

EDAL DRILLING COMPANY LIMITED

POLICE C.I.D HEADQUARTERS BOREHOLE DRILLING REPORT



(PADEMA ROAD)

PREPARED BY:

EDAL DRILLING COMPANY
49 WATERLOO STREET
SIERRA LEONE
FREETOWN

FOR:

POLICE C.I.D HEADQUARTERS
PADEMA ROAD.
FREETOWN

EDAL DRILLING COMPANY LIMITED
9HRS Borehole Pump Test - Constant Discharge Period (MECHANIZED)

Community: CID Headquarters

Date: 20th October 2009

Location Code: Padema Road

Tested by: EDAL DRILLING CO LTD

Boreholes Ref No: Spot Sounding

Ht. of datum above GL(m) 0.57m

Datum level: ☒ Top of casing
☐ Base slab
☐ Other Specify

Depth 100m

Static water level 9.05

Pump setting 80m

CONSTANT DISCHARGE					RECOVERY			
Time	Time since pumping began(min)	Discharge rate (iprm)	Water level below datum (m)	Drawdown (m)	Time	Time since pumping began(min)	Water level below datum	Drawdown (m)
9:00	0	20	9.05		15:00	0		
	1	20	10.00	0.95		1	53.32	44.27
	2	20	11.70	2.65		2	53	43.95
	3	20	12.10	3.05		3	50.05	41.00
	4	20	12.20	3.15		4	46.84	37.79
	5	20	14.13	5.08		5	43.85	34.80
	6	20	15.78	6.73		6	40.52	31.47
	7	20	15.38	6.33		7	39.98	30.93
	8	20	16.13	7.08		8	37.41	28.36
	9	20	17.21	8.16		9	35.33	26.28
9:10	10	20	18.04	8.99	15:10	10	32.67	26.28
	15	20	20.93	11.88		15	28.42	19.37
	20	15	23.63	14.58		20	27.76	18.71
	25	15	25.96	16.91		25	25.98	16.93
	30	15	27.85	18.80		30	24.33	15.28
	35	15	29.52	20.47		35	22.65	13.60
	40	15	31.19	22.14		40	21.91	12.86
	45	15	32.52	23.47		45	21.34	12.29
	50	15	33.62	24.57		50	19.88	10.83
	55	15	34.72	25.67		55	19.54	10.49
10:00	60	15	35.38	26.33	16:00	60	19.08	10.03
	75	15	37.52	28.47		75	18.44	9.39
	90	15	39.34	30.29		90	18.11	9.06
	105	15	40.75	31.70		105	17.87	8.82
11:00AM	120	12	41.93	32.88	17:00	120	17.5	8.45
	135	12	43.23	34.18		135	17.26	8.21
	150	12	44.76	35.71		150	17.18	8.13
	165	12	45.45	36.40		165	17.11	8.06
12:00	180	12	45.85	36.80	18:00	180	17.05	8.00
	210	12	46.14	37.09				
13:00	240	12	48.12	39.07				
	270	12	53.31	44.26				
14:00	300	12	53.62	44.57				
	330	12	53.78	44.73				
15:00	360	12	53.94	44.89				

DAILY LOG FOR DRILLING SUPERVISION

CONTRACT		CID HEADQUARTERS		WELL EDCL/BH - 11		DATE	06 - 08/10/2009
LOCATION CODE:		Spot Drilling				CONTRACTOR	Edal Drilling bCompany Limited
TIME: 8:45am	START OF WORKING HR	END OF WORKING HR				WEATHER	Shining
DATE: 6/10/09	11:31am					DURATION OF RAINFALL	
DEPTH OF HOLE (M)		100m				GEOPHYSICS	Spot Drilling
DEPTH CASED(M)		11m				REF. POINT	
LITHOLOGICAL BOUNDARIES AND SAMPLES OF FORMATION							
DEPTH OF CONTACT ZONE		DRILLING PROCESS			DESCRIPTION OF FORMATION	YIELD	REMARKS(Drilling Method including change of Bit)
DEPTH	SAMPLE	FROM	TO	SPEED			
0 - 5	5	11:31	11:40	2	Literate		air drilling started
					"		with 10" DTH
					"		up to 11.5m
5 10	10	11:42	11:50	1.6	"		
					Granite		Conti with 6.5"
					"		DTH
10 15	15	12:02	12:28	5.2	"		
					"		
					"		
15 20	20	12:55	1:07	2.6	"		
					"		
					"		
20 25	25	1:09	1:19	2	"		
					"		
					"		
25 30	30	1:22	1:35	2.6	Moderatly Weathered granite		
					"		
					"		
30 35	35	1:36	1:50	2.8	"		
					"		
					"		
35 40	40	1:51	2:05	2.8	Weathered granite with collaborate with quartzite		
					"		
40 45	45	2:06	2:18	2.4	"		
					"		
					"		
45 50	50	2:20	2:31	2.2	"		
					"		
					"		
50 55	55	2:34	2:51	3.4	"		
					"		
55 60	60	2:53			"		
					Slightly Hard Granite		
60 65	65	3:33	3:53	4.0			

EDAL DRILLING COMPANY LIMITED

BOREHOLE DEVELOPMENT FORM

Community: CID Headquarters

Date: 07th October 2009

Location Code: Opposite Big Cotton Tree

Tested by: EDAL DRILLING CO LTD

Boreholes Ref No:

Ht. of datum 0.56m

Type of Test ☐ Step drawdown
☒ Constant discharge

Datum level ☒ Top of casing
☐ Base slab
☐ Other Specify

Depth 100m

Static water level 22.56m

Total time of development 2Hrs

Time		Position of pipe BGL	Yield lpm	Pressure bar	Observations
From	To				
2:30pm	3:30pm	99	12	225	Brownish water lifted
4:00pm	5:00	65	15	225	Clear water lifted

Geophysics ref.No. Spot Drilling		Edal Drilling Company Limited 49 Waterloo Street Sierra Leone, Freetown		BH status: Successful Dry	
		BOREHOLE RECORD			
Community		CID HEADQUARTERS	BH ref. No.	EDCL/BH-11	Nat. grid ref.
Drilling contractor		Edal Drilling Company	Drill rig	Super DTH	Method
Drilling start date		6TH October 2009	Compl. date	7th October 2009	Operator
					Raju Govindaraju
TEST PUMPING		Date:	28th Oct 2009	Top of screen *	m
Dynamic WL *		53.94	Pump type	Pedrollo	Static WL *
Static WL *		9.05	Pumping rate (Q)	1.2 m ³ /h	Potential drawdown
Drawdown (s)		44.89	Duration	6 h	Potential yield
			Specific capacity (Q/s)	0.027 m ³ /h/m	Depth of borehole *
					100 m
* Levels to ground level datum					
BH SIZE & TYPE	TEMPORARY	SCALE	PROFILE	TIME/DEPTH M/MIN	WATER ZONES CUMULATIVE Q (l/min)
10" DTH		10	Limerite		
6.5" DTH		20	Granite		
		30			
		40	Moderately weathered granite		
		50	Weathered granite with collaborate with quartzite		
		60			
		70			
		80	Slightly Hard granite	wet	
		90		10	
		100		15	
		110			
	120				
	130				
	140				

Gravel for gravel pack

Cement for grouting

Bentonite for grouting

Installation of grout seal

Cleaning & development

Centralisers fitted

Safety cap fitted

Backfill aband. BH

Disinfection date:

Platform construct. date:

Platform transport adjust.

Cut access to site

Remarks: Successful well

Prepared by: Edal Drilling Company (Contractor)

Certified: AMLADO DIVINE (Consultant)

Approved:

Approved:

Upper grout Seal

Backfill with drill cutting

165mm casing

Lower grout Seal

Open Hole

E. O. H