



GULF INSPECTION INTERNATIONAL Co., (GIICO)
Ph:965-24735121, 24748859 Fax:24733045
Kuwait
www.giico.net
mgmt@giico.net



GIICO EQUIPMENT LIST FOR DRILLING BOREHOLES AND CONDUCTING CPT's

GII Rig No.	Rig Mode	Make / Sl.No.	Mounted on	Kwt. Traffic Plate No.	FEATURES							Remarks
					Auguar	Rotary	Coring	Cased BH	SPT	CPT	Max. depth	
1	Acker AD - II	Acker / USA	GMC Truck	45/8062	Y	Y	Y	Y	Auto	_	30m	
2	Acker AD - II	Acker / USA	GMC Truck	1/27495	Y	Y	Y	Y	Auto	_	30m	
3	Acker AD - II	Acker / USA	GMC Truck	1/27336	Y	Y	Y	Y	Auto	_	30m	
4	Acker AD - II	Acker / USA	GMC Truck	9/51538	Y	Y	Y	Y	Auto	_	70m	
5	Acker AD - II	Acker / USA	GMC Truck	6912	Y	Y	Y	Y	Auto	_	70m	
6	Acker AD - II	Acker / USA	GMC Truck	12/85763	Y	Y	Y	Y	Auto	_	70m	
7	Acker AD - II	Acker / USA	IZUZU Truck	13/51748	Y	N	Y	Y	Manual	_	30m	
8	Acker AD - II	Acker / USA	IZUZU Truck	13/70320	Y	N	Y	Y	Manual	_	30m	
9	Acker AD - II	Acker / USA	GMC Truck	2/77005	Y	Y	Y	Y	Auto	_	70m	
10	Sedidrill	Sedidrill/France	Crawler	N/a	Y	Y	Y	-	Auto	_	30m	Crawler mounted
11	CPT Rig	GEOMIL, Holland	MERCEDEZ Truck	4/81499	-	-	-	-	N/a	Y	-	200kN Capacity
12	Pagani TG73-200 CPT+DPSH	Pagani, Italy	Crawler	N/a	-	-	-	-	DPSH-Auto	Y	-	*200 kN Capacity * Self anchoring
13	Pagani TG73 - 200 CPT + DPH	Pagani, Italy	Crawler	N/a	-	-	-	-	DPH-Auto	Y	-	*200 kN Capacity * Self anchoring
14	Acker - AD/II	Acker / USA	GMC Truck	3/63872	Y	Y	Y	Y	Auto	_	100m	
15	Acker - AD/II	Acker / USA	GMC Truck	5/38663	Y	Y	Y	Y	Auto	_	100m	
16	Acker - AD/II	Acker / USA	GMC Truck	7/50464	Y	Y	Y	Y	Auto	_	100m	
17	Acker - AD/II	Acker / USA	GMC Truck	15-70758	Y	Y	Y	Y	Auto	_	100m	
18	Acker - AD/II	Acker / USA	GMC Truck	15-15440	Y	Y	Y	Y	Auto	_	100m	

Geotechnical Field Testing, Sampling tools:

- Menard G-am Pressure meter conforming to ASTM D 4719
- Dilatometer - Marichetti.
- Acker Field Vane Shear Test
- Pneumatic Borehole Packer for Permeability (Luegon) Testing
- Electrical Earth Resistivity
- Soil Thermal Resistivity Meter
- Mazier – Universal Geotechnical core barrel for sand, silty sand, clayey sand, clay, hard soils and rock
- Double tube core barrels for hard soil and rock coring (HWF, SWF and NWF core barrel) according to ASTM D 2113
- Split barrel tubes with/without liners for Standard Penetration Test (SPT) according to ASTM D 1586-00 and BS5930 or BS 1377 Part 9 (Contd..)

- Thin wall tubes for soil sampling (shelby tubes) 3", 3.5" & 4" dia according to ASTM D 1587
- Piston sampler 3.5" dia
- Drilling rods with various diameters and lengths
- Drill bits of various diameters and types
- Casing with various outside diameters and lengths.
- Air compressors with various capacities
- Water and mud pumps with various capacities
- Plate loading tests
- In-situ field tests (Sand cone method, Drive cylinder cone method)
- Full scale pumping tests
- In-situ CBR tests
- Percolation/Infiltration tests

Geophysical testing:

- Cross-hole seismic tests
- Down-hole seismic tests
- Borehole Verticality survey
- Electromagnetic conductivity survey

Pile testing:

- Low strain pile integrity testing
- High strain dynamic pile testing
- Lateral displacement by inclinometer
- Pile load tests (upto 3000kN)

Geotechnical Laboratory Testing

- Particle Size Distribution (Wet and Dry Sieving)
- Specific Gravity / Particle density
- Chemical Testing of Soil (Sulphate, Chloride, pH, Carbonates, Magnesium, Organic content, Redox Potential etc.)
- Chemical Testing of Ground water (Sulphate, Chloride, pH, TDS, H₂S etc.)
- Field Determination of Water (Moisture) Content of Soil
- Dry Density-Moisture Content Relationship – Standard & Modified Proctor
- California Bearing Ratio (CBR) – Family of curves
- One-Dimensional Consolidation Properties of Soils

- Determination of Unconfined Compressive Strength
- Determination of Shear Strength by Direct Shear
- Determination of Permeability by Constant Head Method
- Unconfined Compressive Strength of Intact Rock Core Specimens
- Determination of the Point Load Strength Index of Rock
- Liquid Limit, Plastic Limit and Plasticity Index of Soil
- Unconsolidated-Undrained Triaxial Compression Test
- Laboratory thermal and electrical Resistivity tests

Licensed Softwares

- gINT ver 7.x : Geotechnical data management & reporting software
- PLog software with PDA – compatible with gINT software
- Unisoft (unisettle, unipile, unicone & unibear)
- Ensoft (Lpile-5, Apile-4, Shaft-5, T-Z pile 2)
- Geopro – 40 geotechnical programs
- CPT-Pro : CPT interpretation, mapping, section
- CPT-Log : CPT logging & presentation software
- Geosystem : Lab test reporting
- Plaxis 2D Ver-8 : FEM software

Major Drilling & Testing Facilities

Drilling Rigs: (19 nos)

- ACKER AD-II Rotary drill rig mounted on GMC truck – **9nos**
- ACKER AD-II Rotary drill rig mounted on TATA truck – **2nos**
- ACKER AD-II Rotary drilling rig mounted on NISSAN truck - **2nos**
- ACKER SOIL SENTRY Rotary drill rig mounted on GMC Pick up – **2nos**
- SEDIDRILL rotary drill rig – crawler mounted – **1no**

CPT Rigs: (3nos)

- **GEOMIL** standalone CPT penetrometer (200kN) mounted (for Offshore & On-shore CPT works)
Equiped with **GEOTECH** cardless CPT cone system – **1Nos**
- **PAGANI TG-73** – crawler mounted, rubber tired – 200kN CPT rig
-Equiped with **MEMOCONE-III** cardless CPT system – **2Nos**

-Equiped with field vane shear test

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- Plaxis 2D Ver-8 : FEM software



List of Equipment & other Laboratory Items (Soil - Concrete - Chemical) - August - 2018



S.No	ID NO.	Item	Locan	Qty.	Make	Remark	Cal Date	Due Date	Requirement	Interval	Applicable Standard	File Ref.	Certificate Status
1	1083U	Sand cone test set	11	1	Controls	Calibrated	17-Apr-18	16-Oct-18	calibrated (MPW)	6			Y
2	1084U	Speedy moisture tester	11	1	Ashworth	Calibrated	16-Apr-18	15-Oct-18	Calibrated (MPW)	6			Y
3	1076U	Digital Balance 20 kg Sr. 8338410226	11	1	Ohaus	Calibrated	12-Apr-18	11-Oct-18	calibrate (MPW)	6		B7	Y
4	1083T	Sand cone test set	11	1	Controls	Calibrated	8-Apr-18	7-Oct-18	calibrated (MPW)	6			Y
5	1084T	Speedy moisture tester	11	1	Ashworth	Calibrated	8-Apr-18	7-Oct-18	Calibrated (MPW)	6			Y
6	1076T	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	22-Apr-18	21-Oct-18	Calibrate (MPW)	6		B7	Y
7	1112G	Reference Thermometer	10	1	TEL-TRU	Calibrated	10-Apr-18	9-Oct-18	Calibrated (MPW)	6			Y
8	1097b	Schmidt Hammer C-380 SN: C380/AG/1136	5	1	Proceq	Calibrated	3-Apr-18	2-Apr-19	calibrate (INCO)	12		-	Y
9	300	Thermocouple Sr. 170603904 with K/Probe	10	1	CENTER	Calibrated	1-May-18	30-Apr-19	Calibrated (INCO)	6			Y
10	1076E	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	4-Jun-18	3-Dec-18	Calibrate (GI)	6		B7	Y
11	1076O	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	3-Aug-18	2-Feb-19	calibrate (GI)	6		B7	Y
12	1112V	Thermometer (0 to 240c)	6	1	TEL-TRU	Calibrated	4-Apr-18	3-Oct-18	calibrate (GI)	6		A10	Y
13	1060	Air content Apparatus for concrete	4	1	Conc. Spec. co.,	Calibrated	15-Apr-18	13-Apr-19	Calibrate (GI)	12		B6	Y
14	1083I	Sand cone test set	5	1	Controls	Calibrated	25-Jun-18	24-Dec-18	calibrate (GI)	6		B4	Y
15	1004	Electronic Balance (Cap.16000 g.)	6	1	Sartorius	Calibrated	8-Apr-18	7-Oct-18	calibrate MPW	6		B7	Y
16	1076F	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	13-Aug-18	12-Feb-19	calibrate (GI)	6		B7	Y
17	1076J	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	19-Jun-18	18-Dec-18	calibrate (GI)	6		B7	Y
18	1083E	Sand cone test set	11	1	Controls	Calibrated	4-Jun-18	3-Dec-18	calibrate (GI)	6		B4	Y
19	1083F	Sand cone test set	11	1	Controls	Calibrated	13-Aug-18	12-Feb-19	calibrate (GI)	6		B4	Y
20	1083J	Sand cone test set	11	1	Controls	Calibrated	19-Jun-18	18-Dec-18	calibrate (GI)	6		B4	Y
21	1083M	Sand cone test set	11	1	Controls	Calibrated	23-May-18	22-Nov-18	calibrate (GI)	6		B4	Y
22	1084A	Speedy moisture tester-30991	11	1	Ashworth	Calibrated	19-Jun-18	18-Dec-18	calibrate (GI)	6	D4944	B5	Y
23	1084F	Speedy moisture tester	11	1	Ashworth	Calibrated	13-Aug-18	12-Feb-19	calibrate (GI)	6	D4944	B5	Y
24	1084I	Speedy moisture tester	11	1	Ashworth	Calibrated	25-Jun-18	24-Dec-18	calibrate (GI)	6	D4944	B5	Y
25	1084J	Speedy moisture tester	11	1	Ashworth	Calibrated	19-Jun-18	18-Dec-18	calibrate (GI)	6	D4944	B5	Y
26	1084S	Speedy moisture tester	11	1	Ashworth	Calibrated	7-Apr-18	6-Oct-18	calibrate (GI)	6	D4944	B5	Y
27	1083Q	Sand cone test set	11	1	Controls	Calibrated	21-Jun-18	20-Dec-18	calibrate (GI)	6		B4	Y
28	1001d	Consolidation cell (50mm)	6	1	ELE	Checked	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12	D2435		Y
29	1001e	Consolidation cell (50mm)	6	1	ELE	Checked	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
30	1001f	Consolidation cell (50mm)	6	1	ELE	Checked	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y



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31	1002a	Direct Shear proving Ring (2 kN)1372	6	1	ELE	Calibrated	2-Apr-18	1-Apr-19	Calibrated (INCO)	12	D3080	A9	Y
32	1002b	Direct Shear proving Ring (2 kN) 1371	6	1	ELE	Calibrated	2-Apr-18	1-Apr-19	Calibrated (INCO)	12		A9	Y
33	1003b	Oven (Y9D091)	4	1	Genlab	Calibrated	4-Apr-18	3-Oct-18	Calibrated (MPW)	6		A10	Y
34	1024a	Proctor Moulds (6") ASTM	7	1	ELE	Calibrated	12-Oct-17	11-Oct-18	Ck Critical Dimensions	12	T99, T180, D698, D1557	B6	Y
35	1055	Cube Moulds (15 X 15)	4	12	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12		B6	Y
36	1005B	Liquid Limit Equipment (70050-1)	6	1	Wykeham	Calibrated	5-Apr-18	4-Apr-19	calibrated INCO	12	D4318,T89		Y
37	16003325	Liquid Limit Equipment	6	1	Controls	Calibrated	27-Jun-18	26-Jun-19	calibrated INCO	12	D4318,T89		Y
38	1008	Shaker for gradation (Agg.)	8	1	SOILTEST	Chkd	4-Sep-18	3-Sep-19	Ck Sieving thoroughnes	12			Y
39	1007b	Sample Splitter (Agg.)	8	1	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
40	1014	Cylinder Shaker (Hydrometer)	6	1	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Mixing thoroughnes	12			Y
41	1087	Piston volumeter	3	1	Controls	Chkd	4-Sep-18	3-Sep-19	Ck Physical Condition	12			Y
42	1011a-01	75mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
43	1011a-02	63mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
44	1011a-03	50mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
45	1011a-04	37.5mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
46	1011a-05	31.5mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
47	1011a-06	25.0mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
48	1011a-07	19.0mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
49	1011a-08	16.0mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
50	1011a-09	12.5mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
51	1011a-10	9.5mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
52	1011a-11	8.0mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
53	1011a-12	6.30mm - 12" dia size	6	1	Endecotts	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
54	1011a-13	4.75mm - 12" dia size	6	1	Endecotts	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
55	1011a-14	4.0mm - 12" dia size	6	1	SOILTEST	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
56	1011a-15	2.36mm - 12" dia size	6	1	SOILTEST	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
57	1011a-16	1.18mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
58	1011a-17	0.425mm - 12" dia size	6	1	Soiltest	Chkd	25-Jun-18	24-Jun-19	"	12	ASTM E11		Y
59	1048a	Standard weight set (1g-1kg)	6	1	ZWIEBEL	Chkd	28-Jul-18	27-Jul-19	Ck Physical condition	12	E617		N
60	1049	Porcelain Mortor and Pestles	6	1		Chkd	2-Sep-17	1-Oct-18	Ck Physical condition	12			N
61	1086	Field Inspection test Kit	3	1	Contols	Chkd	2-Sep-17	1-Oct-18	Ck Physical Condition	12			N



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62	1016	Sample Extruder (GT)	8	8	ELE	Chkd	2-Sep-17	1-Oct-18	Ck Physical condition	12			N
63	1029	Vibrator Hammer	7	1	KANCO628	Chkd	2-Sep-17	1-Oct-18	Ck Physical condition	12	T99, T180, D698, D1557		N
64	1085a	Hydrometer jar	8	20	Controls	Chkd	20-Aug-18	19-Aug-19	Ck Critical Dimensions	12	D422		N
65	1046	Vacuum dessicators (a, b, c)	6	3		Chkd	20-Sep-18	19-Sep-19	Ck Pressure	12			N
66	1053	Concrete Mixer	4	1	ELE	Chkd	2-Sep-18	1-Sep-19	Ck Physical condition	12			N
67	1023	CBR Moulds(A to L)	6	12	ELE	Calibrated	13-Jul-18	12-Jul-19	Ck Critical Dimensions	12	T193, D1883	B6	N
68	1023	CBR Moulds(M to U)	6	9	Controls	Calibrated	14-Oct-17	13-Oct-18	Ck Critical Dimensions	12	T193, D1883	B6	Y
69	1024c	Proctor Moulds (6") ASTM	7	1	Controls	Calibrated	12-Oct-17	11-Oct-18	Ck Critical Dimensions	12	T99, T180, D698, D1557	B6	Y
70	1025b	Proctor Moulds (4") ASTM	7	1	ELE	Calibrated	28-Sep-17	27-Sep-18	Ck Critical Dimensions	12	T99, T180, D698, D1557		Y
71	1025c	Proctor Moulds (4") ASTM	7	1	Controls	Calibrated	28-Sep-17	27-Sep-18	Ck Critical Dimensions	12	T99, T180, D698, D1557	B6	Y
72	1025d	Proctor Moulds (4") ASTM	7	1	Controls	Calibrated	28-Sep-17	27-Sep-18	Ck Critical Dimensions	12	T99, T180, D698, D1557	B6	Y
73	1026a	Proctor Rammer (Manual) 5.0kg(11.0lb)	7	1	ELE	NOT IN USE	-	-	Ck Wt. and Critical Dim	12	T99, T180, D698, D1557		Y
74	1026b	Proctor Rammer (Manual) 4.5kg(10lb)	7	1	ELE	Calibrated	27-Sep-17	26-Sep-18	Ck Wt. and Critical Dim	12	T99, T180, D698, D1557		Y
75	1026c	Proctor Rammer (Manual) 2.5kg(5.5lb)	7	1	ELE	Calibrated	27-Sep-17	26-Sep-18	Ck Wt. and Critical Dim	12	T99, T180, D698, D1557		Y
76	1026d	Proctor Rammer (Manual) 4.5kg(10lb)	7	1	ELE	Calibrated	27-Sep-17	26-Sep-18	Ck Wt. and Critical Dim	12	T99, T180, D698, D1557		Y
77	1027	Field CBR Set		1	ELE	Chkd	27-Sep-17	26-Sep-18	Ck Wt. and Critical Dim	12	D4429	A9	Y
78	1021	Vacuum Chamber	6	1	Gallenramb	Chkd	27-Sep-17	26-Sep-18	Ck Pressure	12			Y
79	1015	Sample Extruder (Proctor, CBR)	6	6	ELE	Chkd	27-Sep-17	26-Sep-18	Ck Physical condition	12			Y
80	1032	Capping Collar (4")	10	1	ELE	Chkd	27-Sep-17	26-Sep-18	Ck Critical Dimensions	12			Y
81	1033	Capping Collar (6")	10	1	ELE	Chkd	27-Sep-17	26-Sep-18	Ck Critical Dimensions	12			N
82	1036	Sand Equivalent Apparatus	8	1	ELE	Chkd	2-Sep-18	1-Sep-19	Ck Physical condition	12			Y
83	1034a	Unit wt containers for concrete (0.01m3)	8	1	ELE	Chkd	24-Jun-18	23-Jun-19	Ck Critical Dimensions	12			Y
84	1034b	Unit wt containers for concrete (2863cm3)	8	1	ELE	Chkd	24-Jun-18	23-Jun-19	Ck Critical Dimensions	12			Y
85	1034c	Unit wt containers for concrete (11.5x18)	8	1	ELE	Chkd	24-Jun-18	23-Jun-19	Ck Critical Dimensions	12			Y
86	1034d	Unit wt containers for concrete (11.4x17.7)	8	1	ELE	Chkd	24-Jun-18	23-Jun-19	Ck Critical Dimensions	12			Y
87	1034e	Unit wt containers for concrete (0.5ft3)	8	1	ELE	Chkd	24-Jun-18	23-Jun-19	Ck Critical Dimensions	12			Y
88	1034f	Unit wt containers for concrete (1ft3)	8	1	ELE	Chkd	24-Jun-18	23-Jun-19	Ck Critical Dimensions	12			Y
89	1035	Unit weight container for sand	8	1	ELE	Chkd	24-Jun-18	23-Jun-19	Ck Critical Dimensions	12			Y
90	1030	Permeability moulds	7	1	Local	Chkd	2-Sep-18	1-Sep-19	Ck Critical Dimensions	12		B6	Y
91	1038	Moisture containers (Brass)	6	8	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition,n	12			Y
92	1039a	Moisture containers (Big)	6	111	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition,n	12			Y



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93	1040a	Moisture containers (Porcelain) P	6	25	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition,n	12			Y
94	1040b	Moisture containers (Porcelain) SM	6	14	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition,n	12			Y
95	1041	Sample tray (Small)	6	5	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition	12			Y
96	1042	Sample tray (medium)	6	2	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition	12			Y
97	1042	Sample tray (Big)	7	5	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition	12			Y
98	1044	Sample tray (Round)	7	7	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition	12			Y
99	1045a	Agg. Crushing Value Moulds(11815g)	6	1	ELE	Chkd	20-Aug-18	19-Aug-19	Ck Critical Dimensions	12			Y
100	1045b	Agg. Crushing Value Moulds(11823g)	6	1	ELE	Chkd	20-Aug-18	19-Aug-19	Ck Critical Dimensions	12			Y
101	1064	Compacting Factor Apparatus	4	1	ELE	Chkd	30-Aug-18	29-Aug-19	Ck Critical Dimensions	12			Y
102	1048c	Standard weight (5kg)	6	1	ZWIEBEL	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12	E617		N
103	1047d	Standard weight (2kg)	6	1	ELE	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12			N
104	1047e	Standard weight (5kg)	6	1	ELE	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12			N
105	1047f	Standard weight (10kg)	6	1	ELE	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12			N
106	1047a	Standard weight set (2g-1kg)	6	6	Ohaus	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12		B7	N
107	1047b	Standard weight set (2g-1kg)	6	6	Ohaus	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12			N
108	1048c	Standard weight (2kg)	6	1	ZWIEBEL	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12	E617		N
109	1048c	Standard weight (1kg)	6	1	ZWIEBEL	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12	E617		N
110	1048c	Standard weight (500g)	6	1	ZWIEBEL	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12	E617		N
111	1048c	Standard weight (200g)	6	1	ZWIEBEL	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12	E617		N
112	1048c	Standard weight (100g)	6	1	ZWIEBEL	Chkd	26-Jun-18	25-Jun-19	Verify (GII)	12	E617		N
113	1058	Beam Moulds	4	7	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
114	1056	Cylinder Moulds	4	12	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
115	1079	Curing tanks(GI)	10	1	local	Chkd	1-Sep-18	30-Aug-19	Ck Physical Condition	12			Y
116	1057	Cylinder Moulds	4	18	SOILTEST	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
117	1062	Shrinkage Apparatus (Concrete)	4	1	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
118	1059A	Slump Sets	4	1	Controls	Chkd	12-Jan-18	11-Jan-19	Ck Critical Dimensions	12			Y
119	1066	Flakiness for Agg.	6	1	ELE	Chkd	12-Oct-17	11-Oct-18	Ck Critical Dimensions	12			Y
120	1065	Sand pouring Apparatus	6	1	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
121	1082A	Proving Ring 5 kN (Triaxial) 1093699	6	1	ELE	Calibrated	11-Mar-18	10-Mar-19	Calibrated (INCO)	12		A9	Y
122	1082B	Proving Ring 2 kN (Directshear) 780060-0088	6	1	ELE	Calibrated	11-Mar-18	10-Mar-19	Calibrated (INCO)	12		A9	Y
123	1082C	Proving Ring 60 kN (CBR) 5855	6	1	Controls	Calibrated	27-Mar-18	26-Mar-19	Calibrated (INCO)	12		A9	Y



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S.No	ID NO.	Item	Locan	Qty.	Make	Remark	Cal Date	Due Date	Requirement	Interval	Applicable Standard	File Ref.	Certificate Status
124	1082D	Proving Ring 50 KN - 11004331	6	1	Controls	Calibrated	11-Mar-18	10-Mar-19	Calibrated (INCO)	12		A9	Y
125	1080	DC-AC Converter	1	1	mobitronic	Chkd	2-Sep-18	1-Sep-19	Ck Physical Condition	12			Y
126	1071	Digital tester/Multimeter	5	1		Chkd	4-Sep-18	3-Sep-19	Check Physical Condi	12			Y
127	1067	Elongation for Agg.	6	1	ELE	Chkd	12-Oct-17	11-Oct-18	Ck Critical Dimensions	12			Y
128	1007a	Sample Splitter (Agg.)	8	1	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
129	1070A	d) Data Logger Unit (Require Power)	3	1	Straightpoint	Verified	14-Aug-18	13-Aug-19	Chk physical condition	12			Y
130	1070-A	d) Beam Stand		1	Controls	Verified	14-Aug-18	13-Aug-19	Ck Physical Condition	12			Y
131	1070-A	e) Gauge stand		3	Controls	Verified	14-Aug-18	13-Aug-19	Ck Physical Condition	12			Y
132	1070-A	Plate load test Equipment-1	1		Controls	Verified	14-Aug-18	13-Aug-19	Ck Physical Condition	12	D1194		Y
133	1123	Hotplate	2	4	Thermolyne	Checked	20-Oct-17	19-Oct-18	Ck Physical Condition	12			N
134	1070A	Transducers(Plate load test)	3	4	Straightpoint	Calibrated	4-Sep-18	3-Sep-19	Calibrate	12		A9	Y
135	1091	Cube moulds 15x15x15 (13)	4	15	Burgan	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12		B6	Y
136	1070-A	Hydraulic Jack (25 TON) 1212265HH	3	1	holmatro Holand	Calibrated	3-Apr-18	2-Apr-19	Calibrated (INCO)			B8	Y
137	1072	Pressuremeter test	1	1	Controls	Chkd	15-Apr-18	13-Apr-19	Ck Physical Condition,	12	D4719		Y
138	1073	DMT	1	1	Marichetti	Chkd	4-Sep-18	3-Sep-19	Ck Pressure Panels	12			Y
139	1075	Cross/Down hole test	1	1	Olson's	Chkd	4-Sep-18	3-Sep-19	Chk physical condition	12	D4428		Y
140	1101	Curing tank-Steel fabricated-GII	10	1	GII	Chkd	4-Sep-18	3-Sep-19	Ck Physical condition	12			Y
141	1076D	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	29-Sep-18	28-Mar-19	Calibrate (GI)	6		B7	Y
142	1076K	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	13-Jun-18	12-Dec-18	calibrate (GI)	6		B7	Y
143	1076L	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	28-0-2018	27-Feb-19	Calibrate (GI)	6		B7	Y
144	1076R	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	18-Jun-18	17-Dec-18	calibrate (GI)	6		B7	Y
145	1076G	Triple Beam Balance (20 kg)	11	1	Ohaus	Calibrated	2-Jun-18	1-Dec-18	calibrate (GI)	6		B7	Y
146	1140	Cutting Machine	7	1		Calibrated	1-Jul-18	30-Jun-19	Ck Physical condition	12			N
147	1078a	Curing tanks(fibre)	10	1	local	Chkd	4-Sep-18	3-Sep-19	Ck Physical Condition	12			N
148	1078b	Curing tanks(fibre)	10	1	local	Chkd	4-Sep-18	3-Sep-19	Ck Physical Condition				N
149	1078c	Curing tanks(fibre)	10	1	local	Chkd	4-Sep-18	3-Sep-19	Ck Physical Condition				N
150	1078d	Curing tanks(fibre)	6	1	local	Chkd	4-Sep-18	3-Sep-19	Ck Physical Condition				N
151	1013	Soil Mixer (Hydrometer)	6	1	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Clearances	6			Y
152	1022	Agg. Impact Value Machine	6	1	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
153	1054	Cube Moulds (10 X 10)	4	10	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y



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S.No	ID NO.	Item	Locan	Qty.	Make	Remark	Cal Date	Due Date	Requirement	Interval	Applicable Standard	File Ref.	Certificate Status
154	1083K	Sand cone test set	11	1	Controls	Calibrated	13-Jun-18	12-Dec-18	calibrate (GI)	6		B4	Y
155	1083L	Sand cone test set	11	1	Controls	Calibrated	28-Aug-18	27-Feb-19	calibrate (GI)	6		B4	Y
156	1083G	Sand cone test set	11	1	Controls	Calibrated	2-Jun-18	1-Dec-18		6		B4	Y
157	1084D	Speedy moisture tester (29860)	11	1	Ashworth	Calibrated	29-Mar-18	28-Sep-18	calibrate (GI)	6	D4944	B5	Y
158	1084G	Speedy moisture tester	11	1	Ashworth	Calibrated	2-Jun-18	1-Dec-18	calibrate (GI)	6	D4944	B5	Y
159	1084K	Speedy moisture tester	11	1	Ashworth	Calibrated	13-Jun-18	12-Dec-18	calibrate (GI)	6	D4944	B5	Y
160	1084L	Speedy moisture tester	11	1	Ashworth	Calibrated	28-Feb-18	27-Aug-19	calibrate (GI)	6	D4944	B5	Y
161	1084R	Speedy moisture tester	11	1	Ashworth	Calibrated	18-Dec-17	17-Jun-18	calibrate (GI)	6	D4944	B5	Y
162	1084E	Speedy moisture tester (31348)	11	1	Ashworth	Calibrated	4-Jun-18	3-Dec-18	calibrate (GI)	6	D4944	B5	Y
163	1050	Slake durability Index	6	1	Local	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12	D4644		Y
164	1052	Compressive Machine(3000kN) 07010196	4	1	Controls	Calibrated	2-Aug-18	1-Feb-19	Calibrated (MPW)	6	BS 1610		Y
165	1107	Crack gauge	3	1	Wykeham	Chkd	4-Sep-18	3-Sep-19	Ck physical condn	12			N
166	1108	Pull off tester	3	1	Controls	Calibrated	19-May-18	18-May-19	calibrate manufacturer	12			Y
167	1088	Soil Resistivity DET 2/2	3	1	AVO,Megger	Under Maintenance	-	-	Calibrated (KU)	12	G57	B3	N
168	1088	Soil Resistivity DET 1339	3	1	AVO,Megger	Calibrated	28-Feb-18	27-Feb-19	Calibrated (INCO)	12	G57	B3	Y
169	1090	Humidity,Temp, dew point	3	1	Jenway	Chkd	28-Aug-18	27-Aug-19	Ck Physical Condition	12			Y
170	1103	Electronic Balance (200 g)	2	1	Denver Instrument	NOT IN USE	-	-	-	6		B7	Y
171	1092	Mould 3 Gang	4	2	Burgan	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12			Y
172	1093	Tamping rod for cube	4	2	Burgan	Chkd	12-Feb-18	11-Feb-19	Ck Critical Dimensions	12			Y
173	1037a	Volumetric flask for Sp.gravity 100ml	6	9	Local	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	once		B6	Y
174	1100	Compressive Machine (3000KN) (Sn. 0309482)	10	1	Controls	Calibrated	8-Jul-18	7-Jan-19	Calibrated (MPW)	6	BS 1610	A9	Y
175	1099	Field Inspection test Kit	4	1	Burgan	Chkd	31-Aug-18	30-Aug-19	Ck Critical Dimensions	12			Y
176	1048c	Standard weight (10kg)	6	1	ZWIEBEL	Chkd	28-Jul-18	27-Jul-19	CK Physical Condition	12	E617		Y
177	1119	Reflux Extractor	6	2	Controls	Chkd	4-Sep-18	3-Sep-19	CK Physical Condition	12			Y
178	1102	Electronic balance (150 kg)	10	1	Chyo, Japan	Calibrated	25-Apr-18	24-Oct-18	calibrate (GI)	6		B7	Y
179	1111	Electronic Balance (3100 g)	2	1	Ohaus	Calibrated	11-Apr-18	10-Oct-18	Calibrated (MPW)	6		B7	Y
180	1138	Water Bath	4	1	Technotest	Calibrated	14-Apr-18	13-Apr-19	calibrate (GI)	6			Y
181	1019b	Triaxial Cells (70mm dia)	6	1	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dimensions	12	D2850, D4767		N
182	1006	Vicat (Setting time of Cement)	4	1	ELE	Chkd	4-Sep-18	3-Sep-19	Ck Critical Dim, Phy Co	12	c187, c191, c451		N
183	1109B	Muffle furnace	2	1	Controls	Chkd, calbrtd	20-Oct-17	19-Oct-18	Ck physical condn, Ten	6		A10	N



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S.No	ID NO.	Item	Locan	Qty.	Make	Remark	Cal Date	Due Date	Requirement	Interval	Applicable Standard	File Ref.	Certificate Status
184	1110B	Spectrophotometer	2	1	Cole-Parmer	Chkd, calbrtd	20-Sep-18	19-Sep-19	calibrate (GI)	12		B1	Y
185	1125	Electronic Balance (60 kg)		1	Ohaus	Calibrated	11-Apr-18	10-Oct-18	Calibrated (MPW)	6		B7	Y
186	1069	Field Vane Shear Equipment	1	1	Acker	Chkd	23-Jan-17	22-Oct-18	Ck Critical Dimensions	12	D2573		Y
187	1070-A	b) Plate (15cm, 30cm, 45cm,60, 75cm)		1each		Chkd	1-Aug-18	1-Aug-19	Ck Physical Condition	12			Y
188	1122	Orbital Shaker	2	1	Stuart	Checked	20-Oct-17	19-Oct-18	Ck Physical Condition	12			Y
189	1115	Casio stop watch	5	3	Casio	Chkd	2-Sep-18	1-Sep-19	Ck physical condn	12			Y
190	1116	Deepmeters	5	3	Eijkelkamp	Chkd	2-Sep-18	1-Sep-19	Ck Physical Condition	12			N
191	1117-A	Calcimeter	2	1	Fann	Chkd	23-Jan-18	22-Jan-19	Verify, calibrate	12		A10	N
192	1117-B	Calcimeter	2	1	Fann	Chkd	23-Jan-18	22-Jan-19	Verify, calibrate	12		A10	N
193	1120a	Vernier caliper 10376822	3	1	Mitutoyo	Calibrated	11-Mar-18	10-Mar-19	Calibrated (INCO)	12		A8	Y
194	1132	Moisture containers (Small)	6	46	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition,m	12			Y
195	1121	pH meter (2520406)	2	1	Jenway	Calibrated	before test	-	OK	12			N
196	1106B	Rebar locator (covermeter)	3	1	Kolectric	Chkd	2-Sep-18	1-Sep-19	calibrate (GI)	12		A3	N
197	1127a	HILTI DD-160.(set)	2	1	Hilti	Calibrated	2-Sep-18	1-Sep-19	Ck Physical condition	12			N
198	1127b	HILTI DD-200.(set)	2	1	Hilti	Calibrated	2-Sep-18	1-Sep-19	Ck Physical condition	12			N
199	1127c	HILTI DD-200.(set)	2	1	Hilti	Calibrated	2-Sep-18	1-Sep-19	Ck Physical condition	12			N
200	1141	Electronic Balance (22Kg)	8	1	Ohaus	NOT IN USE	-	-	-	6		B7	N
201	1130	Moisture containers (Large)	6	63	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition,m	12			Y
202	1131	Moisture containers (medium)	6	47	Local	Chkd	24-Jun-18	23-Jun-19	Ck Physical condition,m	12			Y
203	1003d	Oven (Aggregate Section)	8	1	Genlab	Calibrated	20-May-18	19-Nov-18	Calibrate (GI)	6		A9	Y
204	1031	Los Angeles Machine	8	1	ELE	Chkd	2-Sep-18	1-Sep-19	Ck RPM and Critical Di	12	T96, C131		Y
205	1137	Slope Indicator	3	1	Schlumberger	Chkd	4-Sep-18	3-Sep-19	Ck Physical condition	12			Y
206	1039b	Moisture containers (Big)	6	120	Gilson	Chkd	9-Jun-18	8-Jun-19	Ck Physical condition,m	12			Y
207	1081a	Gauge10x0.002mm - 0156	8	3	ELE	Calibrated	3-Mar-18	2-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)	A8	Y
208	1081a	Gauge 1x0.001in - CBR-001	6	1	Humboldt	Calibrated	3-Mar-18	2-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)		Y
209	1081a	Gauge 5x0.002mm - SIP 755	6	1	ELE	Calibrated	8-Mar-18	7-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)		Y
210	1081b	Gauge10x0.002mm - 01514	6	1	ELE	Calibrated	8-Mar-18	7-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)	A8	Y
211	1081c	Gauge25x0.01mm - N 4916	6	1	Baker	Calibrated	13-Mar-18	12-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)	A8	Y
212	1081f	Gauge25x0.01mm - H 0918	6	1	Baker	Calibrated	13-Mar-18	12-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)		Y



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S.No	ID NO.	Item	Locan	Qty.	Make	Remark	Cal Date	Due Date	Requirement	Interval	Applicable Standard	File Ref.	Certificate Status
213	1081h	Gauge10x0.002mm - 105	6	1	Baker	Calibrated	3-Mar-18	2-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)		Y
214	1081i	Gauge25x0.01mm - ZFG 244	6	1	BAKER	Calibrated	17-Apr-18	16-Apr-19	Calibrated (INCO)	12	BS 907 (SCB-3)		Y
215	1081i	Gauge25x0.01mm - ZGB 119	6	1	BAKER	Calibrated	17-Apr-18	16-Apr-19	Calibrated (INCO)	12	BS 907 (SCB-3)		Y
216	1083R	Gauge10x0.002mm - TDF 464	11	1	ELE	Calibrated	8-Mar-18	7-Mar-19	Calibrated (INCO)	6	BS 907 (SCB-3)	B4	Y
217	1001g	Gauge10x0.002mm - SKA - 670	6	1	ELE	Calibrated	8-Mar-18	7-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)		Y
218	1001h	Gauge10x0.002mm - SKA - 696	6	1	ELE	Calibrated	8-Mar-18	7-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)		Y
219	1001i	Gauge25x0.01mm - C 0469	6	1	ELE	Calibrated	8-Mar-18	7-Mar-19	Calibrated (INCO)	12	BS 907 (SCB-3)		Y
220	1076T	Gauge10x0.002mm - SLC - 908	11	1	ELE	Calibrated	8-Mar-18	7-Mar-19	Calibrated (INCO)	6	BS 907 (SCB-3)		Y
221	1076T	Gauge25x0.01mm - H 0918	11	1	Baker	Calibrated	13-Mar-18	12-Mar-19	Calibrated (INCO)	6	BS 907 (SCB-3)		Y
222	335	Reference Thermometer	10	1	Testo 104	Calibrated	10-Apr-18	9-Oct-18	Calibrated (MPW)	6			Y
223	1024D	Proctor Moulds (6") ASTM	7	1	Controls	Calibrated	12-Oct-17	11-Oct-18	Ck Critical Dimensions.	12	T99, T180, D698, D1557	B6	Y
224	1070c	Gauge-KU-081489063 (0-50 mm) Big	8	1	CDI USA	Calibrated	13-Mar-18	12-Mar-19	Calibrated (INCO)	12			Y
225	1070e	Gauge-KU-153416547 (0-3 inch) Big	8	1	USA	Calibrated	11-Mar-18	10-Mar-19	Calibrated (INCO)	12			Y
226	1070f	Gauge-KU-130729957 (0-4 inch) Big	8	1	USA	Calibrated	11-Mar-18	10-Mar-19	Calibrated (INCO)	12			Y
227	1070g	Gauge-KU-090364839 (0-3 inch) Big	8	1	USA	Calibrated	11-Mar-18	10-Mar-19	Calibrated (INCO)	12			Y
228	1070h	Gauge-KU-090364834 (0-3 inch) Big	8	1	USA	NOT IN USE	-	-	-	12			N
229	1001j	Gauge10x0.002mm - K 8220	8	1	ELE	Calibrated	13-Mar-18	12-Mar-19	Calibrated (INCO)	12		B6	Y

LIST OF EQUIPMENT - GEOTECHNICAL INVESTIGATION DEPT.

Section	SI No.	Test Description/Services	ASTM	Test Equipment
GEOTECHNICAL	G1	Boreholes		Acker Drills
	G2	Standpipes (Ground water level)		Local pipes
	G3	Standard Penetration Test (SPT)	D1586	Acker / Automatic
	G4	Cone Penetration Test (CPT)	D5778	Geotech/Geomill
	G5	Dynamic Probing (DPH, DPSH)		Pagani
	G6	Dynamic Cone Penetration (DCP)		Acker Drills
	G7	Electrical Resistivity (Wenner 4-pin)	G57	Megger
	G8	Electromagnetic survey		Canada
	G9	Cross-hole seismic survey	D4428	Olson Instruments
	G10	Down-hole seismic survey	D7400	Olson Instruments
	G11	Plate load test	D1196	Humboldt
	G12	Cyclic Plate load test	D1195	Humboldt
	G13	Vane shear test	D2573	Acker & TBC
	G14	Pressuremeter test	D4719	Roctest/Texam
	G16	Infiltration Test	D3385	Local
	G17	In-situ (Field) CBR	D4429	ELE
	G18	Thermal Resistivity	D5334	Controls
	G19	Dip meter for GWL monitoring		Burgan
	G20	Thin Wall Tube sampling	D1587	Acker
	G21	Core sampling	D2113	Local
	G22	Falling Head Permeability	D6391	Local
	G23	Rising Head Permeability		Local
	G24	In-situ density (sand replacement)	D1556	Local