

## **APPENDIX 8.3**

### **Borehole Logs**

Client: Bord na Mona/Shell E&P	Site: Srahmore, Bangor-Erris, Co. Mayo.	Job No.: 1169	Scale: 1:50
-----------------------------------	--	------------------	----------------

Grid Reference Easting: E084463 Northing: N323049	Elevation (mOD): 17.56m Borehole Diameter (Subsoil): 65mm Borehole Diameter (Rock): 65mm Borehole Depth (m): 13.5m	Date Started: 22/10/03 Date Completed: 22/10/03	Drill Contractor: Irish Drilling Ltd. Drill Method: Coring Logged by: P.K.
---	---	--	--

Depth m	Description of Strata	Legend	OD Level m	Static Water Level 4/11/03	Samples		BH Tests Type & Ref.	Completion Details	
					Type	Ref. No.		Lining:	Backfill:
GL									
0.55	PEAT							50MM uPVC CASING	CEMENT
			15.09	▼				50MM uPVC SCREEN	BENT ONITE
	Fine grained SAND, with clay/silt matrix, medium light grey to greenish grey.								
12.5									
13.5	SAND with fragments of Schist and Quartzite. Light grey to light greenish grey.								
	END OF BOREHOLE								
18									

Remarks:



# TES

CONSULTING ENGINEERS

Second Floor, Unit 4B/5  
Blanchardstown Corporate Park  
Blanchardstown  
Dublin 15  
TEL: (01) 8030401 FAX: (01) 8030410

BOREHOLE LOG

Borehole BH1B

Sheet No. 2 of 2

Client: Bord na Mona/Shell E&P	Site: Srahmore, Bangor-Erris, County Mayo.	Job No.: 1169	Scale: 1:50
-----------------------------------	---	------------------	----------------

Grid Reference Easting: 084463 Northing: 323049	Elevation (mOD): 17.254 Borehole Diameter (Subsoil): 65mm Borehole Diameter (Rock): 65mm Borehole Depth (m): 23.7m	Date Started: 23/10/03 Date Completed: 24/10/03	Drill Contractor: Irish Drilling Ltd. Drill Method: Coring Logged by: PK
---	---	--	--

Depth m	Description of Strata	Legend	OD Level m	Water Inflows	Samples		BH Tests Type & Ref.	Completion Details	
					Type	Ref. No.		Lining:	Backfill:
18m 18.5	As above						Packet Test Ref.: BH1B Test section: 15.5-23.7m bgl	50mm uPVC Screen	3-7mm Pea Gravel
	Strong to very strong, faintly narrowly banded, (dipping 60 degrees), white to very pale grey, fine to medium grained, micaceous QUARTZITE, fresh to slightly weathered. Mica occurs as strong orientated flakes, producing previously described narrow banding.  Discontinuities: Closely to medium spaced, generally banding parallel (but also steeply dipping in at least 2 other orientations), generally planar, slightly rough surfaced, tight and clean.								
23.7	END OF BOREHOLE								

Client: Bord na Mona/Shell E&P	Site: Srahmore, Bangor-Erris, Co. Mayo.	Job No.: 1169	Scale: 1:50
-----------------------------------	--	------------------	----------------

Grid Reference Easting: E083092 Northing: N323519	Elevation (mOD): 17.20m Borehole Diameter (Subsoil): 65mm Borehole Diameter (Rock): 65mm Borehole Depth (m): 6.1m	Date Started: 28/10/03 Date Completed: 28/10/03	Drill Contractor: Irish Drilling Ltd. Drill Method: Coring Logged by: P.K.
---	--	--	--

Depth m	Description of Strata	Legend	OD Level m	Static Water Level m	Samples		BH Tests Type & Ref.	Completion Details	
					Type	Ref. No.		Lining:	Backfill:
GL									
0.55	PEAT								CEMENT
12.3	Fine grained SAND, with clay/silt matrix, medium light grey to greenish grey.		14.10	▼				50MM uPVC CASING	BENTONITE
14.0	SAND with fragments of eroded Quartzite, Sandstone and Schist. grey.							50MM uPVC SCREEN	3-7mm Pea Gravel
18	END OF BOREHOLE								

Remarks:



BOREHOLE LOG

Borehole BH2B

Sheet No. 1 of 2

<b>Client:</b> Bord na Mona/Shell E&P	<b>Site:</b> Srahmore, Bangor-Erris, County Mayo.	<b>Job No.:</b> 1169	<b>Scale:</b> 1:50
--	--	-------------------------	-----------------------

Grid Reference	Elevation (mOD): 17.17m	Date Started: 27/10/03	Drill Contractor: Irish Drilling Ltd.
Easting: 083092	Borehole Diameter (Subsoil): 65mm	Date Completed: 27/10/03	Drill Method: Coring
Northing: 323519	Borehole Diameter (Rock): 65mm		Logged by: PK
	Borehole Depth (m): 23.5m		

Depth m	Description of Strata	Legend	OD Level m	Static Water Level 4/11/03	Samples		BH Tests	Completion Details	
					Type	Ref. No.	Type & Ref.	Lining:	Backfill:
GL									
0.55	PEAT								
12.0	Fine grained SAND with clay/silt matrix. Medium light grey to greenish grey.		14.09	▼				50mm uPVC CASING	BENTONITE
14.3	SAND with fragments/cobbles of eroded Quartzite, Sandstone and Schist.								
18	Moderately weak to moderately strong thinly bedded/schistose (dipping 30–45 degrees), greenish grey (changing to brown below 21.4m), fine to medium grained micaceous PSAMMITE, moderately weathered. Occasional very thin (<20mm) highly weathered zones. Discontinuities: Very closely spaced, schistosity parallel, generally planar smooth to slightly rough , thick to moderately open, strongly discoloured and clay/rock material filled.								

Remarks: moderately open.

Client: Bord na Mona/Shell E&P	Site: Srahmore, Bangor-Erris, County Mayo.	Job No.: 1169	Scale: 1:50
-----------------------------------	---	------------------	----------------

Grid Reference Easting: 083092 Northing: 323519	Elevation (mOD): 17.17m Borehole Diameter (Subsoil): 65mm Borehole Diameter (Rock): 65mm Borehole Depth (m): 23.5	Date Started: 27/10/03 Date Completed: 27/10/03	Drill Contractor: Irish Drilling Ltd. Drill Method: Coring Logged by: PK
---	--	--	--

Depth m	Description of Strata	Legend	OD Level m	Water Inflows	Samples		BH Tests Type & Ref.	Completion Details	
					Type	Ref. No.		Lining:	Backfill:
18m	As above						Packet Test Ref.: BH2B Test section: 15.75-23.5m	50mm uPVC Screen	3-7mm Pea Gravel
23.5	END OF BOREHOLE								

Client: Bord na Mona/Shell E&P	Site: Srahmore, Bangor-Erris, Co. Mayo.	Job No.: 1169	Scale: 1:50
-----------------------------------	--	------------------	----------------

Grid Reference Easting: E084908 Northing: N323745	Elevation (mOD): 20.29m Borehole Diameter (Subsoil): 65mm Borehole Diameter (Rock): 65mm Borehole Depth (m): 12.5m	Date Started: 28/10/03 Date Completed: 28/10/03	Drill Contractor: Irish Drilling Ltd. Drill Method: Coring Logged by: P.K.
---	---	--	--

Depth m	Description of Strata	Legend	OD Level m	Static Water Level 4/11/03	Samples		BH Tests Type & Ref.	Completion Details	
					Type	Ref. No.		Lining:	Backfill:
GL									
1.55	PEAT		18.52	▼				50MM uPVC CASING	CEMENT BENT ONITE
5.5	Fine grained SAND, with clay/silt matrix, medium light grey to greenish grey.							50MM uPVC SCREEN	3-7mm Pea Gravel
18	END OF BOREHOLE							END OF CASING	

Remarks:

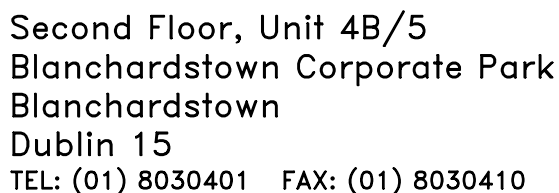


Client: Bord na Mona/Shell E&P	Site: Srahmore, Bangor-Erris, County Mayo.	Job No.: 1169	Scale: 1:50
-----------------------------------	---	------------------	----------------

Grid Reference Easting: 084908 Northing: 323745	Elevation (mOD): 20.26m Borehole Diameter (Subsoil): 65mm Borehole Diameter (Rock): 65mm Borehole Depth (m): 16m	Date Started: 29/10/03 Date Completed: 29/10/03	Drill Contractor: Irish Drilling Ltd. Drill Method: Coring Logged by: PK
---	---	--	--

Depth m	Description of Strata	Legend	OD Level m	Static Water Level 4/11/03	Samples		BH Tests Type & Ref.	Completion Details	
					Type	Ref. No.		Lining:	Backfill:
GL									
1.55	PEAT								
6.0	Fine grained SAND with clay/silt matrix. Medium light grey to greenish grey.		18.02	▼				50mm uPVC CASING	BENTONITE
16	Strong to very strong, massive but locally narrowly banded (dipping 35 degrees), grey to yellowish grey, fine grained micaceous QUARTZITE, fresh to slightly weathered. Mica locally occurring as close to very closely spaced bands/laminae dipping circa 35 degrees. Discontinuities: Between non-intact zones, fractures are closely to very closely spaced, bedding parallel, (dipping about 35 degrees), generally sub-planar, smooth to slightly rough, generally clean.						Packet Test Ref.: BH3B Test section: 11.75-16.0m	50mm uPVC SCREEN	3-7mm Pea Gravel
	END OF BOREHOLE								

Remarks:



## Sheet No. 2 of 2

[illegible]

Client: Bord na Mona/Shell E&P	Site: Srahmore, Bangor-Erris, County Mayo.	Job No.: 1169	Scale: 1:50
-----------------------------------	---	------------------	----------------

Grid Reference Easting: 084489 Northing: 323373	Elevation (mOD): 17.22 Borehole Diameter (Subsoil): 65mm Borehole Diameter (Rock): 65mm Borehole Depth (m): 30m	Date Started: 01/11/03 Date Completed: 01/11/03	Drill Contractor: Irish Drilling Ltd. Drill Method: Coring Logged by: PK
---	--	--	--

Depth m	Description of Strata	Legend	OD Level m	Static Water Level 4/11/03	Samples		BH Tests Type & Ref.	Completion Details	
					Type	Ref. No.		Lining:	Backfill:
GL									
3.1	PEAT		14.81	▼				50mm uPVC CASING	BENTONITE
18	Fine grained SAND with clay/silt matrix. Medium light grey to greenish grey.							50mm uPVC SCREEN	3-7mm Pea Gravel

Remarks:

Client: Bord na Mona/Shell E&P	Site: Srahmore, Bangor-Erris, County Mayo.	Job No.: 1169	Scale: 1:50
-----------------------------------	---	------------------	----------------

Grid Reference Easting: 084489 Northing: 323373	Elevation (mOD): 17.22m Borehole Diameter (Subsoil): 65mm Borehole Diameter (Rock): 65mm Borehole Depth (m): 30m	Date Started: 01/11/03 Date Completed: 01/11/03	Drill Contractor: Glovers SI Ltd. Drill Method: Air Rotary Logged by: PK
---	---	--	--

Depth m	Description of Strata	Legend	OD Level m	Water Inflows	Samples		BH Tests Type & Ref.	Completion Details	
					Type	Ref. No.		Lining:	Backfill:
18m	As above							50mm uPVC Screen	3-7mm Pea Gravel
30	END OF BOREHOLE								