.

The circulation test was performed with `{{drilling\_fluid}}` sieved mud and the Quantum packer assembly below RT at 1 and 2 bpm. Pressure was observed at 260 and 360 psi respectively (PUW/SOW = 26.8/24.3 T with block weight of 18.4T). The lower completion string was RIH to casing shoe at 1040.6m where circulation tests were repeated with equivalent results. At depth, the final string weights were recorded (PUW/SOW = 45.3/16.5 T) with top of Quantum Packer at 983.84.472m. Pumped 1m3 `{{drilling\_fluid}}`SBM HiVis pill and circulated past ball seat with 4m3 of 1.29SG sieved mud. Dropped 1.375” brass ball and chased with 6.7 bbl. of sieved mud @ 1.6 bpm to ball seat.

The string was then pressured up to 1600 psi and held same for 15 minutes. The Pull/Push test was performed to 58/20 T. The backside test of the packer was performed at 300/2000 psi for 5/15mins successfully.

The string was then slacked-off string to 20 T, rotated 15 RHT and picked up string 3m to confirm tool released. Pressured up to 3700 psi to blow ball seat and circulated at 1bpm to confirm string was free.

Commenced POOH with work string to top of MFIV @ 997m. Performed a flow check and observed no losses. Pressure tested the top of the MFIV ball valve to 2000psi for 10mins successfully and displaced 7-5/8” casing to `{{completion\_fluid}}` packer fluid. POOH to surface with the service tool.

* 1. CONCLUSION

The job was executed successfully without any service quality concerns, issues, or incidents. The overall operations were conducted and executed as per `{{client}}`, `{{country}}` and work instructions.

# SEQUENCE OF EVENTS

DSR [XXXXXX] PDF

|  |
| --- |
| `{{dsr}}` |

# LESSONS LEARNED/BEST PRACTICES

* 1. LESSONS LEARNED
* Always confirm integrity of line up prior to any critical pressure operations.
* Calibration of hookload sensor is important for appropriate hookload calculation at TD.
* Spaceout calculations on wash pipe string needs to be verified accordingly.
* Marking the Quantum Packer assembly with visible paint marker across the Stub Acme connections to help check for blacked-out connections especially at night.
* Proper alignment of the packer assembly will enable easier makeup to MFIV Assembly.
  1. BEST PRACTICE
* Review of work instructions at least 6-12 hours prior to RIH with the completion supervisor to avert any changes to the SOP.
* Routine maintenance of handling equipment to be re-used for another well is highly recommended.
* Maintaining one line of communication during critical pressure operations especially from the cement unit and/to the rig floor to avert any miscommunication.

# QHSE

|  |  |  |
| --- | --- | --- |
| **QUEST NO.** | **BRIEF DESCRIPTION** | **DATE** |
| `{{qhse\_question1}}` | `{{qhse\_brief\_description1}}` | `{{qhse\_date1}}` |
| `{{qhse\_question2}}` | `{{qhse\_brief\_description2}}` | `{{qhse\_date2}}` |
| `{{qhse\_question3}}` | `{{qhse\_brief\_description3}}` | `{{qhse\_date3}}` |
| `{{qhse\_question4}}` | `{{qhse\_brief\_description4}}` | `{{qhse\_date4}}` |

# ATTACHMENTS

* 1. PRESSURE TEST CHARTS

**Lower Completion**

Line Test <XXXX>

|  |
| --- |
| `{{line\_test}}` |

Packer Setting <XXXX>

|  |
| --- |
| `{{packer\_setting}}` |

Annulus Test <XXXX>

|  |
| --- |
| `{{annulus\_test}}` |

Release Service Tool <XXXX>

|  |
| --- |
| `{{release\_service}}` |

Expend ballseat <XXXX>

|  |
| --- |
| `{{expand\_ballseat}}` |

MFIV Test <XXXX>

|  |
| --- |
| `{{mfiv}}` |

* 1. SUB-ASSEMBLIES CERTIFICATES

**LOWER COMPLETION**

Quantum Packer Assembly LC-OP-STP-28 [XXXXXX] PDF

|  |
| --- |
| `{{quantum\_packer}}` |

MFIV Assembly LC2-OP-MFIV-32 [XXXXXX] PDF

|  |
| --- |
| `{{mfiv\_assembly}}` |

Washdown Assembly LC-OP-WDS-27 [XXXXXX] PDF

|  |
| --- |
| `{{washdown}}` |

* 1. CLIENT SERVICE QUALITY EVALUATION

CSR [XXXXXX] PDF

|  |
| --- |
| `{{csr}}` |

* 1. TALLIES

|  |
| --- |
| `{{tallies}}` |