

# NEW WELL FRAC PRE-QUALIFICATION CHECKLIST

## TRIGGERS FOR PRE-QUALIFICATION

**Annular:**

- Rate:  $\geq 5 \text{ m}^3/\text{min}$ ?  Yes  No
- Cumulative Frac Tonnage  $\geq 1,500,000 \text{ lb}$ ?  
 Yes  No

**OR****Through-Tubing:**

- Rate:  $\geq 1.5 \text{ m}^3/\text{min}$ ?  Yes  No
- Cumulative Frac Tonnage  $\geq 1,000,000 \text{ lb}$ ?  
 Yes  No

Temperature  $\geq 90^\circ\text{C}$ ?  Yes  NoStage Count  $\geq 50$ ?  Yes  NoPressure  $\geq 55 \text{ MPa}$ ?  Yes  NoLateral Length  $\geq 2,500 \text{ m}$ ?  Yes  NoWinback/New Client?  Yes  No

If “Yes” is checked for any of the above triggers, then proceed to filling the information below.

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November 7, 2023	V1	November 08, 2024	V5	D000065	Kobold Completions – New Well Frac Pre-Qualification Checklist	Owen Rush

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## GENERAL WELL INFORMATION

Customer: \_\_\_\_\_ Contact Name: \_\_\_\_\_

Contact Phone: \_\_\_\_\_ Contact Email: \_\_\_\_\_

Formation: \_\_\_\_\_ UWI / LSD: \_\_\_\_\_

Drill Date: \_\_\_\_\_ Frac Date: \_\_\_\_\_ Kobold Install?  Yes  No

Drill Survey will be provided?  Yes  No Frac Program will be provided?  Yes  No

Permission to obtain coil / frac data for all jobs?  Yes  No

## WELL CONSTRUCTION

Liner Diameter: \_\_\_\_\_  mm  inches      Liner Weight: \_\_\_\_\_  kg/m  PPF      Liner Grade: \_\_\_\_\_

Requested Liner Connection:  LT&C     BT&C     Premium (Type) \_\_\_\_\_

Interm. Diameter: \_\_\_\_\_  mm  inches      Interm. Weight: \_\_\_\_\_  kg/m  PPF      Int. Grade: \_\_\_\_\_

Crossover?  Yes  No      Brand / Model: \_\_\_\_\_

Liner Hanger?  Yes  No    If "Yes", set pressure \_\_\_\_\_ MPa    Brand / Model: \_\_\_\_\_

Tie-Back Liner?  Yes  No    Brand / Model: \_\_\_\_\_

Well Depth: TVD \_\_\_\_\_ m    and TMD \_\_\_\_\_ m    Frac Stage Count: \_\_\_\_\_

Requested Sleeve Features: \_\_\_\_\_

Kobold Toe Port?  Yes, then pressure \_\_\_\_\_ MPa     No      Reclosable?  Yes  No

Kobold Depth Correlation Sub\* Required?  Yes  No      Kobold Centralizers Required  Yes  No

\* Recommended for all open-up sleeves or TMD > 3,000 m

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## FRAC PARAMETERS

Frac Method?  Annular  Through-Tubing  Through-Tubing with Cups (Isofrac)

Sleeve Function?  O-O  O-C-O same run  O-C-O delayed    Check valve required?  Yes  No

Max. Frac Rate: \_\_\_\_\_ m<sup>3</sup>/min    Max. Treating Pressure: \_\_\_\_\_ MPa    Max. Test Pressure: \_\_\_\_\_ MPa

Sand Type & Size: \_\_\_\_\_ Target tonnage / stage: \_\_\_\_\_ Sand Density in Vertical: \_\_\_\_\_ kg/m<sup>3</sup>

Number of Stages: \_\_\_\_\_ Cumulative tonnage: \_\_\_\_\_ lb    Estimated ISIP: \_\_\_\_\_

Estimated differential pressure at end of frac: \_\_\_\_\_ MPa

Re-opening in same run?  Yes  No. If “No”, then subsequent run by default?  Yes

Estimated differential pressure expected when re-opening a sleeve: \_\_\_\_\_ MPa

Memory Instrumentation?  No  Single  Dual    Tracers Required?  Yes  No

## WELL CONDITIONS

Bottom Hole Temperature: \_\_\_\_\_ °C  Estimated  Actual

H<sub>2</sub>S Present?  Sweet <.5%  Sour >.5%    HCl Used?  Yes \_\_\_\_\_%  No

Acid Type?  Synthetic  Natural    Acid Purpose? \_\_\_\_\_

Other chemicals present that can be detrimental to elastomer performance? Or N/A: \_\_\_\_\_

Aliphatic Hydrocarbons:  Yes \_\_\_\_\_%  No    Aromatic Hydrocarbons:  Yes \_\_\_\_\_%  No

Amines:  Yes \_\_\_\_\_%  No    Brines:  Yes \_\_\_\_\_%  No    Bromides:  Yes \_\_\_\_\_%  No

CO<sub>2</sub>:  Yes \_\_\_\_\_%  No    Condensates:  Yes \_\_\_\_\_%  No    Methanol:  Yes \_\_\_\_\_%  No

Field History:  Wax  Scale  Casing Corrosion  N/A

History of casing deformation in the field?  Yes  No. If “Yes”, indicate:

Min. ID restriction to be expected: \_\_\_\_\_ mm    Max. allowable BHA diameter: \_\_\_\_\_ mm    Frequency of occurrences: \_\_\_\_\_

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## TUBULAR STRING USED TO OPERATE THE BHA

Coiled Tubing (size, weight, grade): \_\_\_\_\_ Drill Pipe (size, weight, grade connection type): \_\_\_\_\_

Third-party string model provided?  Yes  No      Internal string model provided?  Yes  No

If “Yes” to internal string model provided, Kobold will require drilled surveys / conveyance string details / wellbore fluids to run an internal string model. Will this information be provided?  Yes  No

Recommended job based on string model results?  Yes  No

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## PROPOSED EQUIPMENT / PERSONNEL SUPPLY

Proposed Sleeve Model Number: \_\_\_\_\_

Sleeve Quantity Requested: \_\_\_\_\_

Other Liner Equipment: \_\_\_\_\_

Proposed Frac Configuration: \_\_\_\_\_

Sleeve Installation Supervisor Required: \_\_\_\_\_

## INTERNAL SIGN OFF

Business Development: \_\_\_\_\_ Date: \_\_\_\_\_

Operations: \_\_\_\_\_ Date: \_\_\_\_\_

Manufacturing: \_\_\_\_\_ Date: \_\_\_\_\_

Engineering: \_\_\_\_\_ Date: \_\_\_\_\_

Finance: \_\_\_\_\_ Date: \_\_\_\_\_

## EXTERNAL SIGN-OFF

Referenced Customer Quote #: \_\_\_\_\_ Link: \_\_\_\_\_

Customer Representative: \_\_\_\_\_ Date: \_\_\_\_\_

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