



N.S. ENGINEERING & GEOTECHNICAL SERVICES PVT. LTD.

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N.S. LABORATORY OUR SERVICES:

Field Investigation:

- ➤ Rotary Drilling (Capacity up to 700m)
- ➤ Percussion Drilling
- ➤ Auger Drilling
- > Static Cone Penetration Test
- ➤ Vane Shear Test
- ➤ Hydro-Fracture Test
- ➤ In-situ Direct Shear Test
- ➤ Plate-Jacking Test
- > Static Pile Load Test
- Dynamic Pile Load Test
- ➤ Pile Integrity Test
- Borehole Camera (Televiewer- Acoustic Borehole Scanning)

Geo-Physical Test:

- ➤ Electrical resistivity tomography (ERT)
- ➤ Seismic Refraction Tomography (SRT)
- ➤ Magnetotellurics (MT-1500m)

Laboratory Test:

1. Rebar Test:

- ➤ Elongation, Tensile Strength Test
- > Shear Test
- ➤ Strand Test of Tension Cable/Steel Rope
- Bend-Rebend Test

2. Lab Test for Rocks:

- > Triaxial Test (C & φ)
- ➤ Modulus of Elasticity
- ➤ Poisson's Ratio
- ➤ Unconfined Compressive Strength
- ➤ Slake Durability
- > Tensile (Brazilian Test)
- Point Load Test
- Porosity
- Density
- ➤ Water Absorption
- > Specific Gravity
- ➤ Natural Moisture Content
- ➤ Block Coring

3. Lab Tests for Soil:

- ➤ Moisture Content
- ➤ Atterberg's Limits

- ➤ Shrinkage Limit
- ➤ Grain Size Analysis (Wet & Dry)
- > Hydrometer
- ➤ Bulk Density (Wet & Dry Density)
- > Specific Gravity
- ➤ Void Ratio
- ➤ Direct Shear Test (C & Φ)
- > Triaxial (UU)
- ➤ Triaxial (CU)
- Unconfined Compression Test
- > Permeability Test
- Consolidation Test (Swell Test)

4. Lab Test for Water:

- > pH Value
- ➤ Chloride Content (ppm)
- ➤ Sulphate Content (ppm)
- > TSP (ppm)

5. Lab Test for Aggregate (Coarse/Fine):

- ➤ Proctor Compaction (OMC/MDD)
- California Bearing RatioTest (CBR)
- ➤ Organic Content
- Grain Size Analysis (Dry/Wet)
- ➤ Mica/Clay Content

6. Lab Test for Concrete, Aggregate & Brick:

- Grain size Distribution
- > Organic Impurities
- ➤ Chloride Content
- ➤ Sulphate Soundness
- ➤ Alkali Reactivity
- ➤ Aggregate Crushing Value
- ➤ Aggregate Impact Value
- ➤ Flakiness & Elongation Index
- ➤ Los Angeles Abrasion Test (LAA)
- ➤ Concrete Mix Design
- Compressive Strength of Cube
- ➤ Compressive Strength of Brick
- ➤ Water Absorption of Brick

Non-Destructive Test:

- Rebar Scanning
- ➤ Rebound Hammer Test
- ➤ Flat Jack Test
- > Push Shear Test

N.S. LABORATORY



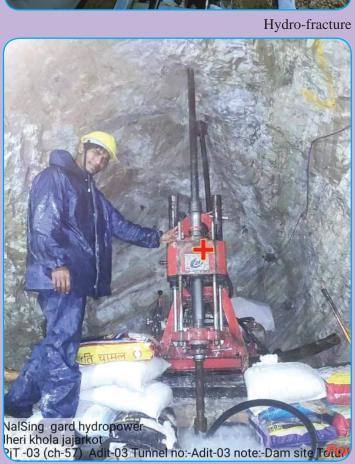
In-situ Direct Shear Test inside Tunnel



Horizontal Drilling inside Tunnel



Hydro-fracture Test inside Tunnel



Vertically upward Drilling Inside Tunnel



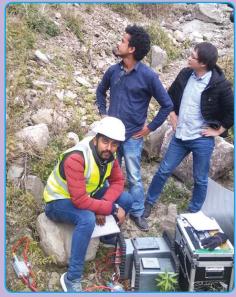
Plate Jacking Test inside Tunnel



Flat Jack Test for Ritu Niwash at Manbhawan



Static Cone Penetration Test at Dhobighat



2D ERT Test for Fast Track Project



Installation of Automatic Data Logger for Vibrating Wire Piezometer (KTFT Project)



320m Rotary Drilling at KTFT Project with 1000m capacity Drilling Machine



Field work Monitoring by Senior Geotechnical Engineer via Random Site Visit



Gate Gate

N.S. Laboratory

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