

# GUL HASSAN

(Tunnel Engineer/Geologist)



## CONTACT:

### Cell

+966508874693

### Whatsapp

+923333504033

### E-Mail

gulhmk@gmail.com

### Location

KSA

### IQAMA

(Transferable)  
2623395973

## SKILLS

- ✓ Administrative Skills
- ✓ Tunnel excavation
- ✓ Drilling and Blasting
- ✓ Underground safety
- ✓ QA/QC of tunneling works
- ✓ Site Inspections
- ✓ Documentation & Reporting
- ✓ Site Quality Supervision
- ✓ Material Testing
- ✓ Geological Mapping
- ✓ Risk Assessment
- ✓ Team Player
- ✓ Team Builder
- ✓ Time Management
- ✓ Observations skills
- ✓ Analytical
- ✓ Good knowledge of minerals and rocks
- ✓ Able to work independently
- ✓ Computer Skills
- ✓ MS Word
- ✓ MS Excel
- ✓ MS PowerPoint

## JOB SUMMARY:

Having professional and extensive 14 years of working experience in Execution and construction supervision of large scale underground infrastructure projects like Tunnels, Vertical shaft, Desender, Weir, Dams and ensure project adhere to safety, budget and schedule requirements. During this tenure of professional work have gained expertise in Execution, Construction Supervision, Quality control, Tunnel Excavation/Mining, Geological Mapping, Tunnel Support & Geotechnical investigation.

## ACADEMIC QUALIFICATIONS:

### **Master of Science in Geology, 2010**

Federal Urdu University of Arts, Science and Technology Karachi

### **Bachelor of Science (Hons) in Geology, 2008**

Federal Urdu University of Arts, Science and Technology Karachi

## HSE CERTIFICATION:

### NEBOSH IGC

### NEBOSH UK

## HSE TRAINING:

Risk Assessment

Qanmos College

First Aid

Qanmos College

Confined Space

Qanmos College

Work at Height

Qanmos College

## WORK HISTORY:

**(14 years)**

### **Employer: Frontier Works Organization (FWO)-Pakistan**

**7.0 years**

Project : **48 MW Jaggran-II Hydropower Project, AJ&K**

#### Major Components are:

Headrace Tunnel 3.8Km, Adit Tunnel 400m, Vertical Shafts 50m, Inclined Shaft 160m, Surge Shaft 50m, Desender 120m, Weir and Powerhouse

### **Position : Tunnel Engineer**

Duration : 25<sup>th</sup> April 2018 to 25<sup>th</sup> April 2025

### **Job Responsibilities:**

- ⇒ Supervise and execution tunnel excavation by NATM and Drill & Blast methods.
- ⇒ Planning of tunnel excavation by NATM and Drill & Blast method.
- ⇒ Evaluate geological conditions before and during construction.
- ⇒ Coordinate with design teams to resolve the technical and design issues.
- ⇒ Supervise and manage all onsite construction activities to ensure project progress according to the approved plans and schedule.
- ⇒ Execute and supervise the excavation of Tunnel, Vertical Shafts and Dam.
- ⇒ Manage site logistics including mucking, drilling patterns, blasting cycles, ventilation, and dewatering operations.
- ⇒ Supervise installation of initial supports (shotcrete, lattice girders, steel ribs, rock bolts, wire mesh, and rock anchor/spiles).
- ⇒ Supervise and execute Drilling and Control Blasting.
- ⇒ Manage the Manpower for the execution of tunnel excavation, Tunnel Support, Concrete lining, and mass concreting at weir/desender.
- ⇒ Execute final concrete lining (35cm thick), Concrete at Weir and Desender
- ⇒ Supervise Grouting i.e Contact, Curtain and compaction
- ⇒ Slope stability and landslide treatment.
- ⇒ Ensure compliance with project specifications, method statements and ITP
- ⇒ Coordinate with QC Team to prepare/implement quality Plans and quality issues.
- ⇒ Conduct site inspections to ensure adherence to quality and safety.
- ⇒ Ensuring that work carried out is in accordance with the Project specification.
- ⇒ Participate in technical /progress review meeting with the Consultants and contractor's representatives to resolve the issues regarding construction progress, quality and health and safety issues.
- ⇒ Coordinate with subcontractors & suppliers to ensure smooth execution of work.
- ⇒ Monitor material usage, site resources& ensure cost control measures are followed
- ⇒ Ensure health and safety at the workplace.
- ⇒ Review contractor submittals including ITP, shop drawings, and material approvals for tunneling works.
- ⇒ Identify geotechnical hazards (collapse, water ingress, Rock Fall and landslide).
- ⇒ Prepare daily, weekly, and monthly progress reports, documenting excavation advancement, support installation, and construction activities.

**PROFESSIONAL COURSES:**

- ✓ Measurements & Drilling Calculation
- ✓ Drilling & Mud logging Techniques
- ✓ Diploma in Information Technology

**INDUSTRY/ AREA OF INTEREST:**

- ✓ Tunneling
- ✓ Construction
- ✓ Mining/Minerals
- ✓ Engineering
- ✓ Oil & Gas

**FUNCTIONAL AREAS:**

- ✓ Execution
- ✓ Field Operations
- ✓ Administration
- ✓ Monitoring & Evaluation
- ✓ Planning & Development
- ✓ Project Management
- ✓ Quality Control (QC)
- ✓ Safety & Environment

**LANGUAGES:**

- ✓ English
- ✓ Urdu

**Employer :China Gezhouba Group of Companies CGGC-PK (3.8 years)**

**Project : 969 MW Neelum Jhelum Hydroelectric Project, AJ&K**  
*Major Components are:*  
 Headrace Tunnel 28Km, Adit Tunnel, Vertical Shafts, Inclined Shaft, Surge Shaft and Powerhouse

**Position :Tunnel Engineer/Geologist**

**Duration : 25<sup>th</sup> July 2014 to 30<sup>th</sup> March 2018**

**Job Responsibilities:**

- ⇒ Supervise and manage all onsite construction activities to ensure project progress according to the approved plans and schedule.
- ⇒ Execute tunnel Excavation cycle and manage manpower & site resources.
- ⇒ Tunnel construction supervision and inspection.
- ⇒ Evaluate of Rock class by using RMR and Q-system.
- ⇒ Supervision of control Drilling and Control Blasting.
- ⇒ Conducted inspections of civil works including concrete, rebar and formwork.
- ⇒ Prepare and implement Method Statements.
- ⇒ Assist to Maintain QC documents, RFI, WIR, MIR, etc.
- ⇒ Witnessed onsite concrete tests such as slump test, temperature test, etc.
- ⇒ Coordinate with subcontractors for various construction and quality issues.
- ⇒ Execute and supervise tunnel support (initial and final support) decision, recommendation based on rock mass evaluation and to ensure proper installation of recommended support.
- ⇒ Review and validate design drawings, tunneling sequences, excavation stages, and temporary/permanent support details.
- ⇒ Slope Protection work at dam site.
- ⇒ Supervise tunnel initial Support like shotcrete, rock bolts and wiremesh.
- ⇒ Supervise dam foundation Grouting (Consolidation and Curtain), Contraction joint Grouting and Contact Grouting in tunnel.
- ⇒ Maintain progress record of construction activities on daily basis.

**Employer : AGES Consultants Peshawar-PK (2.5 years)****Projects : Feasibility Study and Engineering Design of:**

Gahrait Swir Lasht HPP Project (310 MW), Chitral, KPK  
 Toren More - Kari Hydropower Project (350 MW), Chitral, KPK  
 Jamshil - Turen More Hydropower Project (260 MW), Chitral, KPK  
 Tirichan - Attahk Irrigation Water Project, Chitral, KPK  
 Kalkot Patrak HPP (47 MW) Upper Dir, KPK  
 Patrak Sheringal HPP (22 MW) Upper Dir, KPK  
 Shigo Kas HPP (102MW) Lower Dir, KPK

**Position : Junior Geologist/Geotechnical Engineer**

**Duration : 1<sup>st</sup> Jan 2012 to 30<sup>th</sup> May 2014**

**Job Responsibilities:**

- ⇒ Managed and execute extensive drilling operations with multiple drilling rigs.
- ⇒ Supervised in-situ field tests, including Water Pressure Tests, Field Permeability Tests, Field Density Tests, Cone Penetration Tests and Standard Penetration Tests.
- ⇒ Boreholes logging (ranging from 10m to 220m deep) and documented excavated test pits, ensuring accurate geological characterization. Data Collection, Management & Reporting.
- ⇒ Collected and managed core samples for laboratory testing, ensuring data integrity and project continuity. Digitized, evaluated, corrected, and finalized all field data, including borehole logs, test pit logs, and field test results.
- ⇒ Surface Geological Mapping and Slope Mapping.
- ⇒ Effectively managed site operations, ensuring adherence to safety protocols, project timelines, and technical specifications.
- ⇒ Identify potential geo-hazards such as landslides, rockfalls, liquefaction, subsidence, sinkholes, instability, and seismic risks during site investigations.
- ⇒ Develop mitigation and stabilization solutions such as soil nailing, rock bolting, shotcrete, retaining walls, drainage systems, and ground improvement methods.

**Employer : Ministry of Petroleum & Natural Resources-PK (1 year)**

**Duration : 15<sup>th</sup> December 2010 to 14<sup>th</sup> December 2011)**

**Position : Internee Geologist**