

	Contract Name: Monckton Production Facility				Client: Hargreaves Ltd c/o Patrick Parsons Ltd			Borehole ID: RBH4						
	Contract Number: G151311	Date Started: 01/05/2015	Date Completed: 01/05/2015	Logged: IMC	Checked: AP	Status: PRELIM	Sheet 2 of 2							
	Rotary Open Hole Borehole Log		Easting: 437414.0	Northing: 412077.1	Ground Level: 66.23m (OD)	Plant Used: GEO 602	Print Date: 13/08/2015	Scale: 1:50						
Weather:		Rig Crew: I.Mountain, L.Thomas		Termination:										
Samples & In Situ Testing				Strata Details				Groundwater						
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation						
				(12.70)			11							
							12							
							13							
							14							
							15							
							16							
							17							
			48.23	18.00		End of Borehole at 18.000m	18							
							19							
							20							
Start & End of Shift Observations				Borehole Diameter		Casing Diameter		Remarks:						
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)	Backfilled with gravel and bentonite. slotted and plain pipe installed with stand up cover. Groundwater struck at 13.9m, with no rise recorded.					
Flush Information					Installation				Water Strike					
Top (m)	Base (m)	Flush Type	Return	Flush Colour	Top (m)	Base (m)	Type	Dia (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
					0.00	14.00	PLAIN	50				0	0.00	
					14.00	18.00	SLOTTED	50	13.90			20	13.90	



Contract Name:
Monckton Production Facility

Client:
Hargreaves Ltd c/o Patrick Parsons Ltd

Borehole ID:

RBH4A

Contract Number:
G151311

Date Started:
18/06/2015

Date Completed:
18/06/2015

Logged:
IMC

Checked:
AP

Status:
PRELIM

Sheet 1 of 2

Rotary Open Hole
Borehole Log

Easting:
437412.9

Northing:
412076.5

Ground Level:
66.16m (OD)

Plant Used:
Puntel

Print Date:
13/08/2015

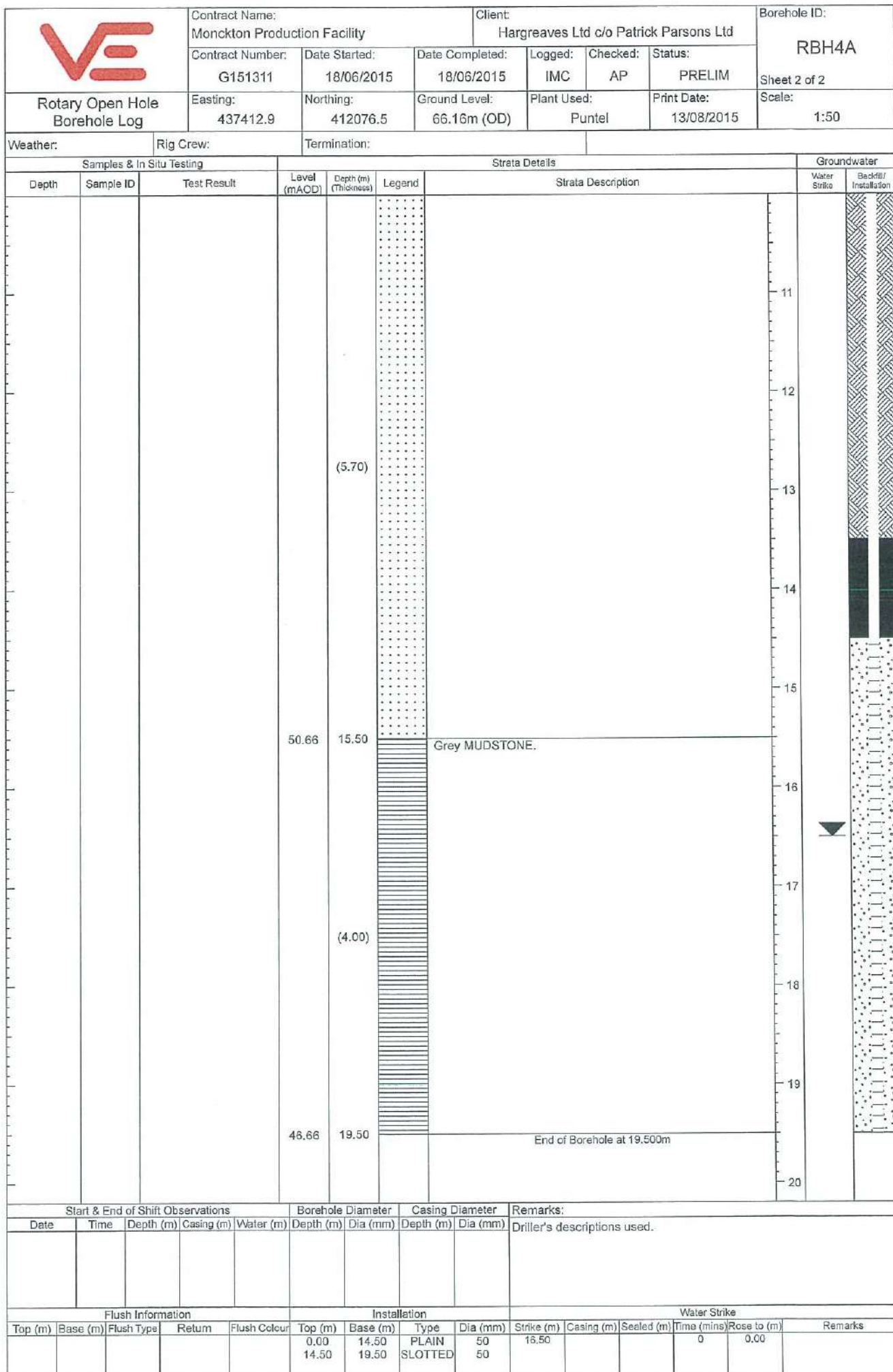
Scale:
1:50

Weather:

Rig Crew:

Termination:

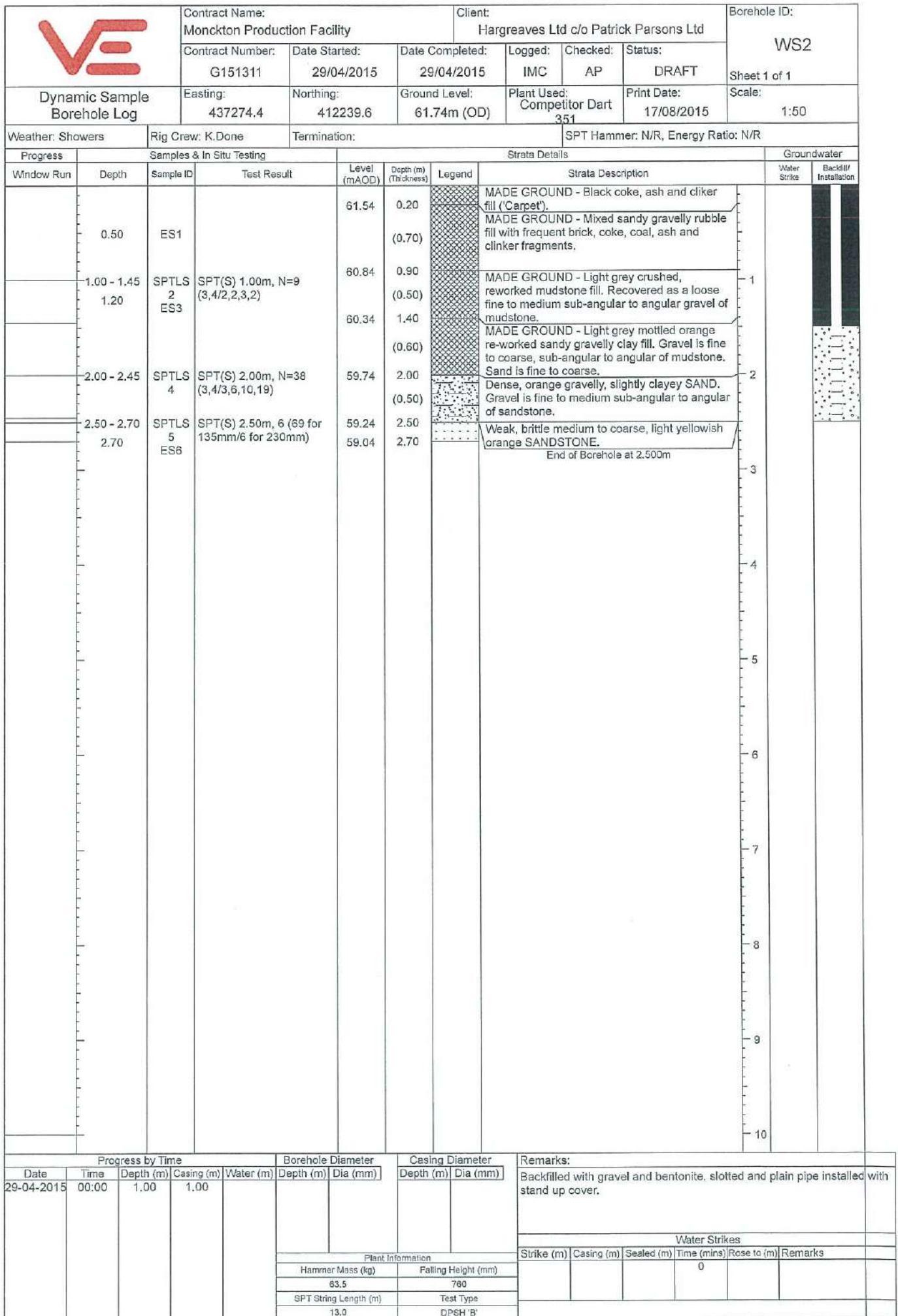
Samples & In Situ Testing					Strata Details					Groundwater				
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description			Water Strike	Backfill/Installation				
						MADE GROUND								
			65.66	(0.50) 0.50		Brown CLAY.								
				(0.80) 1.30		Red SANDSTONE.		1						
			64.86											
				(1.30) 2.60		Grey SANDSTONE.		2						
			63.56											
				(7.20) 9.80				3						
								4						
								5						
								6						
								7						
								8						
								9						
			56.36			Very hard, grey SANDSTONE.		10						
					Continued next sheet									
Start & End of Shift Observations					Borehole Diameter		Casing Diameter		Remarks:					
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)	Driller's descriptions used.					
Flush Information					Installation				Water Strike					
Top (m)	Base (m)	Flush Type	Return	Flush Colour	Top (m)	Base (m)	Type	Dia (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
					0.00	14.50	PLAIN	50	16.50			0	0.00	
					14.50	19.50	SLOTTED	50						



	Contract Name: Monckton Production Facility				Client: Hargreaves Ltd c/o Patrick Parsons Ltd			Borehole ID: RBH5						
	Contract Number: G151311	Date Started: 12/06/2015	Date Completed: 12/06/2015	Logged: IMC	Checked: AP	Status: PRELIM		Sheet 2 of 2						
	Rotary Open Hole Borehole Log		Easting: 437471.1	Northing: 411825.9	Ground Level: 62.18m (OD)	Plant Used: Comacchio 305	Print Date: 13/08/2015	Scale: 1:50						
Weather:		Rig Crew:		Termination:										
Samples & In Situ Testing			Strata Details					Groundwater						
Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description		Water Strike	Backfill/Installation					
				(2.00)		Grey SANDSTONE.		11						
			50.18	12.00		Grey MUDSTONE.		12						
				(4.00)				13						
								14						
								15						
			46.18	16.00		End of Borehole at 16.000m		16						
								17						
								18						
								19						
								20						
Start & End of Shift Observations			Borehole Diameter		Casing Diameter		Remarks:							
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)	Driller's descriptions used.					
Flush Information					Installation				Water Strike					
Top (m)	Base (m)	Flush Type	Return	Flush Colour	Top (m)	Base (m)	Type	Dia (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
					0.00	12.00	PLAIN	50	14.00	13.00		0	0.00	
					12.00	16.00	SLOTTED	50						



Progress by Time					Borehole Diameter		Casing Diameter		Remarks:					
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)						
29-04-2015	00:00	1.00	1.00											
					Plant Information		Water Strikes							
					Hammar Mass (kg)		Falling Height (mm)		Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
					63.5		760							
					SPT String Length (m)		Test Type							
					13.0		DPSH 'B'							



		Contract Name: Monckton Production Facility				Client: Hargreaves Ltd c/o Patrick Parsons Ltd			Borehole ID: WS3	
		Contract Number: G151311		Date Started: 29/04/2015		Date Completed: 29/04/2015		Logged: IMC	Checked: AP	Status: PRELIM
		Easting: 437343.0		Northing: 412314.9		Ground Level: 62.30m (OD)		Plant Used: Competitor Dart 351		Print Date: 17/08/2015
Dynamic Sample Borehole Log		Termination: SPT Hammer: N/R, Energy Ratio: N/R						Scale: 1:50		
Weather:		Rig Crew: K.Done								
Progress		Samples & In Situ Testing		Strata Details		Groundwater				
Window Run	Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/Installation	
	0.30	ES1		61.70	(0.60)		MADE GROUND - Crushed coke fill.			
	1.00	ES3	SPT(S) 1.00m, N=8		0.60		MADE GROUND - Greyish black mottled orangish brown reworked sandy gravelly clay fill with frequent coal, coke, ash and brick fragments. Gravel is fine to coarse, sub-angular to very angular of mixed lithologies. Sand is fine to coarse.			
	1.00 - 1.45	SPTLS 2	(1,1/1,2,2,3)					1		
	1.50	ES4								
	2.00 - 2.45	SPTLS 5	SPT(S) 2.00m, N=7		(3.40)			2		
	2.50	ES6								
	3.00 - 3.45	SPTLS 7	SPT(S) 3.00m, N=9					3		
	3.50	ES8								
	3.90 - 4.00	SPTLS 9	SPT(S) 3.90m, 0 (75 for 95mm/...)	58.30	4.00		End of Borehole at 4.000m	4		
								5		
								6		
								7		
								8		
								9		
								10		
Progress by Time		Borehole Diameter		Casing Diameter		Remarks:				
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)		
29-04-2015	00:00	1.00	1.00						Groundwater struck at 3.9m, with no rise recorded after 20 minutes. Backfilled with gravel and bentonite. slotted and plain pipe installed with stand up cover.	
						Water Strikes				
						Strike (m) Casing (m) Sealed (m) Time (mins) Rose to (m) Remarks				
						3.90 0 20 3.90				
						Plant Information				
						Hammer Mass (kg) Felling Height (mm)				
						63.5 750				
						SPT String Length (m) Test Type				
						13.0 DPSH 'B'				

	Contract Name: Monckton Production Facility			Client: Hargreaves Ltd c/o Patrick Parsons Ltd			Borehole ID: WS4
	Contract Number: G151311	Date Started: 28/04/2015	Date Completed: 28/04/2015	Logged: IMC	Checked: AP	Status: PRELIM	Sheet 1 of 1
Dynamic Sample Borehole Log	Easting: 437365.6	Northing: 412171.1	Ground Level: 63.91m (OD)	Plant Used: Competitor Dart 351	Print Date: 17/08/2015	Scale: 1:50	

Weather: Showers Rig Crew: K.Done Termination: SPT Hammer: N/R, Energy Ratio: N/R

Progress		Samples & In Situ Testing			Strata Details			Groundwater	
Window Run	Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Water Strike	Backfill/ Installation
	0.00	D1					MADE GROUND - Black crushed coke fill (stock yard 'carpet')		
	0.30	D2		63.66	0.25		MADE GROUND - Mixed fill of crushed brick, sandstone and mudstone gravels and occasional coal, coke, and clinker.		
	0.50	D3							
	0.50	ES4							
	1.00	ES6	SPT(S) 1.00m, N=7					1	
	1.00 - 1.45	SPTLS 5	(1,0/1,2,2,2)						
	1.50	D7			(2.45)				
	2.00 - 2.45	SPTLS 8	SPT(S) 2.00m, N=8					2	
			(1,1/2,2,2,2)						
	3.00 - 3.45	SPTLS 9	SPT(S) 3.00m, N=18	61.21 61.11 60.91 60.91	2.70 2.80 3.00		Dense, orange gravelly SAND. Gravel is fine to coarse, sub-angular to angular of sandstone. Weak, orange fine to medium SANDSTONE. Window sample refused at 3.0m bgl on sandstone. SPT advanced to 4.0m bgl.	3	
			(2,3/4,4,5,5)						
	4.00 - 4.20	SPTLS 10	SPT(S) 4.00m, 4 (71 for 140mm/4,...)					4	
							End of Borehole at 4.200m		
								5	
								6	
								7	
								8	
								9	
								10	

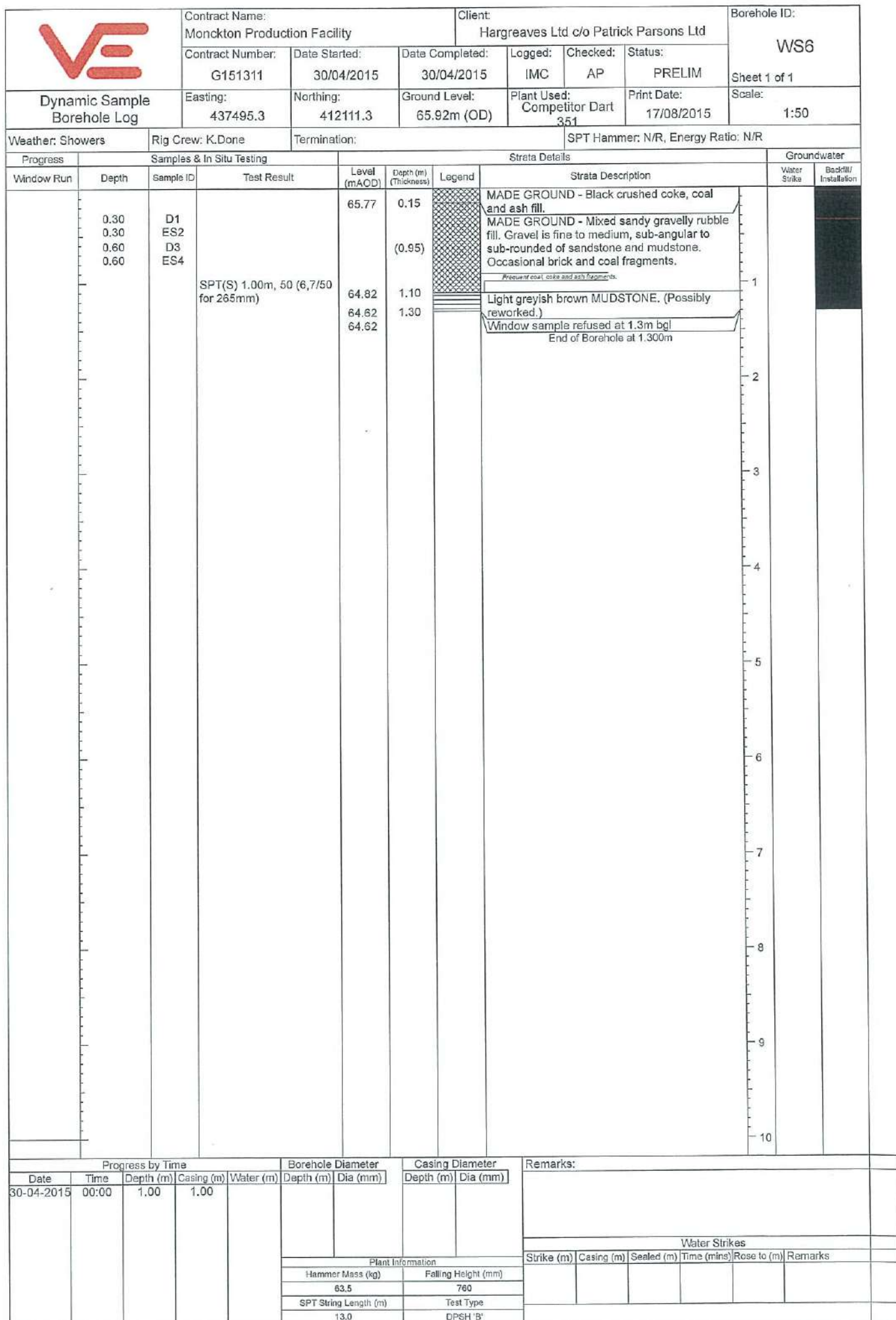
Progress by Time					Borehole Diameter		Casing Diameter		Remarks: Backfilled with gravel and bentonite. slotted and plain pipe installed with stand up cover.			
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)				
28-04-2015	00:00	1.00	1.00									
28-04-2015	01:00	2.00	2.00									
28-04-2015	02:00	3.00	2.00									
28-04-2015	03:00	4.00	2.00									
					Plant Information		Water Strikes					
					Hammer Mass (kg)	Falling Height (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
					63.5	760				0		
					SPT String Length (m)	Test Type						
					13.0	DPSH 'B'						



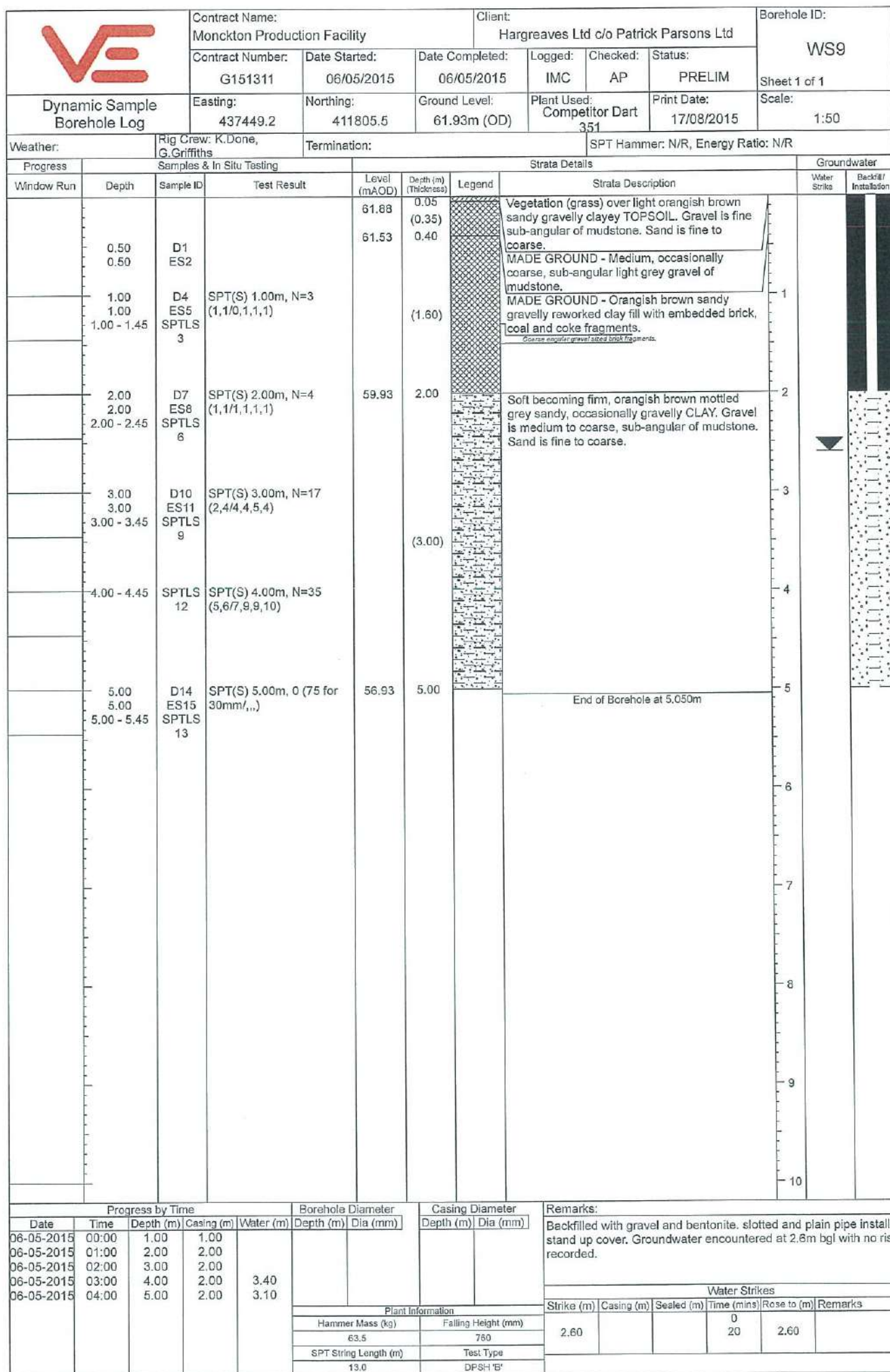
Progress		Samples & In Situ Testing			SPT Hammer: N/R, Energy Ratio: N/R				
Window Run	Depth	Sample ID	Test Result	Level (mAOD)	Depth (m) (Thickness)	Legend	Strata Description	Groundwater	
	0.00	D1		64.69	0.50		MADE GROUND - Black crushed coke fill with coal and ash. (Stockyard 'Carpet').		
	0.30	D2							
	0.50	D3							
	0.50	ES4							
	1.00	D6	SPT(S) 1.00m, N=18 (3,5/5,4,4,5)		(1.50)		MADE GROUND - Reworked light grey crushed mudstone fill with fine to coarse sand and fine to medium sub-angular to angular gravel of mudstone and occasional sandstone.	1	
	1.00	ES7							
	1.00 - 1.45	SPTLS 5							
	1.50	D8							
	2.00	D10	SPT(S) 2.00m, N=17 (3,3/4,4,4,5)	63.19	2.00		MADE GROUND - Reworked reddish brown sandy gravelly clay fill. Sand is fine to coarse, gravel is fine to medium, sub-angular to angular of sandstone and mudstone. Occasional embedded coal, coke and brick fragments.	2	
	2.00	ES11							
	2.00 - 2.45	SPTLS 9							
	2.50	D12							
	3.00	D14	SPT(S) 3.00m, N=26 (5,5/5,6,7,8)		(1.70)			3	
	3.00	ES15							
	3.00 - 3.45	SPTLS 13							
	4.00	D17	SPT(S) 4.00m, 50 (25 for 135mm/50 for 275mm)	61.49	3.70		Light orangish grey weak MUDSTONE.	4	
	4.00 - 4.20	SPTLS 16							
				61.19	4.00		End of Borehole at 4.200m		
								5	
								6	
								7	
								8	
								9	
								10	

Progress by Time					Borehole Diameter		Casing Diameter		Remarks:
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)	
28-04-2015	00:00	1.00	1.00						
28-04-2015	01:00	2.00	1.00						
28-04-2015	02:00	3.00	1.00						
28-04-2015	03:00	4.00	1.00						

Plant Information				Water Strikes					
Hammer Mass (kg)		Falling Height (mm)		Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
63.5		760		2.90			0	2.90	
SPT String Length (m)		Test Type							
13.0		DPSH 'B'							



Progress by Time					Borehole Diameter		Casing Diameter		Remarks:					
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)						
06-05-2015	00:00	1.00	1.00	3.80					Backfilled with gravel and bentonite. slotted and plain pipe installed with stand up cover.					
06-05-2015	01:00	2.00	1.00											
06-05-2015	02:00	3.00	1.00											
11-05-2015	03:00	4.00	1.00											
Plant Information									Water Strikes					
Hammer Mass (kg)					Falling Height (mm)				Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
63.5					760				3.80			0 20	3.80	
SPT String Length (m)					Test Type									
13.0					DPSH 'B'									





Progress by Time					Borehole Diameter		Casing Diameter		Remarks: Backfilled with gravel and bentonite, slotted and plain pipe installed with stand up cover. Groundwater encountered at 2.8m, with no rise recorded.		
Date	Time	Depth (m)	Casing (m)	Water (m)	Depth (m)	Dia (mm)	Depth (m)	Dia (mm)			
06-05-2015	00:00	1.00	1.00								
06-05-2015	01:00		2.00								
06-05-2015	02:00	3.00	2.00	2.80							
06-05-2015	03:00	4.00	2.00	3.40							
06-05-2015	04:00	5.00	2.00	3.80							
					Plant Information		Water Strikes				
		Hammer Mass (kg)		Falling Height (mm)		Strike (m)	Casing (m)	Sealed (m)	Time (mins)	Rose to (m)	Remarks
		63.5		750		2.80			0 20	2.80	
		SPT String Length (m)		Test Type							
		13.0		DPSH 'B'							



Trial Pit Log

Trialpit No
TP101
Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311

Co-ords: 437323.61 - 412101.74
Level: 63.97

Date
29/04/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):

Depth
1.50

Scale
1:25

Logged
IMC

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00	D					MADE GROUND - Black crushed coke fill (stock yard 'carpet').
	0.00	ES					
	0.30	B					MADE GROUND - Dark reddish brown sandy gravel fill with brick and coke fragments. <i>Frequent buried whole and half bricks.</i>
	0.30	D					
	0.30	ES		0.50	63.47		
	0.50	B					
	0.50	D					Orange gravelly, slightly clayey fine to medium SAND. Gravel is fine to coarse, sub-angular to angular, of sandstone.
	1.00	D					
	1.00	ES		1.10	62.87		
	1.50	D					
	1.50	ES		1.80	62.17		Trial pit abandoned at 1.8m bgl due to drain pipe encountered (redundant). End of pit at 1.50 m
	1.50	ES		1.80	62.17		

Remarks: Groundwater was encountered at 1.5m. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP102

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437353.32 - 412184.34
Level: 63.82Date
29/04/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
1.80Scale
1:25
Logged

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.00 0.00 0.00	B D ES					MADE GROUND - Crushed coke fill ('Carpet').
	0.50 0.50 0.50	B D ES		0.40	63.42		MADE GROUND - Reinforced concrete slab.
				0.70	63.12		MADE GROUND - Reddish brown, mixed rubble fill of crushed brick fragments, frequent whole bricks, coke, coal, ash, clinker and buried metal objects.
	1.00 1.00 1.00	B D ES		1.00	62.82		MADE GROUND - Old concrete slab or footing.
				1.40	62.42		MADE GROUND - Orangish brown, re-worked gravelly clayey sand.
				1.80 1.80	62.02 62.02		Trial pit abandoned due to obstruction encountered. End of pit at 1.80 m.

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP103

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311

Co-ords: 437264.31 - 412242.75

Level: 61.83

Date

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):

Depth

Scale
1:25

Logged

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.30 0.30 0.30 0.50 0.50	B D ES D ES		0.30	61.52		MADE GROUND - Crushed coke fill ('Stock yard carpet').
	1.00 1.00 1.00	B D ES		1.30	60.52		MADE GROUND - Mixed rubble, coke, coal, ash, clinker and brick fill.
	1.50 1.50 1.50	B D ES		1.60	60.22		MADE GROUND - Re-worked grey crushed mudstone fill, fragmented to a fine to medium sub-angular to angular compacted sandy gravel of mudstone. Sand is fine to coarse.
	1.80 1.80 1.80	B D ES		2.00	59.82		Orange sandy fine to coarse sub-angular to angular GRAVEL of sandstone. Sand is medium to coarse. Frequent small to medium cobbles of sandstone.
	3.00 3.00	B D		3.50 3.50	58.32 58.32		Weak, brittle, medium to coarse, orange SANDSTONE.
							Trial pit terminated on hard grey MUDSTONE.

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP104

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437244.10 - 412305.95
Level: 60.55Date
30/04/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
1.30Scale
1:25

Logged

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.30 0.30 0.30 0.50 0.50 0.50	B D ES B D ES		0.30	60.25		MADE GROUND - Coke, coal, ash fill ('Carpet').
	1.00 1.00 1.00	B D ES		1.35 1.35	59.20 59.20		MADE GROUND - Mixed rubble fill of sandy gravelly clay with embedded pottery, brick, coal, ash. Strong ash/tar/bitumen odour observed. Frequent buried whole and half bricks and pieces of buried timber encountered.
							Trial pit terminated upon encountering a cable at 1.35m bgl. No signal from CAT.
							End of pit at 1.30 m

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP105

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437331.03 - 412274.23
Level: 62.69Date
06/05/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
3.20Scale
1:25

Logged

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.20	62.49		MADE GROUND - Dark grey/black coarse coke fill ('Carpet').
	0.30 0.30 0.40 - 1.00 0.50 0.50	D ES B ES					MADE GROUND - Reddish orange crushed brick fill with occasional weathered half bricks.
	1.00 1.00	D ES		1.00	61.69		MADE GROUND - Mixed brick rubble, coke, coal and ash fill with some fine to coarse, sub-angular crushed mudstone gravels.
	1.50 1.50	D ES					
	3.00 - 3.50	B		3.00	59.69		Dark orangish grey MUDSTONE with frequent iron ore colouring.
	3.20 3.20	D ES		3.20 3.20	59.49 59.49		Trial pit terminated on mudstone. End of pit at 3.20 m

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP107

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437419.94 - 412327.16
Level: 63.80

Date

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
2.00Scale
1:25

Logged

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.10 0.10 0.10 0.30	B D ES D		0.20	63.60		MADE GROUND - Coke, ash, coal and gravel fill. Gravel is fine to coarse, sub-rounded to sub-angular of sandstone and mudstone.
	0.50 0.50 0.50	B D ES					MADE GROUND - Mixed rubble fill of whole and half bricks, crushed brick fragments, broken concrete, coke, coal, ash and occasional buried metal, timber, steel rope, and rags. <i>Large buried steel lifting cable/rope.</i> <i>Buried railway sleeper encountered.</i>
				1.30	62.50		CONCRETE - Large buried concrete structure encountered.
	2.00 2.00	D ES		2.00 2.00	61.80 61.80		Trial pit abandoned after 30 mins attempting to break through concrete obstruction. <i>End of pit at 2.00 m</i>

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP108

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437495.18 - 412301.86
Level: 65.45

Date

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
1.10Scale
1:25

Logged

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.30 0.30 0.30 0.50 0.50 0.50	B D ES B D ES		0.50	64.95		MADE GROUND - Mixed rubble fill with crushed brick, coal, coke, ash, sand, clay and gravel. Gravel is fine to coarse, sub-rounded to sub-angular of sandstone and mudstone.
	1.00 1.00 1.00	B D ES		1.10	64.35		Orangish grey, weak brittle MUDSTONE. Frequent ironstone nodules and iron ore colouring within the mudstone.
							End of pit at 1.10 m

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP109

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437363.45 - 412266.30
Level: 63.07Date
06/05/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
3.50Scale
1:25

Logged

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.30 0.30	D ES		0.20	62.87		MADE GROUND - Fine to coarse, dark greyish black coke fill ('carpet').
	0.50 0.50	D ES		0.60	62.47		MADE GROUND - Mixed brick and coke rubble fill with frequent half bricks, lumps of concrete and small to large cobbles of mudstone.
	1.20 1.20	D ES					MADE GROUND - Reworked grey mudstone. Recovered as a fine to coarse sub-angular to angular cobbly gravel of mudstone. Cobbles are small to large, sub-angular to angular of mudstone with frequent visible fossilized plant matter.
	2.50 2.50	D ES					
				3.00	60.07		Orangish brown very sandy, slightly gravelly CLAY. Gravel is fine to medium, sub-angular to angular of sandstone. Sand is fine to coarse.
	3.50 3.50	D ES		3.50	59.57		End of pit at 3.50 m

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP110

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437395.76 - 412261.89
Level: 63.65

Date

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
3.80Scale
1:25

Logged

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.50 0.50	D ES					MADE GROUND - Fine to coarse, greyish black coke fill.
	1.20 1.20	D ES		1.00 1.30	62.65 62.35		MADE GROUND - Fill comprising a coarse sub-angular gravel of granite. (Possible old railway ballast.)
	2.30 2.30	D ES		1.85	61.80		MADE GROUND - Dark greyish black, slightly clayey sandy gravelly mixed rubble fill with brick fragments, coke, coal and ash.
	3.80 3.80	D ES		3.80 3.80	59.85 59.85		Weak, brittle, orangish brown MUDSTONE.
							Trial pit terminated in mudstone. End of pit at 3.80 m

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP1

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311

Co-ords: 437241.69 - 412299.81

Level: 60.73

Date
13/05/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
3.60Scale
1:25Logged
IMC

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.25 0.25 0.25 0.50 0.50 0.50	B D ES B D ES		0.30	60.43		MADE GROUND - Crushed, compacted coke fill. (Carpet).
	1.50 1.50 1.50	B D ES					MADE GROUND - Mixed rubble fill with frequent weathered whole, half and fragmented bricks, coke, coal and ash. Frequent buried metal objects.
	2.00 2.00 2.00	B D ES					
	2.50 2.50 2.50	B D ES		2.50	58.23		
	3.00 3.00 3.00	B D ES					
	3.50 3.50 3.60	D ES B		3.60	57.13		Weak, brittle, medium coarse orange SANDSTONE.
							
							
							
							
							
							
							
							
							
							
							
							
							

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No
TP2

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311

Co-ords: 437227.60 - 412283.55
Level: 61.10

Date
15/05/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):

Depth
3.50

Scale
1:25

Logged
IMC

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.30 0.30 0.30	B D ES		0.70	60.40		MADE GROUND - Fine to coarse, compacted crushed coke ('carpet').
	0.80 0.80 0.80	B D ES					MADE GROUND - Mixed rubble fill with brick, coal, coke and ash fragments in a reworked sandy gravelly clay matrix.
	1.50 1.50 1.50	B D ES		1.85	59.24		Medium dense, orange gravelly cobbly SAND. Gravel is fine to coarse, sub-angular to angular. Cobbles are small to medium, sub-angular to angular of sandstone.
	2.00 2.00 2.00	B D ES		2.50	58.60		Weak, brittle, coarse orange SANDSTONE.
	3.50 3.50 3.50	B D ES		3.50	57.60		End of pit at 3.50 m

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP3

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311

Co-ords: 437381.76 - 412168.12

Level: 64.19

Date

14/05/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
3.80

Scale

1:25

Logged
IMC

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
	0.30 0.30 0.30	B D ES					MADE GROUND - Fine to coarse, dark greyish black, crushed and compacted coke fill ('carpet').	
	0.80 0.80 0.80	B D ES		0.80	63.38		CONCRETE - Reinforced slab.	1
	1.50 1.50 1.50	B D ES		1.50	62.68		MADE GROUND - Mixed rubble fill with brick, coal, coke and ash fragments in a reworked sandy gravelly clay matrix. Frequent buried metal and timber objects.	
	2.00 2.00 2.00	B D ES		2.00	62.18		Medium dense, orange gravelly cobbly fine to coarse SAND. Gravel is medium to coarse (mostly coarse) sub-angular to angular of sandstone. Cobbles are small to medium sub-angular to angular of sandstone.	2
	3.00 3.00 3.00	B D ES		3.00	61.18		Weak, brittle, coarse orange SANDSTONE.	3
	3.80 3.80 3.80	B D ES		3.80	60.38		End of pit at 3.80 m	4
								5

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP4

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437437.73 - 412225.69
Level: 64.66Date
14/05/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
3.20Scale
1:25Logged
IMC

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.30 0.30 0.30	B D ES		0.35	64.31		MADE GROUND - Fine to medium, crushed compacted coke ('carpet').
	1.00 1.00 1.00	B D ES					MADE GROUND - Reddish brown mixed brick rubble fill, comprising crushed brick fill, weathered bricks, lumps of concrete, occasional coke, coal, ash, sand and gravel. Gravel is fine to medium of sandstone, sand is fine to coarse.
	2.00 2.00 2.00	B D ES					
	3.00 3.00 3.00	B D ES		3.00	61.66		CONCRETE - Large concrete obstruction encountered. Attempted to break through.
				3.20 3.20	61.46 61.46		Trial pit terminated on concrete obstruction. End of pit at 3.20 m

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP5

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437519.17 - 412136.50
Level: 66.31Date
20/05/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
3.00Scale
1:25Logged
IMC

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.15			0.15	66.16		Vegetation (grass) over dark greyish black, sandy, slightly gravelly TOPSOIL with frequent embedded rootlets. Gravel is fine, occasionally medium, sub-rounded to angular. Sand is fine to coarse.
	0.30	B					MADE GROUND - Compacted mixed fill of crushed coke, coal, ash sand, gravel and occasional brick fragments. Gravel is fine to medium sub-rounded to angular of sandstone and mudstone, sand is fine to coarse.
	0.30	D					
	0.30	ES					
	0.50	B					
	0.50	D					
	0.50	ES					
	1.00	B					MADE GROUND - Reworked orangeish brown fine to coarse, sub-rounded to sub-angular sandy, cobbly gravel of sandstone. Occasional crushed coke, coal and ash. Sand is fine to coarse. Cobbles are small to medium, sub-rounded to sub-angular.
	1.00	D					
	1.00	ES					
	1.50	B					
	1.50	D					
	1.50	ES					
	2.00	B					Loose, fine to coarse, sub-rounded to sub-angular, occasionally angular sandy cobbly GRAVEL of sandstone. Sand is fine to coarse. Cobbles are small to medium occasionally large, sub-rounded to angular.
	2.00	D					
	2.00	ES					
	2.50	B					
	2.50	D					
	2.50	ES					
	2.70			2.70	63.61		Weak, brittle, coarse orangish brown SANDSTONE.
	3.00	B		3.00	63.31		End of pit at 3.00 m
	3.00	D					
	3.00	ES					

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:





Trial Pit Log

Trialpit No

TP6

Sheet 1 of 1

Project Name: Monckton Production Facility

Project No.
G151311Co-ords: 437330.11 - 412093.73
Level: 64.12Date
14/05/2015

Location: Lund Hill Lane, Royston, Barnsley, S71 4BD

Dimensions
(m):Depth
3.00Scale
1:25Logged
IMC

Client: Hargreaves Ltd c/o Patrick Parsons Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
	0.30 0.30 0.30 0.50 0.50 0.50	B D ES B D ES					MADE GROUND - Compacted fine to coarse coke fill ('Carpet').
	1.00 1.00	B ES		1.10	63.02		Medium dense gravelly cobbly SAND. Gravel is fine to coarse sub-angular to angular of sandstone. Cobbles are small to medium, sub-angular to angular.
	1.50 1.50 1.50	B D ES					
	2.00 2.00	D ES		2.00	62.12		Weak, brittle, medium to coarse orange SANDSTONE.
	2.50 2.50	D ES					
	3.00 3.00	D ES		3.00 3.00	61.12 61.12		Trial pit terminated in sandstone. End of pit at 3.00 m

Remarks: No groundwater encountered. Stability: Good. Backfilled with arisings. Log issue: Draft.

Stability:

