

CURRICULUM VITAE

EHAB SHAKER YASIN BASUONI

Non-Revenue Water and District Metering Specialist — water utility operator side

1. APPLICATION SUMMARY

Application	General registration in the expert database
Fields of expertise	Non-Revenue Water reduction; District Metered Areas; acoustic leak detection; pressure management; smart metering and AMI; water balance and utility performance
Target positions	NRW Specialist; DMA Specialist; Water Loss Reduction Expert; Smart Metering / AMI Specialist; Water Utility Performance Advisor
Expected remuneration	USD 9,500 per month, inclusive of per diem. Negotiable subject to the package offered for accommodation, international travel and insurance.
Availability	Available from 1 December 2026. Short-term and long-term assignments, worldwide.

2. PERSONAL DATA

Family name	Basuoni
First name	Ehab
Date of birth	23 July 1988
Nationality	Jordanian
Residence	Aqaba, Jordan
Telephone	+962 77 852 6111
E-mail	ehabbasuoni88@gmail.com
Professional body	Jordan Engineers Association, Membership No. 131352 — Civil Engineering Division, Water, Sewage and Environment Section, Water Engineering Branch (since 17 May 2014)
Present position	Head of Non-Revenue Water Section, Non-Revenue Water and Energy Efficiency Department, Aqaba Water Company (AWC) W.L.L.
Countries of work experience	Jordan (2014 – present); Germany (industrial internship, 2013 – 2014)

3. EDUCATION

Period	Institution	Qualification
2009 – 2013	German Jordanian University, Madaba, Jordan	B.Sc. Civil Engineering — Water and Environmental Engineering and Management
2014	Magdeburg-Stendal University of Applied Sciences, Germany	Exchange semester, Water Engineering
2019	IHE Delft Institute for Water Education, Netherlands	Short course, Water Transport and Distribution

4. LANGUAGE SKILLS

Language	Reading	Speaking	Writing
Arabic	Native	Native	Native
English	Fluent	Fluent	Fluent
German	Intermediate	Intermediate	Intermediate

5. KEY QUALIFICATIONS FOR THIS ASSIGNMENT

- Thirteen years in the water sector, eleven inside an operating water utility, covering the full non-revenue water cycle: IWA water balance top-down and bottom-up, DMA establishment and validation, pressure management, acoustic leak detection, and commercial loss reduction through metering accuracy and illegal-use control.
- Owner-side responsibility for a distribution network of 1,968 km and 27,665 pipe segments serving approximately 42,000 metered service connections in Aqaba City, and about 45,600 across the full service area.

- Measured result: company-wide non-revenue water reduced from 58.7% (Q1 2021) to 34.0% (Q3 2026), reported quarterly to and recognised by the Jordanian Ministry of Water and Irrigation.
- Leak detection at scale: direction of a 500-unit noise logger fleet on an IoT platform, acoustic correlation survey, minimum night flow analysis and repair tracking.
- Pressure management: pressure zone review, PRV performance assessment and pressure-leakage (N1) analysis across the city network.
- Commercial loss reduction: delivery and continuing operation of a 42,000-unit ultrasonic LoRaWAN AMI estate — reading validation, meter accuracy and under-registration testing, illegal-use detection and re-billing, and apparent-versus-real loss separation.
- Donor-funded delivery and coordination with GIZ, PTB, JICA and USAID, including procurement and reporting under USAID ADS 310 and 22 CFR 228 and a USAID Fixed Amount Reimbursement Agreement for smart metrology infrastructure in Aqaba.
- Hydraulic modelling in WaterGEMS, WaterCAD and EPANET; GIS in ArcGIS Pro and QGIS; SCADA and Power BI. Author of the Non-Revenue Water certification examination for ACWUA, the Arab Countries Water Utilities Association.

6. EMPLOYMENT RECORD

Period	Employer	Country	Position
09/2025 – present	Aqaba Water Company (AWC) W.L.L.	Jordan	Head of Non-Revenue Water Section
09/2020 – 09/2025	Aqaba Water Company (AWC) W.L.L.	Jordan	Head of Water Meter Division
09/2015 – 09/2020	Aqaba Water Company (AWC) W.L.L.	Jordan	Supervision and Planning Engineer
06/2014 – 06/2015	Darras Contracting Company	Jordan	Water / Infrastructure Site Engineer
05/2014 – 04/2015	Aqaba Development Corporation	Jordan	Trainee Water Engineer (concurrent)
09/2013 – 01/2014	Duktus Rohrsysteme Wetzlar GmbH	Germany	Intern, Application Engineering

The Aqaba Development Corporation traineeship ran concurrently with the first months of the Darras Contracting appointment; both relate to the same urban infrastructure project, from the client side and the contractor side respectively.

7. REFERENCE PROJECTS

1. Non-Revenue Water Reduction Programme, Aqaba City

Country	Jordan
Client	Aqaba Water Company (AWC) W.L.L. — regulated by the Ministry of Water and Irrigation and the Aqaba Special Economic Zone Authority
Dates	09/2025 – present (programme ownership); NRW data and loss-reduction work from 09/2020
Position held	Head of Non-Revenue Water Section (programme owner)
Network length	1,968 km of distribution network, 27,665 pipe segments
Service connections	approx. 42,000 metered service connections in Aqaba City (approx. 45,600 service-area wide)
Software used	WaterGEMS, EPANET, ArcGIS Pro, QGIS, SCADA, Power BI, advanced Excel

Scope of work:

- DMA establishment and validation: zoning strategy, boundary valve and meter siting, hydraulic verification, commissioning, and continuing DMA balance monitoring.
- Leak detection: direction of a 500-unit noise logger fleet on an IoT platform, acoustic correlation survey, minimum night flow (MNF) analysis, and repair tracking with the networks section.
- Pressure management: pressure zone review, PRV performance assessment and pressure-leakage (N1) analysis across the city network.
- Commercial loss reduction: AMI reading validation, bulk and customer meter accuracy and under-registration testing, illegal-use detection and re-billing, and apparent-versus-real loss separation.

- IWA water balance top-down and bottom-up; ILI, MNF and NRW percentage tracking and quarterly reporting to the Ministry of Water and Irrigation.

Result: Company-wide NRW reduced from 58.7% (Q1 2021) to 34.0% (Q3 2026). Aqaba Governorate NRW reduced to 15.0% in Q3 2026.

2. District Metered Area (DMA) Programme, Aqaba City

Country	Jordan
Client	Aqaba Water Company (AWC) W.L.L.
Dates	2018 – 2020
Position held	Project Manager (design and implementation)
Network length	Aqaba City distribution network
Service connections	Citywide customer base
Software used	WaterCAD, WaterGEMS, ArcGIS

Scope of work:

- Design, redesign and installation of district metered areas across the city network.
- Zoning strategy, boundary valve and bulk meter siting, hydraulic verification and commissioning.
- Establishment of DMA balance reporting and minimum night flow baselines used for subsequent leak detection targeting.

Result: DMA framework that underpins the utility's current NRW programme.

3. Citywide AMI Smart Meter Deployment, Aqaba

Country	Jordan
Client	Aqaba Water Company (AWC) W.L.L.
Dates	2020 – 2025 (delivery); estate in continuing operation
Position held	Project Manager (owner side)
Network length	Aqaba City distribution network, 1,968 km
Service connections	42,000 service connections converted
Software used	AMI / LoRaWAN head-end systems, SmartWater platform, Power BI, advanced Excel

Scope of work:

- Replacement of every mechanical customer meter in Aqaba City with 42,000 Mach 10 ultrasonic LoRaWAN smart meters.
- Technical specification, procurement support and tender evaluation; contractor supervision and phased rollout across a live network.
- Commissioning, communication and alarm monitoring, reading validation and data quality control.
- Commercial loss reduction through metering accuracy: under-registration testing, bulk meter accuracy improvement and consumption profile analysis.

Result: Full-city AMI coverage; measurable reduction in apparent losses and billing disputes.

4. Large-Customer Metering and Metering Chamber Installation, Aqaba

Country	Jordan
Client	Aqaba Water Company (AWC) W.L.L.
Dates	2019
Position held	Project Manager
Network length	Aqaba City distribution network
Service connections	Large-consumer and bulk supply points
Software used	WaterCAD, AutoCAD, ArcGIS

Scope of work:

- Design and installation of large-customer and bulk meters with manhole chambers, DN50 to DN300.
- Hydraulic sizing, chamber detailing, site supervision, commissioning and accuracy verification.

Result: Improved measurement accountability at the highest-consumption points on the network.

5. Water Network Works — Tendering and Construction Supervision, Aqaba

Country	Jordan
Client	Aqaba Water Company (AWC) W.L.L.
Dates	09/2015 – 09/2020
Position held	Supervision and Planning Engineer
Network length	Aqaba City and Aqaba Governorate water network works
Service connections	—
Software used	WaterCAD V8i, SewerCAD V8i, AutoCAD, Civil 3D

Scope of work:

- Preparation of tender and contract documents and bills of quantities for water network works.
- Checking of plans, drawings and quantities for accuracy of calculation and compliance with design.
- Principal technical adviser on site to contractors, craftspeople and operatives; day-to-day site supervision.
- Valuation of completed works and certification of contractor payments; technical progress reporting.
- Participation in the water modelling team: hydraulic and hydrologic data collection, model development, calibration and application.
- Application and enforcement of health and safety requirements across construction activities.

Result: Delivery of network rehabilitation and extension works to specification and programme.

6. Morjan Engineers Village — Urban Infrastructure Works, Aqaba

Country	Jordan
Client	Marjan Company (Jordan Engineers Association investment arm) with Aqaba Development Corporation; consultant: Consolidated Engineering and Environment
Dates	06/2014 – 06/2015 (contractor side); 05/2014 – 04/2015 (client-side traineeship)
Position held	Water / Infrastructure Site Engineer — Darras Contracting Company
Network length	Water, sewer and storm drainage networks: UPVC DN160 – DN315 and GRP DN400 – DN600, approx. 11 km of pipeline, with Ø1,000 – Ø1,500 mm access chambers
Service connections	—
Software used	AutoCAD, advanced Excel

Scope of work:

- Principal technical adviser on a construction site to subcontractors, craftspeople and operatives.
- Checking of plans, drawings and quantities for accuracy of calculation; verification that materials and workmanship met specification.
- Management and interpretation of the contract design documents supplied by the client and consultant.
- Day-to-day site management, supervision of the site labour force and of subcontractors, and programme planning.

Result: Completed water, sewer, storm drainage and road infrastructure for the development.

8. LICENCES AND CERTIFICATIONS

- Licence to Practise — Non-Revenue Water Network Operator, Level III, Accreditation and Quality Assurance Commission, Jordan (2025 – 2030)
- Supervisor, Non-Revenue Water — ACWUA (2025); Operator Level III, Non-Revenue Water — ACWUA (2025)
- Licensed Operator, Water Distribution Networks — Technical and Vocational Skills Development Commission, Jordan (2024 – 2029)
- Licensed Water Network Maintenance Supervisor — Accreditation and Quality Assurance Commission, Jordan (2019 – 2024)
- Training of Trainers, Water Network Maintenance — Water Authority of Jordan with GIZ and CAQA (2019)
- OSHA 30-Hour Occupational Safety and Health (2014); NASP 30-Hour Construction Safety, USA (2014)

9. SELECTED TRAINING (APPROXIMATELY 50 COURSES COMPLETED; FULL RECORD AVAILABLE)

Non-revenue water and leak detection: Improving Non-Revenue Water Management Capacity — JICA, Tokyo (2025); Technical Course on NRW Reduction — Fuji Tecom Inc., Tokyo (2025); Advanced NRW Calculation — USAID; Physical Losses Reduction — USAID; Multilog2 loggers and pressure transient analysis; Tokyo Keiki UFP-20 portable flow measurement; Fuji Tecom PL-G and NPL-100 pipeline locating.

Modelling and design: Water Network Analysis and Hydraulic Modelling with WaterGEMS — USAID NRW Project; WaterCAD V8i; SewerCAD V8i; Storm Water Networks and Rainfall Estimation; Civil 3D — Jordan Engineers Association.

Metrology and quality infrastructure: Quality Infrastructure for Efficient Water Management in Jordan — PTB, Physikalisch-Technische Bundesanstalt, Germany (2022).

Data and GIS: ArcGIS Pro Essential Workflows (24 h); GIS Applications for Water Utilities (40 h); ArcGIS 1 and 2; Working with CAD Data in ArcGIS — Esri and InfoGraph; Microsoft Power BI — University of Jordan (2025).

Management and governance: Multilevel Water Governance — The Hague Academy for Local Governance; Contract Management and Administration — Jordan Engineers Association; Strategic Planning.

10. PROFESSIONAL RECOGNITION

- Company-wide NRW reduction from 58.7% to 34.0% (Q1 2021 – Q3 2026), recognised by the Jordanian Ministry of Water and Irrigation.
- Author of the Non-Revenue Water certification examination for ACWUA, the Arab Countries Water Utilities Association.
- Keynote speaker, Smart Water Metering and Customer Transformation Congress, Brussels, June 2026.
- Cover feature, H2O Global News, Issue 17, March 2026.
- Talent for Governance scholarship — The Hague Academy for Local Governance and Waternet, Netherlands.

11. CERTIFICATION

I, the undersigned, certify that to the best of my knowledge and belief this CV correctly describes myself, my qualifications and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



Signature

Eng. Ehab Shaker Yasin Basuoni

22 October 2026

Date