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| **Ultrasonic Thickness Measurement report**  **Протокол по результатам проведения ультразвуковой толщинометрии** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **JOB DETAILS / РАБОЧАЯ ИНФОРМАЦИЯ** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Client**  Клиент | | | | | **NCOC N. V.** | | | | | | | | **Project**  Проект | | | | | | | | **ESKENE WEST** | | | | | |
| **Work location**  Место работы | | | | | **Unit 210 Tr 2** | | | | | | | | **Control object**  Объект контроля | | | | | | | | **A1-2102-PO-033-6-A13-WN KE01-A1-210-PO-P-DI-8097-051**  **A1-2102-PO-033-6-A13-WN KE01-A1-210-PO-P-DI-8097-052** | | | | | |
| **Material**  Марка стали | | | | | **A420/W|PL**  **A333 Gr.6** | | | | | | | | **Dimension**  Размер | | | | | | | | **6’’x7.11 mm;** | | | | | |
| **Calibration Temperature**  Температура калибровочного блока | | | | | **+2°C** | | | | | | | | **Object Temperature**  Температура объекта контроля | | | | | | | | **+40°C** | | | | | |
| **Surface condition**  Состояние поверхности | | | | | **Coated** | | | | | | | | **Couplant**  Контактная жидкость | | | | | | | | **UT Gel** | | | | | |
| **Correction factors**  Поправочные факторы | | | | | **n/a** | | | | | | | | **Roughness**  Шероховатость | | | | | | | | **-** | | | | | |
| **INSPECTION PROCEDURE / НОРМАТИВНЫЕ ДОКУМЕНТЫ** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Procedure**  Процедура | | | | **QP-11-UTT-Q01**  **Rev 04** | | | | | | **Standard for testing**  Стандарт по контролю | | | | | **GOST 28702-90** | | | | **Standard for item**  Стандарт для ОК | | | | | **ASME B31.3** | | |
| **EQIPMENT PARAMETERS / ПАРАМЕТРЫ ОБОРУДОВАНИЯ** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Probe, S/N**  Датчик, № | | | | | | | **D790, №1306596** | | | | | | **Size**  Размер | | | | | | | | **11 mm** | | | | | |
| **Angle**  Угол ввода | | | | | | | **0º** | | | | | | **Crystal**  ПЭ | | | | | | | | **Dual** | | | | | |
| **Frequency**  Частота преобразователя | | | | | | | **5 MHz;** | | | | | | **Accuracy**  Точность | | | | | | | | **± 0,1 mm** | | | | | |
| **CALIBRATION BLOCK DETAILS / ПАРАМЕТРЫ КАЛИБРОВОЧНОГО БЛОКА** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Calibration Block**  Калибровочный блок | | | | | | | **Step wedge** | | | | | | **Calibration Block Range**  Диапазон толщин калибровочного блока | | | | | | | | **2.5-12.50 mm** | | | | | |
| **INSPECTION EQUIPMENT / ОБОРУДОВАНИЕ ИНСПЕКЦИОННОГО КОНТРОЛЯ** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **№** | | **Equipment**  Оборудование | | | | **Manufacture** Изготовитель | | | | | **Serial number**  Серийный номер | | | | | | **Certificate**  Сертификат поверке | | | | | | **Expire date**  Дата истечения поверки | | | |
|  | | 38DL PLUS | | | | OLYMPUS | | | | | 171421601 | | | | | | KZ-01-21-Ж-0169 | | | | | | 01.03.2022 | | | |
|  | | Step wedge calibration block | | | | OLYMPUS | | | | | 0265 19 | | | | | | - | | | | | | - | | | |
| **Job description:**   1. Echo to echo UT technique was used. 2. Inspection performed on South, North, West, East, Top, Bottom, Extrados and Intrados sides related to object position. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Notes** / Примечания:  N/A-not applicable. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **INSPECTION RESULTS / РЕЗУЛЬТАТЫ КОНТРОЛЯ** | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Line / Tag N / Номер** | | **Item description/**  **Участок контроля** | **Section number/**  **Номер сечения** | | | | **Diameter, inch /**  **Диаметр, дюйм** | **Nominal thickness, mm/**  **Номинальная толщина, мм** | | | **South, mm/**  **Юг, мм** | | **North, mm /**  **Север, мм** | | **West, mm /**  **Запад, мм** | | **East, mm /**  **Восток, мм** | | **Top, mm /**  **Верх, мм** | | **Bottom, mm /**  **Низ, мм** | | | **Extrados, mm /**  **Внешний радиус, мм** | **Intrados, mm /**  **Внутренний радиус, мм** |
| **A1-2102-PO-033-6-A13-WN KE01-A1-210-PO-P-DI-8097-052** | | CML-01  Pipe | 1 | | | | 6” | 7.11 | | | - | | - | | 7.11 | | 6.51 | | 7.14 | | 6.57 | | | - | - |
| 2 | | | | - | | - | | 7.12 | | 6.58 | | 7.18 | | 6.77 | | | - | - |
| 3 | | | | - | | - | | 7.12 | | 6.88 | | 7.18 | | 6.80 | | | - | - |
| CML-04  Elbow | 1 | | | | - | | - | | 7.96 | | 7.22 | | - | | - | | | 7.18 | 7.26 |
| 2 | | | | - | | - | | 7.78 | | 7.19 | | - | | - | | | 6.94 | 7.70 |
| 3 | | | | - | | - | | 7.71 | | 7.11 | | - | | - | | | 7.19 | 7.91 |
| CML-05  Pipe | 1 | | | | 7.11 | | 7.45 | | 7.38 | | 7.56 | | - | | - | | | - | - |
| 2 | | | | 6.94 | | - | | 7.26 | | 7.64 | | - | | - | | | - | - |
| 3 | | | | 6.80 | | 7.42 | | 7.23 | | 7.67 | | - | | - | | | - | - |
| **A1-2102-PO-033-6-A13-WN KE01-A1-210-PO-P-DI-8097-051** | | CML-04  Elbow | 1 | | | | - | | - | | 6.21 | | 6.51 | | - | | - | | | 5.55 | 6.40 |
| 2 | | | | - | | - | | 6.02 | | 6.51 | | - | | - | | | - | 6.54 |
| 3 | | | | - | | - | | 6.11 | | 6.35 | | - | | - | | | 5.45 | 6.12 |

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| Examined by / Контроль провёл: | | Approved by / Протокол утвердил: | | Client representative /  Представитель клиента | |
| Name / ФИО | Zhuravlyov Sergey | Name / ФИО | Kuryanau Dzmitry | Name / ФИО |  |
| Signature / Подпись |  | Signature / Подпись |  | Signature / Подпись |  |
| Date / Дата | 03.12.2021 | Date / Дата | 03.12.2021 | Date / Дата |  |
| Cert. № /  № серт-та | UT L II cert. No. 63-05-19  expire date: 28.05.2022 | Cert. № /  № серт-та | UT L II cert. No 2B 230/20  expiry date 31.05.2025 | Cert. № /  № серт-та |  |

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| Annex 1 / Приложение 1  Inspection Drawing / Схема контроля |
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| **A1-2102-PO-033-6-A13-WN KE01-A1-210-PO-P-DI-8097-052** |
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| **A1-2102-PO-033-6-A13-WN KE01-A1-210-PO-P-DI-8097-051** |