

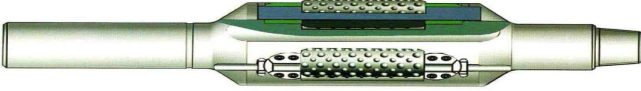
# AI TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED

Basra, North Rumaila, Quality Control Yard - Iraq

Tel: +9647810009138 / +9647834964657



## INSPECTION CERTIFICATE FOR 12 1/4" ROLLER REAMER# DEP-19-1230

|                                                    |                                                                                                                                                   |                                                                                     |                                                  |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>Client Name:</b>                                | <b>AL-ESNAAD OIL TOOL FOR OIL SERVICES.LLC</b>                                                                                                    | <b>Report No.:</b>                                                                  | QC-24-05-AL-ESNAAD-026                           |
| <b>Acceptance criteria:</b>                        | DS-1 Fifth Edition, Volume 4                                                                                                                      | <b>Date of Inspection:</b>                                                          | 13.MAY.2024                                      |
| <b>Work Location:</b>                              | <b>AL-ESNAAD OIL TOOL YARD</b>                                                                                                                    |                                                                                     |                                                  |
| <b>TEST EQUIPMENT &amp; CONSUMABLE DETAILS</b>     |                                                                                                                                                   |                                                                                     |                                                  |
| WHITE CONTRAST WCP-2                               | Batch #: 220602 Manufacture: Magnaflux<br>Exp Date: JUN.2025                                                                                      | <b>TECHNICAL DETAILS</b>                                                            | Wet Visible Continuous                           |
| BLACK INK 7HF                                      | Batch#: 220605 Manufacture: Magnaflux<br>Exp Date: JULY.2025                                                                                      | COIL(1200 AMP-TURNS/IN                                                              | SC 22713 Cal.15.FEB.2024<br>Cal Due14.AUG.2024   |
| FLUORESCENT 14HF                                   | Batch #: 220306 Manufacture: Magnaflux<br>Exp Date: March.2025                                                                                    | A.C HAND YOKE                                                                       | 201504053 Cal.15.FEB.2024<br>Cal Due14.AUG.2024  |
| INTENSITY METER                                    | SR#1608000134 CAL.Date Cal. 15.FEB.2024<br>Cal Due 14.AUG.2024                                                                                    | UV BLACK LIGHT                                                                      | SR#1900084 Cal.15.FEB.2024<br>Cal Due14.AUG.2024 |
| LEAD GAGE                                          | SR#AH07KF0027 GAEMAKER LG-5003<br>Cal. 13.FEB.2024<br>Cal Due 12.AUG.2024                                                                         | THREAD PROFILE GAGE                                                                 | SR#21336 Cal. 13.FEB.2024<br>Cal Due 12.AUG.2024 |
| Magnetic Partical Concentration 7HF                | 1.2 TO 2.4 ML/100 ML                                                                                                                              |                                                                                     | SR#21335 Cal. 15.FEB.2024<br>Cal Due 14.AUG.2024 |
| magnetic particle concentration<br>flourcent 14 HF | 0.1 TO 0.4 ML/100 ML                                                                                                                              | WMPT Light Intensity                                                                | 3450 Lux                                         |
| RING GAUGE                                         | DES 12 1/4" RING GAUGE SR # ITS-0012)<br>CAL.Date.04.SEP.2023<br>CAL Due Date. 03.SEP.2024                                                        | UV LIGHT INTENSITY:                                                                 | 3000 μw/cm <sup>2</sup>                          |
| <b>MAGNITISUM DIRECTION (LONGITUDENAL)</b>         |                                                                                                                                                   |                                                                                     |                                                  |
| <b>METHODOLOGY:</b>                                | <ul style="list-style-type: none"> <li>Through Visual inspection</li> <li>Dimensional 3</li> <li>MPI inspection with Ultraviolet light</li> </ul> |                                                                                     |                                                  |
| <b>ROLLER REAMER</b><br><b>12 1/4"</b>             |                                                                                                                                                   |  |                                                  |

| Serial No.  | Connection  |                                                                                      | Condition |      |      | Dimensional 3 Inspection |         |           |         |          |           |       |          |          |           |         |           |                  |                  |                 |                        |                 |
|-------------|-------------|--------------------------------------------------------------------------------------|-----------|------|------|--------------------------|---------|-----------|---------|----------|-----------|-------|----------|----------|-----------|---------|-----------|------------------|------------------|-----------------|------------------------|-----------------|
|             | Pin         | Box                                                                                  | Pin       | Box  | Body | Pin                      |         |           |         |          |           | Box   |          |          |           |         |           | Body             |                  |                 |                        |                 |
|             |             |                                                                                      |           |      |      | OD                       | ID (F)  | PIN λ(In) | SRG ϕ   | SRG (In) | BEVEL ϕ   | OD    | CB ϕ     | CB λ(In) | BB ϕ      | BBλ(In) | BEVEL ϕ   | Fishing Neck (A) | Blade Length (B) | Down Length (C) | Overall Length(D) (In) | Blade Width (E) |
| DEP-19-1230 | 6 5/8'' Reg | 6 5/8'' Reg                                                                          | Acc.      | Acc. | Acc. | 8 ¼''                    | 2 7/8'' | 5''       | 5 3/8'' | 15/16''  | 7 11/16'' | 8 ¼'' | 6 1/16'' | 5/8''    | 5 18/64'' | 9''     | 7 11/16'' | 27 ½''           | 19'''            | 26''            | 78''                   | 5 7/8''         |
| Conclusion: |             | *12 ¼'' ROLLER REAMER Was Found “Acceptable” At The Time of Inspection Ready to Use. |           |      |      |                          |         |           |         |          |           |       |          |          |           |         |           |                  |                  |                 |                        |                 |

### Abbreviations :

|                     |                        |     |                    |                          |                      |      |               |       |               |        |                |
|---------------------|------------------------|-----|--------------------|--------------------------|----------------------|------|---------------|-------|---------------|--------|----------------|
| OD                  | Outside Diameter       | ID  | Inside Diameter    | SRG                      | Stress Relief Groove | CB   | Counter Bore  | BB    | Bore Back     | FB     | Float Bore     |
| ϕ                   | Diameter               | λ   | Length             | ϖ                        | Width                | δ    | Depth         | NP.   | Not Present   | NA.    | Not Applicable |
| EGR                 | Elevator Groove Recess | SGR | Slip Groove Recess | CR                       | Crack                | B    | Bent          | PC    | Premium Class | RF     | Reface         |
| GT                  | Galled Thread          | TP  | Thread Pitting     | SP                       | Seal Pitting         | TD   | Thread Damage | SD    | Seal Damage   | M      | Mashed         |
| 1                   | 100 % Coating          | 2   | 99-71 % Coating    | 3                        | 70-40 % Coating      | 4    | Up to 40 %    | 5     | Nil           | WT     | Wall Thickness |
| <b>Colors Code:</b> |                        | Red |                    | Crack or Extreme Damage. |                      | Blue | Damage        | Green | Seal Damage   | Yellow | ACFM           |

|                         |                          |                    |                    |                      |                            |  |
|-------------------------|--------------------------|--------------------|--------------------|----------------------|----------------------------|--|
| <b>Inspector</b>        | <b>Review By</b>         |                    |                    |                      |                            |  |
| <b>Qualification:</b>   | <b>Senior Inspector:</b> | M.FAHAD            | <b>Supervisor:</b> | WAQAS AWAN           | <b>Customer Name:</b>      |  |
| <b>Signature:</b>       |                          |                    |                    |                      | <b>Customer Signature:</b> |  |
| Original - Client Files |                          | Copy - Area Office |                    | QC/FN/IBS/001 Rev.00 | Dated: 07 Nov 2021         |  |

