## Al TAKAMUL COMPANY FOR ENGINEERING TESTS AND PROFESSIONAL SAFETY LIMITED Basra, North Rumaila, Quality Control Yard - Iraq



## CERTIFICATION OF VISUAl, THOROUGH EXAMINATON & MAGNETIC PARTICLE INSPECTION

| Client: HALLIBURTON (HPS)  |  |                       |  |   |   |  |  | Rep  | port No:   |                                | QC-24-04-HPS-NDT-021  |  |                  |  |
|--|--|-----------------------|--|---|---|--|--|--|--|--------------------------------|---|--|------------------|--|
| Location: HPS YARD   |  |                       |  |   |   |  |  | JC   | DB NO:   |                                | 20724   |  |                  |  |
| Inspection Date: Monday, April 22, 2024  |  |                       |  |   |   |  |  | Next Ins   | pection Date:  |                                | Monday, October 21, 2024  |  |                  |  |
| Type Of Inspection:         VISUAL, THOROUGH EXAMINATION & MAGNETIC PARTICLE INSPECTION                                      |  |                       |  |   |   |  | ECTION                                 | Spec   | ification:   |                                | ASTM E709 & ASTM E 1444 (2016) ASME V Article 7 (2019) & API 6A |  |                  |  |
|  |  |                       | and the second   |   |   |  |  | τ  | JNIT DESCRIPT  | ON:                            |   | FLANGE 3 1/8" 5M R35   | 5 X 3" 1502 WING |  |
|  |  |                       |  |   |   |  |  |  | UNIT S/N:  |                                | HAH-20900-2-3   |  |                  |  |
|  |  |                       |  |   |   |  |  |  | INSPECTION RESULT :  |                                |   |  |                  |  |
|  |  |                       |  |   |   |  |  | VISUA  | VISUAL, THOROUGH EXAMINATION   |                                |   | VISUAL & MAGNETIC PARTICLE INSPECTION ( M.P.I. ) HAD BEEN DONEON TH<br>AVAILABLE AREAS FOR THE ABOVE DESCRIPTION |                  |  |
|  |  |                       |  |   |   |  |  | MAG  | MAGNETIC PARTICLE INSPECTION   |                                |   | Thread & Avaliable critical areas inspected and found free from cracks and other defects                         |                  |  |
|  |  |                       |  |   |   |  |  |  | FINAL RESULTS  |                                |   | THE ABOVE INSPECTED AREAS WAS ACCEPTED   |                  |  |
|  |  |                       |  |   |   |  |  |  | COMMENT:<br>(MPI Wet Fluorescent inspection Thread With UltraViolet Light)<br>Magnetic Particle Inspection With A/C Hand Yoke , Black & White Contrast |                                |   |  |                  |  |
|  |  |                       | EQUIPN   | IENT DETAILS  |   |  |  |  | ]  | DEDCON I                       | DETAILS   | REVIEW BY  |                  |  |
| EQUIPMENT : AC/DC HAND   |  |                       | · ·  |   |   |  |  |  |  | ERSON I                        | DETAILS   |  | REVIEW BY        |  |
| EQUIPMENT :  | AC/DC HANL   | ) Yoke                | EQUIPMENT :  | Shooting Coil DC  | EQ  | UIPMENT :  |  | LACK LIGHT:<br>ł0 µw/cm²   | INSPECTOR NA<br>M.SHAHZAD AH   | ME:                            | Compactor Compactor   | SENIOR INSPECTOR:  | REVIEW BY        |  |
| S.NO:  | 2015040  |                       |  |   | EQ  | UIPMENT :<br>S.NO:   | 324                                    |  |  | ME:                            | Somptine A  | SENIOR INSPECTOR:  |                  |  |
| S.NO:  | -  | 52                    | EQUIPMENT :  | Shooting Coil DC  |   |  | 324<br>1                               | ł0 μw/cm <sup>2</sup>  | M.SHAHZAD AH   | ME:<br>MED                     | STARS   |  | NAVEED HUSSAIN   |  |
| S.NO:<br>Cal Due Date:   | 2015040  | 52                    | EQUIPMENT :<br>S.NO:   | Shooting Coil DC<br>22650   |   | S.NO:  | 324<br>1<br>14                         | 40 μw/cm <sup>2</sup><br>1898977   | M.SHAHZAD AH   | ME:<br>MED<br>ON:              |   | SENIOR INSPECTOR:<br>SUPERVISOR:   |                  |  |
| S.NO:<br>Cal Due Date:   | 2015040<br>14.0CT.20<br>SCENT 14HF   | 052                   | EQUIPMENT :<br>S.NO:<br>Cal Due Date:  | Shooting Coil DC<br>22650<br>15.0CT.2024  | Ca  | S.NO:<br>Due Date:<br>EXPIRE DAT   | 324<br>1<br>14.<br>TE:                 | 40 μw/cm²<br>1898977<br>.0CT.2024  | M.SHAHZAD AH<br>QUALIFICATI<br>ASNT LEVEI  | ME:<br>MED<br>ON:              |   |  | NAVEED HUSSAIN   |  |
| S.NO:<br>Cal Due Date:<br>FLUORES  | 2015040<br>14.0CT.20<br>SCENT 14HF<br>Paint Manufact<br>Meter                          | 052                   | EQUIPMENT :<br>S.NO:<br>Cal Due Date:<br>Magnaflux<br>Magnaflux                                | Shooting Coil DC<br>22650<br>15.0CT.2024<br>Batch No:   | 22030<br>22060  | S.NO:<br>Due Date:<br>EXPIRE DAT   | 324<br>1<br>14.<br>TE:<br>Black        | 40 μw/cm <sup>2</sup><br>1898977<br>OCT.2024<br>MARCH,2025   | M.SHAHZAD AH<br>QUALIFICATI<br>ASNT LEVEI  | ME:<br>MED<br>ON:<br>.II<br>/T | or Ingineer of the  |  | NAVEED HUSSAIN   |  |
| S.NO:<br>Cal Due Date:<br>FLUORES<br>Whie Contrast I   | 2015040<br>14.0CT.20<br>SCENT 14HF<br>Paint Manufact<br>Meter<br>ITENSITY:             | 052<br>024<br>ure:    | EQUIPMENT :<br>S.NO:<br>Cal Due Date:<br>Magnaflux<br>Magnaflux                                | Shooting Coil DC<br>22650<br>15.0CT.2024<br>Batch No:<br>Batch No:<br>HNICAL DETAIL                     | 22030<br>22060  | S.NO:<br>Date:<br>EXPIRE DAT<br>EXPIRE DAT   | 324<br>1<br>14.<br>TE:<br>Blacl<br>Man | 40 µw/cm <sup>2</sup><br>1898977<br>0CT.2024<br>MARCH,2025<br>JUN,2025<br>x Magnetic Ink                     | M.SHAHZAD AH<br>QUALIFICATI<br>ASNT LEVEI<br>MT & PT & '   | ME:<br>MED<br>ON:<br>.II<br>/T | Angine to a   | SUPERVISOR:  | NAVEED HUSSAIN   |  |
| S.NO:<br>Cal Due Date:<br>FLUORES<br>Whie Contrast I<br>Digital Lux M<br>WHITE LIGHT IN                                      | 2015040<br>14.0CT.20<br>SCENT 14HF<br>Paint Manufact<br>Meter<br>TTENSITY:<br>:2722003 | 024<br>ure:<br>Wet FL | EQUIPMENT :<br>S.NO:<br>Cal Due Date:<br>Magnaflux<br>Magnaflux                                | Shooting Coil DC<br>22650<br>15.OCT.2024<br>Batch No:<br>Batch No:<br>HNICAL DETAIL<br>ration 14 HF 0.: | 22030<br>22060<br>S   | S.NO:<br>C EXPIRE DATE<br>C EXPIRE DAT<br>2 EXPIRE DAT<br>100 ml   | 324<br>1<br>14.<br>TE:<br>Blacl<br>Man | 40 µw/cm²<br>1898977<br>.0CT.2024<br>MARCH,2025<br>JUN,2025<br>xMagnetic Ink<br>ufacture:7HF<br>IN No:220605 | M.SHAHZAD AH<br>QUALIFICATI<br>ASNT LEVEI<br>MT & PT & '   | ME:<br>MED<br>ON:<br>.II<br>/T | or ngineer of state   | SUPERVISOR:  | NAVEED HUSSAIN   |  |
| S.NO:<br>Cal Due Date:<br>FLUORES<br>Whie Contrast J<br>Digital Lux M<br>WHITE LIGHT IN<br>3570 Lux/S.NO:<br>Cal Due Date:16 | 2015040<br>14.0CT.20<br>SCENT 14HF<br>Paint Manufact<br>Meter<br>TTENSITY:<br>:2722003 | 024<br>ure:<br>Wet FL | EQUIPMENT :<br>S.NO:<br>Cal Due Date:<br>Magnaflux<br>Magnaflux<br>UVORESCENT Particle Concent | Shooting Coil DC 22650 15.0CT.2024 Batch No: Batch No: HNICAL DETAIL ration 14 HF 0.: ion 7 HF 1.:      | Ca<br>220300<br>220600<br>S<br>1 to 0.4 ml/<br>2 to 2.4 ml/ | S.NO:<br>Due Date:<br>C EXPIRE DAT<br>C EXPIRE DAT<br>100 ml 0 100 ml 0 1000 ml 0 100 ml 0 100 ml 0 100 ml 0 | 324                                    | 40 µw/cm²<br>1898977<br>.0CT.2024<br>MARCH,2025<br>JUN,2025<br>xMagnetic Ink<br>ufacture:7HF<br>IN No:220605 | M.SHAHZAD AH<br>QUALIFICATI<br>ASNT LEVEL<br>MT & PT &<br>STAMP & SIGNA  | ME:<br>MED<br>ON:<br>.II<br>/T | or Ingineer mark  | SUPERVISOR:  | NAVEED HUSSAIN   |  |