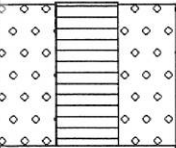


BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB011		PAGE 2 of 2		
	NUMBER	TYPE					START DATE: 29/3/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE		
							FINISH DATE: 30/3/99		BOREHOLE DIAMETER: 130/80 mm		
						DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm			
						LOGGED BY: SG APPR'D BY:		SCREEN SLOT SIZE: 1 mm			
						DESCRIPTION		COMMENTS			
						5	Soft grey-brown sandy SILT				5
						5.5	Firm to stiff orange-brown gravelly CLAY with sandstone cobbles and boulders				5.5
						6.0					6.0
						6.5					6.5
						7.0					7.0
						7.5					7.5
						8.0					8.0
						8.5					8.5
						9.0					9.0
						9.5					9.5
						10.0					10.0

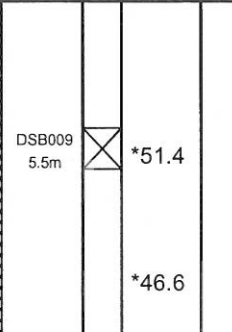
LOCATION / NOTES: 1. All measurements in m below ground level (mbgl) 2. Hole size telescoped to smaller diameter with depth		LEGEND  Disturbed Sample  Undisturbed Sample  Headspace Analysis  Down Borehole Analysis  Groundwater Table  Perched Water Table	BOREHOLE LOG Job Title SOIL & GROUNDWATER INVESTIGATION Location LLANDARCY REFINERY Client BP LLANDARCY LTD App'd DRAFT Ref. SG/CR/BRS Date MAY 99 Job No. 39991-004-401	 DAMES & MOORE GROUP
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BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB010		PAGE 1 of 1	
	NUMBER	TYPE					START DATE: 31/3/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 31/3/99		BOREHOLE DIAMETER: 130/80 mm	
							DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm	
				LOGGED BY: SG		APPR'D BY:		SCREEN SLOT SIZE: 1 mm		
							DESCRIPTION	COMMENTS		
						0	CONCRETE (MADE GROUND)			0
						0.5	Loose grey medium GRAVEL	No odour		0.5
						1.0	Loose brown sandy and silty GRAVEL	Damp with slight sweet hydrocarbon odour		1.0
						1.5	Medium dense black silty sandy GRAVEL with occasional cobbles	Wet and oily with strong hydrocarbon odour		1.5
						1.75	Loose green-grey fine to medium GRAVEL	Very strong garlic odour wet		1.75
						2.0	Firm brown gravelly CLAY	Yellow crystals observed in gravel at 1.5m		2.0
						2.5	Borehole terminated at 2.5 mbgl	medium to strong garlic like odour		2.5
						3.0		Borehole terminated due to casing jamming and collapse		3.0
						3.5				3.5
						4.0				4.0
						4.5				4.5
						5.0				5.0

LOCATION / NOTES: 1. All measurements in m below ground level (mbgl) 2. DUPI1 = DSB010-1.75m 3. Hole size telescoped to smaller diameter with depth 4. Borehole terminated due to collapse and		LEGEND Disturbed Sample Undisturbed Sample Headspace Analysis Down Borehole Analysis Groundwater Table Perched Water Table		BOREHOLE LOG Job Title SOIL & GROUNDWATER INVESTIGATION Location LLANDARCY REFINERY Client BP LLANDARCY LTD App'd DRAFT Ref. SG/CR/BRS Date MAY 99 Job No. 39991-004-401		 DAMES & MOORE GROUP	
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BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB009		PAGE 1 of 2	
	NUMBER	TYPE					START DATE: 06/04/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 06/04/99		BOREHOLE DIAMETER: 130/80 mm	
						DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm		
						LOGGED BY: SG APPR'D BY:		SCREEN SLOT SIZE: 1 mm		
							DESCRIPTION	COMMENTS		
						0	CONCRETE (MADE GROUND)		0	
							Loose light brown slightly sandy fine to medium GRAVEL with some concrete fragments (MADE GROUND)	Slight solvent odour Dry		
						0.5	Loose greyish brown medium GRAVEL	Strong solvent odour Wet	0.5	
							Loose grey sandy fine to medium sub-angular GRAVEL	Yellow product observed		
						1.0		Strong solvent odour Wet	1.0	
							Loose grey coarse SAND			
						1.5	Loose grey fine to medium sub-angular GRAVEL with some sand	Strong solvent odour Wet	1.5	
						2.0			2.0	
							Firm to stiff brown CLAY with occasional fine gravel	Slight odour Dry		
						2.5			2.5	
							cobbles at 2.8 and 3.1m			
						3.0		Moderate to strong solvent odour from 3m	3.0	
						3.5			3.5	
						4.0	Firm grey-brown very gravelly silty CLAY		4.0	
							Soft to firm grey-brown very silty gravelly SAND with some clay	wet strong solvent odour		
						4.5		wet strong solvent odour	4.5	
							Soft to firm brown sandy and gravelly CLAY			
						5.0			5.0	

LOCATION / NOTES:		LEGEND		BOREHOLE LOG	
1. All measurements in m below ground level (mbgl)		☒ Disturbed Sample		Job Title SOIL & GROUNDWATER INVESTIGATION	
2. Shallow well installed using 19mm HDPE pipe		■ Undisturbed Sample		Location LLANDARCY REFINERY	
3. Hole size telescoped to smaller diameter with depth		* Headspace Analysis		Client BP LLANDARCY LTD	
		† Down Borehole Analysis		App'd DRAFT	
		▽ Groundwater Table		Ref. SG/CR/BRS	
		▽ Perched Water Table		Date MAY 99	
				Job No. 39991-004-401	
				 DAMES & MOORE	

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB009		PAGE 2 of 2	
	NUMBER	TYPE					START DATE: 06/04/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 06/04/99		BOREHOLE DIAMETER: 130/80 mm	
							DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm	
							LOGGED BY: SG APPR'D BY:		SCREEN SLOT SIZE: 1 mm	
							DESCRIPTION	COMMENTS		
 DSB009 5.5m *51.4 *46.6							Soft to firm brown sandy and gravelly CLAY	Very sweet solvent odour	5	
							Loose to medium dense orange-brown fine SAND		5.5	
							Firm to stiff orange-brown gravelly CLAY		6.0	
							Borehole terminated at 6.15 mbgl		6.5	
									7.0	
									7.5	
									8.0	
									8.5	
									9.0	
									9.5	
									10.0	

LOCATION / NOTES:

- All measurements in m below ground level (mbgl)
- Hole size telescoped to smaller diameter with depth
- Borehole collapsed to 4.9 mbgl

LEGEND

-  Disturbed Sample
-  Undisturbed Sample
- * Headspace Analysis
- + Down Borehole Analysis
-  Groundwater Table
-  Perched Water Table

BOREHOLE LOG

Job Title		SOIL & GROUNDWATER INVESTIGATION	
Location		LLANDARCY REFINERY	
Client		BP LLANDARCY LTD	
App'd	DRAFT		
Ref.	SG/CR/BRS		
Date	MAY 99		
Job No.		39991-004-401	

DAMES & MOORE

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB008		PAGE 1 of 2	
	NUMBER	TYPE					START DATE: 31/3/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 31/3/99		BOREHOLE DIAMETER: 130/80 mm	
							DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm	
LOGGED BY: SG		APPR'D BY:		SCREEN SLOT SIZE: 1 mm						
							DESCRIPTION	COMMENTS		
						0	CONCRETE (MADE GROUND)		0	
						0.5	Loose brown and pink-brown sandy gravel with some wood and occasional cobbles (MADE GROUND)		0.5	
						1.0			1.0	
						1.25		Yellow product at 1.2m to 1.4m Wet		
						1.5	Loose black sandy GRAVEL	Very strong hydrocarbon and garlic like odours	1.5	
						2.0	Loose grey sandy fine to medium GRAVEL	Wet, Strong garlic odour	2.0	
						2.5	Firm brown to orange-brown slightly gravelly CLAY becoming sandy at 2.8m	Damp with strong garlic odour	2.5	
						3.0	Firm grey-brown clayey and sandy SILT with occasional fine to medium sub-rounded gravel and some black-brown organic mottling	Strong garlic odour	3.0	
						3.5	Firm brown to orange-brown very sandy silty CLAY with some sub-rounded fine to medium gravel	Strong sweet garlic odour	3.5	
						4.0	becoming more gravelly at 4m		4.0	
						4.5		Odour decreasing at 4.9m	4.5	
						5.0			5.0	

LOCATION / NOTES:	LEGEND	BOREHOLE LOG	
1. All measurements in m below ground level (mbgl)	Disturbed Sample	Job Title SOIL & GROUNDWATER INVESTIGATION	
2. Shallow installation 19mm HDPE pipe	Undisturbed Sample	Location LLANDARCY REFINERY	
3. Hole size telescoped to smaller diameter with depth	Headspace Analysis	Client BP LLANDARCY LTD	
	Down Borehole Analysis	App'd DRAFT	
	Groundwater Table	Ref. SG/CR/BRS	
	Perched Water Table	Date MAY 99	
		Job No. 39991-004-401	
		DAMES & MOORE	

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BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB007		PAGE 1 of 2	
	NUMBER	TYPE					START DATE: 29/3/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 29/3/99		BOREHOLE DIAMETER: 130/80 mm	
				DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm				
				LOGGED BY: SG		APPR'D BY:		SCREEN SLOT SIZE: 1 mm		
						DESCRIPTION	COMMENTS			
						0	Loose brown and grey sub-rounded to sub-angular fine to coarse GRAVEL (MADE GROUND)	Some water at 0.3m	0	
						0.5	Loose red coarse SAND to fine gravel with some ash (MADE GROUND)			
						0.5	Loose black medium to coarse sand sized ASH with some clinker fragments (MADE GROUND)			
						0.5	Soft to firm greyish brown clayey GRAVEL (MADE GROUND)			
						1.0	Loose black and red coarse GRAVEL and brick fragments (MADE GROUND)	Slight hydrocarbon odour	1.0	
						1.0	Firm greyish brown CLAY with orange streaks and rootlets			
						1.5	Soft black silty fibrous PEAT			
						1.5	Soft to firm greyish brown CLAY with frequent orange stained rootlets	Damp at 1.5m	1.5	
						2.0	becoming greyer at 2.0m	Damp with moderate hydrocarbon odour from 1.5m	2.0	
						2.5	Soft brown-grey gravelly CLAY with some orange stained rootlets	Slight sheen on gravel surface at 2.7m	2.5	
						3.0	Blue-grey coarse sandstone gravel at 3m			
						3.0	Firm to stiff brown slightly silty CLAY with some fine to medium gravel	Slightly sweet garlic odour Damp at 3.0m - 3.5m	3.0	
						3.5	Loose to medium dense brown-grey coarse SAND with some fine gravel and silt	Slight sheen at 3.5m with moderate odour	3.5	
						4.0	Loose soft and grey-brown sandy SILT with occasional fine to medium gravel.			
						4.5				
5.0										

LOCATION / NOTES:		LEGEND		BOREHOLE LOG	
1. All measurements in m below ground level (mbgl)		Disturbed Sample Undisturbed Sample Headspace Analysis Down Borehole Analysis Groundwater Table Perched Water Table		Job Title SOIL & GROUNDWATER INVESTIGATION Location LLANDARCY REFINERY Client BP LLANDARCY LTD App'd DRAFT Ref. SG/CR/BR Date MAY 99 Job No. 39991-004-401	
2. Hole size telescoped to smaller diameter with depth				DAMES & MOORE GROUP	

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB007		PAGE 2 of 2	
	NUMBER	TYPE					START DATE: 29/3/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 29/3/99		BOREHOLE DIAMETER: 130/80 mm	
							DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm	
		LOGGED BY: SG APPR'D BY:		SCREEN SLOT SIZE: 1 mm						
					5	X-X-X	Soft to very soft grey-brown silty CLAY	Moderate garlic like odour wet	5	
						X-X-X	Very soft orange-brown silty CLAY			
					5.5	X-X-X	Firm to stiff brown gravelly CLAY	Dry	5.5	
						X-X-X	Firm orange-brown very sandy silty CLAY			
							Firm to stiff brown gravelly CLAY with a cobbles at 6m			
					6.0		Firm orange-brown very gravelly (fine to coarse sub-rounded to sub-angular) CLAY with occasional cobbles		6.0	
				6.5				6.5		
					7.0			Strong solvent odour at 7m	7.0	
				7.5					7.5	
				8.0					8.0	
				8.5					8.5	
				9.0					9.0	
					9.5				9.5	
					10.0				10.0	

LOCATION / NOTES: 	LEGEND Disturbed Sample Undisturbed Sample Headspace Analysis Down Borehole Analysis Groundwater Table Perched Water Table	BOREHOLE LOG	
		SOIL & GROUNDWATER INVESTIGATION	
		LLANDARCY REFINERY	
		BP LLANDARCY LTD	
		DRAFT	
		SG/CR/BRS	
		MAY 99	
		39991-004-401	

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB006		PAGE 1 of 1	
	NUMBER	TYPE					START DATE: 1/4/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 01/04/99		BOREHOLE DIAMETER: 130/80 mm	
							DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm	
				LOGGED BY: SG		APPR'D BY:		SCREEN SLOT SIZE: 1 mm		
							DESCRIPTION	COMMENTS		
						0	CONCRETE (MADE GROUND)			0
						0.5	Loose brownish and pinkish grey fine to medium GRAVEL with some silt (MADE GROUND)			0.5
							Loose red and grey-brown brick fragments and fine to medium gravel (MADE GROUND)			
							Loose grey and brown-grey coarse GRAVEL with some fine and medium gravel			
						1.0	Loose grey fine to medium GRAVEL with some sand and silt becoming black at 1.2m	Yellow product observed with strong garlic-like solvent odour at 0.75m yellow product down to 1m Wet from 0.5m	1.0	
						1.5	Sandstone boulder at 1.3m,			1.5
						2.0	Firm to stiff brown and orange-brown gravelly CLAY	Odour very strong from gravel	2.0	
							Hard brown-blue grey weathered sandstone GRAVEL	Medium odour at 2.15m in cobbles		
						2.5	Firm to stiff brown gravelly CLAY with boulders and cobbles at 2.4m		2.5	
								Dry Becoming damp at 2.8m		
						3.0	Firm orange-brown very sandy gravelly silty CLAY		3.0	
						3.5			3.5	
						4.0	Soft to very stiff brown slightly gravelly CLAY		4.0	
							Borehole terminated at 4.0 mbgl on refusal			
						4.5			4.5	
						5.0			5.0	

LOCATION / NOTES:	LEGEND	BOREHOLE LOG	
1. All measurements in m below ground level (mbgl)	Disturbed Sample	Job Title SOIL & GROUNDWATER INVESTIGATION	
2. Shallow well installed with 19mm HDPE pipe	Undisturbed Sample	Location LLANDARCY REFINERY	
3. Temporarily cased to 2.2m	* Headspace Analysis	Client BP LLANDARCY LTD	
4. Hole size telescoped to smaller diameter	↓ Down Borehole Analysis	App'd DRAFT	
	▽ Groundwater Table	Ref. SG/CR/BRS	
	▽ Perched Water Table	Date MAY 99	
		Job No. 39991-004-401	
		DAMES & MOORE GROUP	

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB005		PAGE 1 of 1	
	NUMBER	TYPE					START DATE: 1/4/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 1/4/99		BOREHOLE DIAMETER: 130/80 mm	
						DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm		
						LOGGED BY: SG APPR'D BY:		SCREEN SLOT SIZE: 1 mm		
							DESCRIPTION	COMMENTS		
						0	CONCRETE (MADE GROUND)		0	
							Loose grey and pink with grey fine to coarse silty GRAVEL with wood fragments at 0.5m (MADE GROUND)	Damp	0.5	
						0.5	Loose brownish grey fine to coarse slightly silty GRAVEL (MADE GROUND)			
							Loose grey fine to medium sandy GRAVEL (MADE GROUND)	Damp to wet	1.0	
						1.0	Loose to medium dense black sandy medium to coarse GRAVEL (MADE GROUND)	Moderate solvent odour		
							becoming ashy at 1.75m	Strong hydrocarbon odour	1.5	
						1.5	some brick fragments and concrete at 2m	Stained		
								Wet, with strong hydrocarbon and solvent odour	2.0	
						2.0				
									2.5	
						2.5				
									3.0	
						3.0				
									3.5	
						3.5				
									4.0	
						4.0				
									4.5	
						4.5				
									5.0	
						5.0				

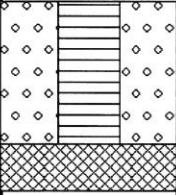
LOCATION / NOTES:	LEGEND	BOREHOLE LOG	
1. All measurements in m below ground level (mbgl)	☒ Disturbed Sample	Job Title SOIL & GROUNDWATER INVESTIGATION	
2. Borehole collapsed after casing to 1.7m	■ Undisturbed Sample	Location LLANDARCY REFINERY	
3. Hole size telescoped to smaller diameter with depth	* Headspace Analysis	Client BP LLANDARCY LTD	
	† Down Borehole Analysis	App'd	DRAFT
	▼ Groundwater Table	Ref.	SG/CR/BRs
	▽ Perched Water Table	Date	MAY 99
		Job No.	39991-004-401
		 DAMES & MOORE GROUP	

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB004		PAGE 1 of 1	
	NUMBER	TYPE					START DATE: 6/4/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 7/4/99		BOREHOLE DIAMETER: 130/80 mm	
						DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm		
						LOGGED BY: SG APPR'D BY:		SCREEN SLOT SIZE: 1 mm		
						DESCRIPTION		COMMENTS		
						CONCRETE (MADE GROUND)				0
						Loose brown and grey sandy fine gravel (MADE GROUND)		Dry		0.5
						Wood at 0.75m		Yellow free product (becoming black) visible		1.0
						Medium dense grey fine to coarse GRAVEL and cobbles		Strong solvent odour		1.5
						Loose to medium dense grey sandy fine GRAVEL with some medium to coarse gravel		Wet		2.0
						very dense at 2m - 2.35m		Strong solvent odour, wet		2.5
						Firm black slightly gravelly CLAY (BOULDER CLAY)		Free product		3.0
						Cobble at 3.45m		Borehole bentonite seal set at 2m to prevent potential creation of pathway		3.5
						Borehole terminated at 3.45 mbgl due to shoe breaking off barrel, leaving hardened steel drill shoe at base of borehole		No returns from 2.8m		4.0
										4.5
										5.0

LOCATION / NOTES:		LEGEND		BOREHOLE LOG	
1. All measurements in m below ground level (mbgl)		☒ Disturbed Sample		Job Title SOIL & GROUNDWATER INVESTIGATION	
2. Borehole collapsed to 3.2 m		■ Undisturbed Sample		Location LLANDARCY REFINERY	
3. Bentonite seal from 3.2-2.0 m		* Headspace Analysis		Client BP LLANDARCY LTD	
4. Hole size telescoped to smaller diameter with depth		† Down Borehole Analysis		App'd DRAFT	
		▼ Groundwater Table		Ref. SG/CR/BR5	
		▽ Perched Water Table		Date MAY 99	
				Job No. 39991-004-401	
				 DAMES & MOORE	

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB003		PAGE 1 of 2	
	NUMBER	TYPE					START DATE: 31/3/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 01/04/99		BOREHOLE DIAMETER: 130/80 mm	
							DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm	
				LOGGED BY: SG		APPR'D BY:		SCREEN SLOT SIZE: 1 mm		
							DESCRIPTION	COMMENTS		
						0	CONCRETE (MADE GROUND)			0
						0.5	Loose brown and pinkish brown sandy fine to medium GRAVEL with occasional cobbles (MADE GROUND)	Slight sweet odour damp		0.5
						1.0	Loose black sandy GRAVEL (MADE GROUND)	very strong garlic odour wet yellow product observed at 1m		1.0
						1.5	Loose grey slightly silty sandy GRAVEL	very very strong garlic odour wet yellow product at 1.6m		1.5
						2.0	loose greyish green fine to coarse GRAVEL	Free phase yellow solvent observed on larger gravels		2.0
						2.5	Loose brown slightly silty clayey GRAVEL	very strong odour		2.5
						3.0	Loose greyish green fine to coarse GRAVEL			
						3.0	Firm orangey brown gravelly CLAY stained black from 2.9 to 30m	moderate to strong 'garlic-like' solvent odour damp		3.0
						3.5	becoming sandy at 3.25m with some brown mottling			3.5
						4.0	Soft brown slightly sandy SILT with some clay and occasional cobbles.	wet strong solvent odour		4.0
						4.5				4.5
						5.0				5.0

LOCATION / NOTES:		LEGEND		BOREHOLE LOG	
1. All measurements in m below ground level (mbgl)		Disturbed Sample Undisturbed Sample Headspace Analysis Down Borehole Analysis Groundwater Table Perched Water Table		Job Title SOIL & GROUNDWATER INVESTIGATION	
2. Shallow installation 19mm HDPE				Location LLANDARCY REFINERY	
3. Hole size telescoped to smaller diameter with depth				Client BP LLANDARCY LTD	
				App'd DRAFT	
				Ref. SG/CR/BR5	
				Date MAY 99	
				Job No. 39991-004-401	

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB003		PAGE 2 of 2	
	NUMBER	TYPE					START DATE: 31/3/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 1/4/99		BOREHOLE DIAMETER: 130/80 mm	
							DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm	
						LOGGED BY: SG APPR'D BY:		SCREEN SLOT SIZE: 1 mm		
							DESCRIPTION	COMMENTS		
						5	Medium dense orange-brown silty and clayey GRAVEL and cobbles	Wet Sheen visible Strong solvent odour	5	
						5.5	Soft to firm orange- brown very gravelly silty and sandy CLAY		5.5	
						Borehole terminated at 5.65 mbgl				6.0
						6.0			6.0	
						6.5			6.5	
						7.0			7.0	
						7.5			7.5	
						8.0			8.0	
						8.5			8.5	
						9.0			9.0	
						9.5			9.5	
						10.0			10.0	

LOCATION / NOTES: 1. All measurements in m below ground level (mbgl) 2. Shallow installation 19mm HDPE 3. Hole size telescoped to smaller diameter with depth		LEGEND  Disturbed Sample  Undisturbed Sample  Headspace Analysis  Down Borehole Analysis  Groundwater Table  Perched Water Table	BOREHOLE LOG Job Title SOIL & GROUNDWATER INVESTIGATION Location LLANDARCY REFINERY Client BP LLANDARCY LTD App'd DRAFT Ref. SG/CR/BR5 Date MAY 99 Job No. 39991-004-401	 DAMES & MOORE GROUP
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BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB002		PAGE 1 of 1	
	NUMBER	TYPE					START DATE: 06/04/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 06/04/99		BOREHOLE DIAMETER: 130/80 mm	
							DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm	
				LOGGED BY: SG		APPR'D BY:		SCREEN SLOT SIZE: 1 mm		
							DESCRIPTION	COMMENTS		
							0	CONCRETE		0
							0.5	Loose grey/greenish grey, coarse GRAVEL with some fine to medium gravel and cobbles and wood fragments	Oily appearance Slight to moderate solvent odour No yellow product observed slight solvent odour	0.5
							1.0	Loose to medium dense black fine to medium GRAVEL with cobbles		1.0
							1.5	Soft to firm greyish brown and black silty CLAY with some fine gravel		1.5
							2.0	Dense grey coarse GRAVEL and cobbles of slag material (possibly fall back from ~1m)	coring from 1.6m due to concrete slight odour	2.0
							2.5	Soft to firm greyish brown and black sandy and silty CLAY with occasional fine gravel	moderate solvent odour damp	2.5
							3.0	Soft to firm slightly orangey brown very sandy and slightly clayey SILT with occasional fine subrounded gravels	moderate solvent odour damp	3.0
							3.5	becoming cobbles at 3.5m		3.5
							4.0			4.0
							4.5	Very gravelly at 4.5m		4.5
							5.0	Borehole terminated at 5 mbgl		5.0

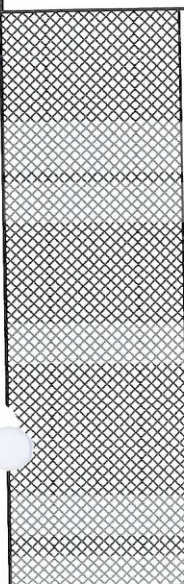
LOCATION / NOTES:	LEGEND	BOREHOLE LOG	
1. All measurements in m below ground level (mbgl)	Disturbed Sample	Job Title SOIL & GROUNDWATER INVESTIGATION	
2. No PID result from 2m	Undisturbed Sample	Location LLANDARCY REFINERY	
3. Shallow well installed using 19mm HDPE pipe	* Headspace Analysis	Client BP LLANDARCY LTD	
4. Hole size telescoped to smaller diameter with depth	† Down Borehole Analysis	App'd DRAFT	
5. Borehole collapsed to 3.7m	Groundwater Table	Ref. SG/CR/BRS	
	Perched Water Table	Date MAY 99	
		Job No. 39991-004-401	
		DAMES & MOORE GROUP	

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB001		PAGE 1 of 2	
	NUMBER	TYPE					START DATE: 06/04/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 06/04/99		BOREHOLE DIAMETER: 130/80 mm	
				DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm				
				LOGGED BY: SG APPR'D BY:		SCREEN SLOT SIZE: 1 mm				
						DESCRIPTION	COMMENTS			
						0	CONCRETE (MADE GROUND)		0	
						0.5	loose brown and white clayey fine to medium GRAVEL	Dry	0.5	
						1.0	Loose to medium dense grey fine GRAVEL with some medium and occasional coarse gravel and sand	No yellow product observed strong solvent odour	1.0	
						1.5	Medium dense dark grey coarse GRAVEL with some yellow product	strong solvent odour some product visible petrol odour at 1.5-1.7m	1.5	
						2.0	Firm black slightly gravelly CLAY	slightly eggy solvent odour	2.0	
						2.5	Soft orange-brown very sandy gravelly SILT with infrequent black mottling	damp slight odour	2.5	
						3.0	becoming more gravelly at 2.5m		3.0	
						3.5	very gravelly between 3.25 and 3.5m with some cobbles	water ingress observed through gravel layer slight solvent odour	3.5	
						4.0	clay more brown in colour at 3.6m		4.0	
						4.5	becoming reddish brown towards 4m		4.5	
						4.0	firm orange brown very sandy silty CLAY with occasional fine gravel	no odour at 4m some collapse of sandy silt sample 'warm'	4.0	
						4.5		becoming dry	4.5	
						5.0	firm reddish brown mottled slightly gravelly CLAY		5.0	

LOCATION / NOTES:	LEGEND	BOREHOLE LOG	
1. All measurements in m below ground level (mbgl)	Disturbed Sample	Job Title SOIL & GROUNDWATER INVESTIGATION	
2. Shallow well installed using 19mm HDPE	Undisturbed Sample	Location LLANDARCY REFINERY	
3. Hole size telescoped to smaller diameter with depth	Headspace Analysis	Client BP LLANDARCY LTD	
4. Borehole collapsed to 4.8m	Down Borehole Analysis	App'd DRAFT	
	Groundwater Table	Ref. SG/CR/BR5	
	Perched Water Table	Date MAY 99	
		Job No. 39991-004-401	
		DAMES & MOORE	

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: DSB001		PAGE 2 of 2	
	NUMBER	TYPE					START DATE: 06/04/99		DRILLING METHOD: HYDRAULIC PERCUSSIVE	
							FINISH DATE: 06/04/99		BOREHOLE DIAMETER: 130/80 mm	
							DRILLER: GEOTECHNICAL		SCREEN TYPE & DIAMETER: POLYPROPYLENE 50mm	
				LOGGED BY: SG APPR'D BY:		SCREEN SLOT SIZE: 1 mm				
							DESCRIPTION	COMMENTS		
					5		Firm reddish brown mottled slightly gravelly CLAY	Some fall back from sandy silt warm sample returns	5	
					5.5				5.5	
					6.0				6.0	
					6.5				6.5	
					7.0				7.0	
					7.5				7.5	
					8.0				8.0	
					8.5				8.5	
					9.0				9.0	
					9.5				9.5	
					10.0				10.0	

LOCATION / NOTES: 1. All measurements in m below ground level (mbgl) 2. Shallow well installed using 19mm HDPE 3. Hole size telescoped to smaller diameter with depth 4. Borehole collapsed to 4.8m		LEGEND Disturbed Sample Undisturbed Sample * Headspace Analysis + Down Borehole Analysis ▽ Groundwater Table ▽ Perched Water Table		BOREHOLE LOG Job Title SOIL & GROUNDWATER INVESTIGATION Location LLANDARCY REFINERY Client BP LLANDARCY LTD App'd DRAFT Ref. SG/CR/BR5 Date MAY 99 Job No. 39991-004-401		 DAMES & MOORE	
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BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: MSTP307		PAGE 1 of 1	
	NUMBER	TYPE					START DATE: 3/03/99		DRILLING METHOD: Window Sampling	
							FINISH DATE: 3/03/99		BOREHOLE DIAMETER: 100 mm	
							DRILLER: THYSSENS		SCREEN TYPE & DIAMETER: N/A	
							LOGGED BY: DB/ MC		APPR'D BY:	
									SCREEN SLOT SIZE: N/A	
							DESCRIPTION	COMMENTS		
					0		Loose brown PEAT.	No odour	0	
					0.5		Soft orange brown silty CLAY.	Slight hydrocarbon odour	0.5	
			*0.0					Moderate hydrocarbon odour		
			*1425		1.0		Soft orange brown sandy silty CLAY	Hydrocarbon sheen on water	1.0	
			*232		1.5		Soft orange-brown silty very sandy CLAY.	Moderate odour	1.5	
		*332		2.0		Borehole terminated at 2.0 mbgl		2.0		
					2.5				2.5	
					3.0				3.0	
					3.5				3.5	
					4.0				4.0	
					4.5				4.5	
					5.0				5.0	

LOCATION / NOTES:

1. All measurements in m below ground level (mbgl)

LEGEND

-  Disturbed Sample
-  Undisturbed Sample
-  Headspace Analysis
-  Down Borehole Analysis
-  Groundwater Table
-  Perched Water Table

BOREHOLE LOG

Job Title **SOIL & GROUNDWATER INVESTIGATION**

Location **LLANDARCY REFINERY**

Client **BP LLANDARCY LTD**

Ti App'd **DRAFT**

Ref. **CR/RH/MCH**

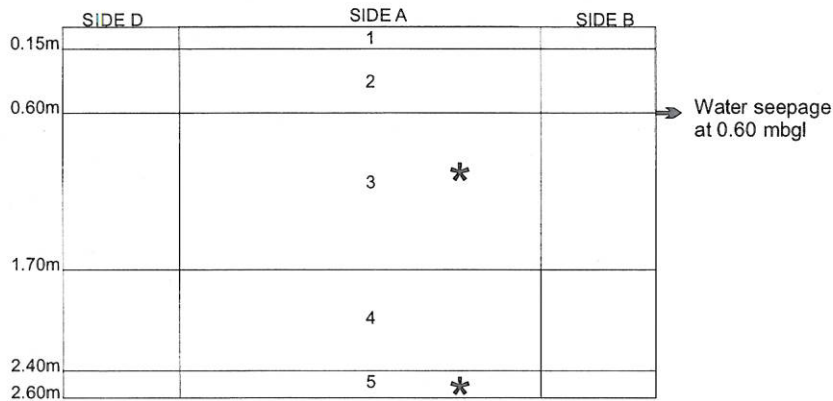
Date **APRIL 99**

Job No. **39991-004-401**

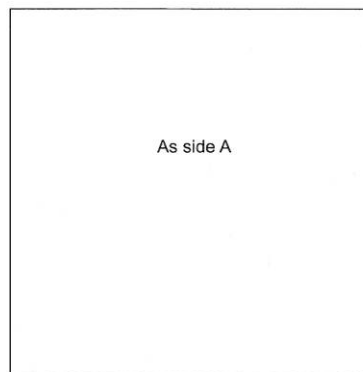

DAMES & MOORE

TRIAL PIT NUMBER: MSTP210
GROUND ELEVATION: -
DATE OF EXCAVATION: 11/6/98
WATER LEVEL: 0.60 mbgl
LOGGED BY: RF
APPROVED BY:

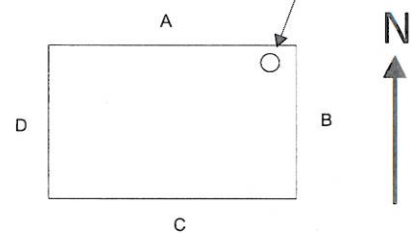
SIDE ELEVATIONS



SIDE C



PLAN
Well installed (MSMW053)



0 1 2m
Vertical Scale

Key:

- * Soil Sample location
- WA Water Sample
- HS Headspace Analysis
- ⇒ Water Ingress

STRATA DESCRIPTIONS	COMMENTS	SAMPLES
1. Loose coarse angular GRAVEL (MADE GROUND) 2. Firm brown gravelly CLAY (MADE GROUND) 3. Stiff black CLAY 4. Very stiff grey BOULDER CLAY 5. Grey sandy BOULDER CLAY with fragments of weathered sandstone to weathered sandstone at base of pit Trial pit terminated at 2.60 mbgl on refusal	a. Slight oil staining in places and on water surface b. Hydrocarbon odour c. Well installed (MSMW053)	<u>PID RESULTS</u> 0.5m - 0 ppm 1.0m - 20.8 ppm 1.5m - 17.2 ppm 2.0m - 4.2 ppm 2.5m - 80.2 ppm <u>SOIL SAMPLES</u> MSTP210-1.0m MSTP210-2.5m

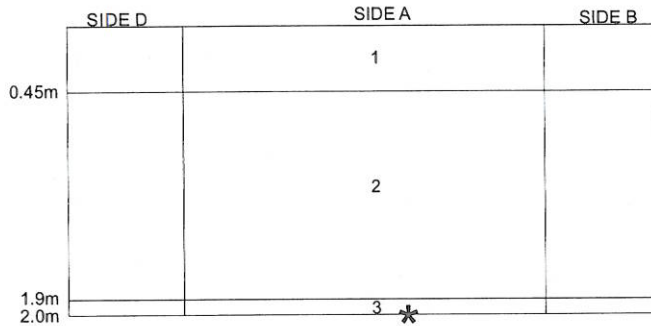
Job Title:	SOIL & GROUNDWATER INVESTIGATION	
Location:	LLANDARCY REFINERY	
Client:	BP LLANDARCY	
Job No:	39991-001-401	DRAFT



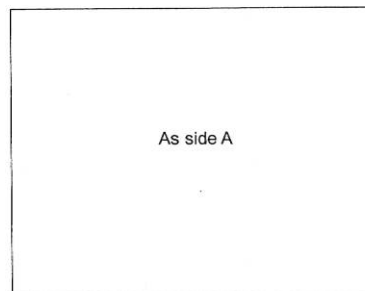
DAMES & MOORE

TRIAL PIT NUMBER: MSTP204
GROUND ELEVATION: -
DATE OF EXCAVATION: 24/6/98
WATER LEVEL: SURFACE
LOGGED BY: RF
APPROVED BY:

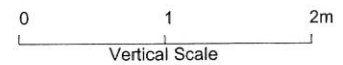
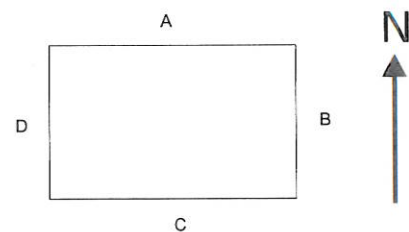
SIDE ELEVATIONS



SIDE C



PLAN



Key:

- * Soil Sample location
- WA Water Sample
- HS Headspace Analysis
- ➡ Water Ingress

STRATA DESCRIPTIONS	COMMENTS	SAMPLES
1. Loose chippings, bits of wood, metal bars and concrete fragments (MADE GROUND) 2. Grey/green/khaki, stiff CLAY - occasional gravels 3. Grey, stiff BOULDER CLAY Trial pit terminated at 2.0 mbgl due to stiff boulder clay	a. Strong hydrocarbon odour and oily sheen on surface water b. Chippings saturated c. Strong hydrocarbon odour d. Window sampled due to access restrictions	<u>PID RESULTS</u> 0.5m - 1.5 ppm 1.0m - 9.1 ppm 1.5m - 35.4 ppm 2.0m - 79.3 ppm <u>SOIL SAMPLES</u> MSTP204-2.0m

Job Title: SOIL & GROUNDWATER INVESTIGATION

Location: LLANDARCY REFINERY

Client: BP LLANDARCY

Job No: 39991-001-401

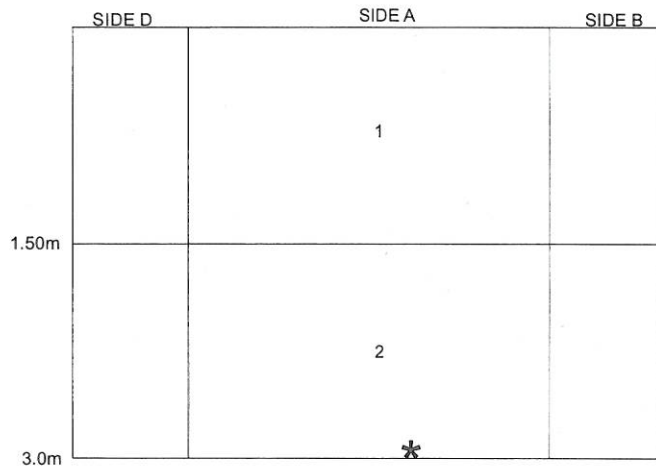
DRAFT



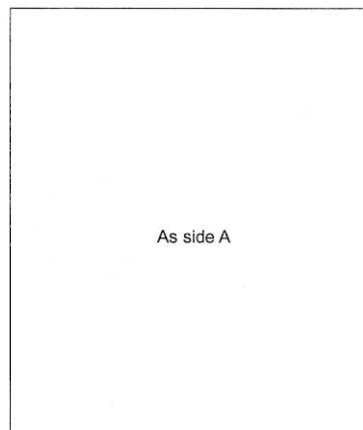
DAMES & MOORE

TRIAL PIT NUMBER: MSTP192
GROUND ELEVATION: -
DATE OF EXCAVATION: 18/6/98
WATER LEVEL: DRY
LOGGED BY: RF
APPROVED BY:

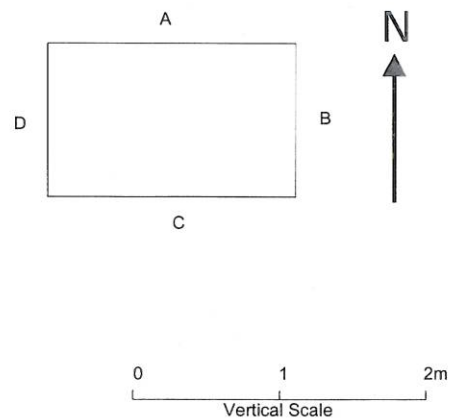
SIDE ELEVATIONS



SIDE C



PLAN



Key:

- * Soil Sample location
- WA Water Sample
- HS Headspace Analysis
- Water Ingress

STRATA DESCRIPTIONS	COMMENTS	SAMPLES
1. Brick and coarse gravel fragments in a grey and brown matrix (MADE GROUND) 2. Grey/brown plastic CLAY, with occasional coarse gravels, becoming sandy, more gravel rich and damp with depth Trial pit terminated on refusal at 3.0 mbgl	a. Slight hydrocarbon odour B. Window sampled due to access restrictions	<u>PID RESULTS</u> 0.5m - 0.2 ppm 1.0m - 4.7 ppm 1.5m - 7.2 ppm 2.0m - 2.9 ppm 2.5m - 2.5 ppm 3.0m - 13.3 ppm <u>SOIL SAMPLES</u> MSTP192-3.0m

Job Title: **SOIL & GROUNDWATER INVESTIGATION**

Location: **LLANDARCY REFINERY**

Client: **BP LLANDARCY**

Job No: **39991-001-401**

DRAFT



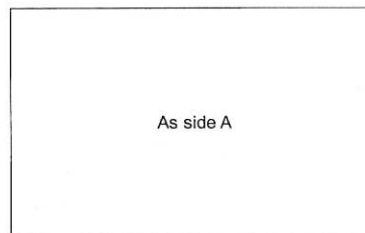
DAMES & MOORE

TRIAL PIT NUMBER: MSTP184b
GROUND ELEVATION: -
DATE OF EXCAVATION: 24/6/98
WATER LEVEL: DRY
LOGGED BY: RF
APPROVED BY:

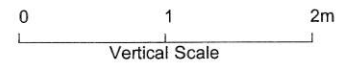
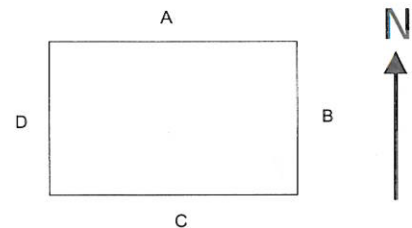
SIDE ELEVATIONS

SIDE D	SIDE A	SIDE B
	1	
0.25m	2	
0.4m	3	
0.55m	4	
0.9m	5	
1.2m	6 *	
1.6m		

SIDE C



PLAN



Key:

- * Soil Sample location
- WA Water Sample
- HS Headspace Analysis
- Water Ingress

STRATA DESCRIPTIONS	COMMENTS	SAMPLES
1. Large loose CHIPPINGS 2. Bricks, coarse gravel, concrete fragments and ash (MADE GROUND) 3. Black FLY ASH 4. Firm; brown CLAY 5. Bright orange/brown, firm CLAY 6. Brown and orange/brown, firm CLAY with medium gravel, sandier with depth Trial pit terminated on refusal at 1.6 mbgl	a. No hydrocarbon odour or staining evident b. Window sampled due to access restrictions c. Originally attempted on 8/6/98 with JCB and terminated at 0.5m	<u>PID RESULTS</u> 0.5m - 0 ppm 1.0m - 0 ppm 1.5m - 0 ppm <u>SOIL SAMPLES</u> MSTP184-1.5m

Job Title:	SOIL & GROUNDWATER INVESTIGATION	
Location:	LLANDARCY REFINERY	
Client:	BP LLANDARCY	
Job No:	39991-001-401	DRAFT
 DAMES & MOORE		

TRIAL PIT NUMBER: MSTP184a
 GROUND ELEVATION: -
 DATE OF EXCAVATION: 8/6/98
 WATER LEVEL: DRY
 LOGGED BY: RC
 APPROVED BY:

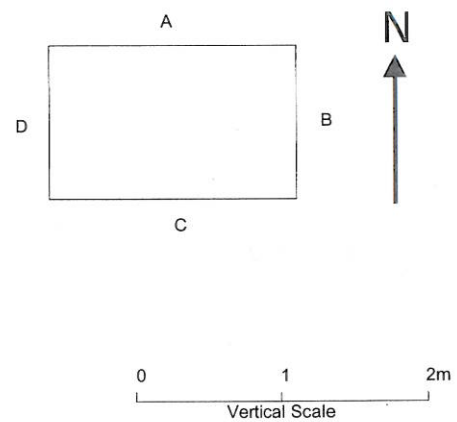
SIDE ELEVATIONS

	SIDE D	SIDE A	SIDE B
0.20m		1	
0.50m		2	

SIDE C

As side A

PLAN



Key:

- * Soil Sample location
- WA Water Sample
- HS Headspace Analysis
- ⇒ Water Ingress

STRATA DESCRIPTIONS	COMMENTS	SAMPLES
1. Loose brown coarse GRAVEL (MADE GROUND) 2. Loose coarse sandy GRAVEL (MADE GROUND) Large blocks of building rubble at 0.5m with concrete plinths at base of pit Trial pit terminated at 0.50 mbgl on refusal	a. Suggested window sampling location Location window sampled on 246.98 to 1.6m (184a)	No PID readings or samples collected

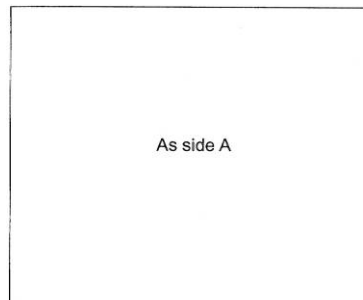
Job Title:	SOIL & GROUNDWATER INVESTIGATION	
Location:	LLANDARCY REFINERY	
Client:	BP LLANDARCY	
Job No:	39991-001-401	DRAFT
 DAMES & MOORE		

TRIAL PIT NUMBER: MSTP178
GROUND ELEVATION: -
DATE OF EXCAVATION: 18/6/98
WATER LEVEL: DRY
LOGGED BY: RF
APPROVED BY:

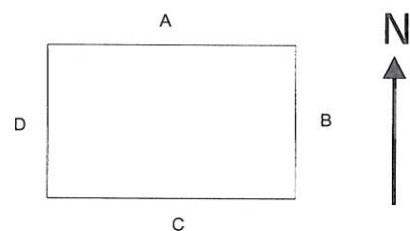
SIDE ELEVATIONS

SIDE D	SIDE A	SIDE B
	1	
0.5m	2 *	
0.75m		

SIDE C



PLAN



0 1 2m
Vertical Scale

Key:

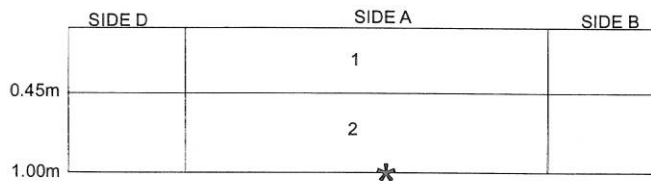
- * Soil Sample location
- WA Water Sample
- HS Headspace Analysis
- ➔ Water Ingress

STRATA DESCRIPTIONS	COMMENTS	SAMPLES
1. Loose limestone GRAVEL 2. Grey, stiff CLAY Trial pit terminated on refusal at 0.75 mbgl	a. Bitumen coating on gravel chippings b. Strong hydrocarbon / organic odour c. Window sampled due to access restrictions	<u>PID RESULTS</u> 0.75m - 15.2 ppm <u>SOIL SAMPLES</u> MSTP178-0.75m

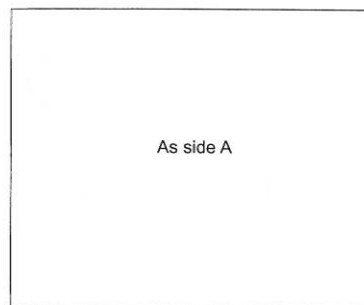
Job Title:	SOIL & GROUNDWATER INVESTIGATION	
Location:	LLANDARCY REFINERY	
Client:	BP LLANDARCY	
Job No:	39991-001-401	DRAFT
 DAMES & MOORE		

TRIAL PIT NUMBER: MSTP127
GROUND ELEVATION: -
DATE OF EXCAVATION: 24/6/98
WATER LEVEL: SURFACE
LOGGED BY: RF
APPROVED BY:

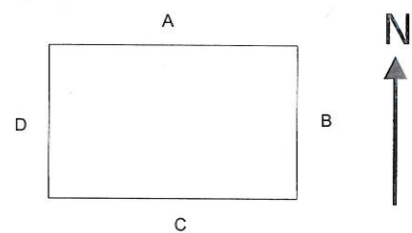
SIDE ELEVATIONS



SIDE C



PLAN



Key:

- * Soil Sample location
- WA Water Sample
- HS Headspace Analysis
- ⇒ Water Ingress

STRATA DESCRIPTIONS	COMMENTS	SAMPLES
1. Medium GRAVEL, in damp brown clay matrix	a. Saturated	<u>PID RESULTS</u> 0.5m - 0 ppm 1.0m - 0 ppm
2. Shelly, medium grained sand, beige with white and buff coloured, shell fragments (MADE GROUND) Trial pit terminated on refusal at 1.0mbgl due to sandstone	b. Saturated c. Window sampled due to access restrictions	<u>SOIL SAMPLES</u> MSTP127-1.0m

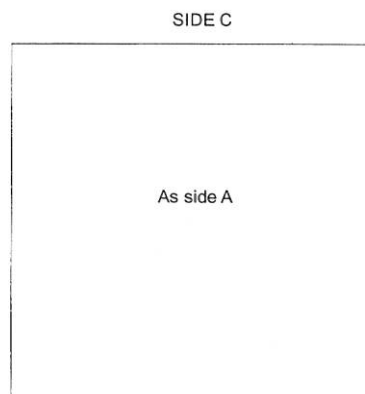
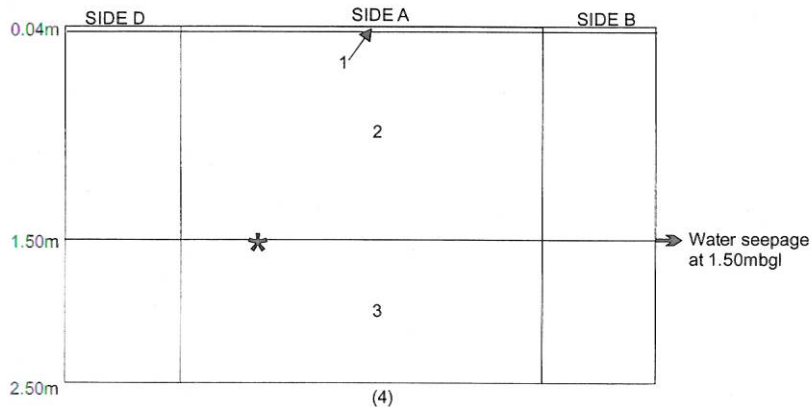
Job Title:	SOIL & GROUNDWATER INVESTIGATION
Location:	LLANDARCY REFINERY
Client:	BP LLANDARCY
Job No:	39991-001-401
	DRAFT



DAMES & MOORE

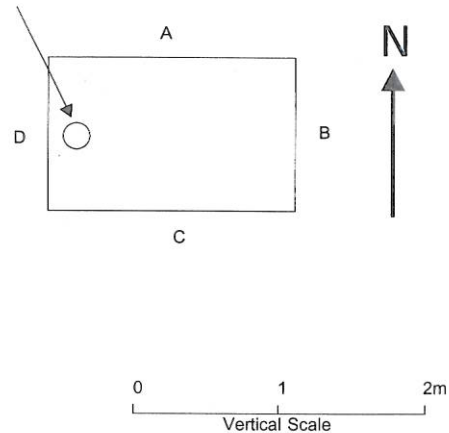
TRIAL PIT NUMBER: MSTP072
GROUND ELEVATION: -
DATE OF EXCAVATION: 1/6/98
WATER LEVEL: 1.50mbgl
LOGGED BY: RC
APPROVED BY:

SIDE ELEVATIONS



Temporary
well installed

PLAN



Key:

- * Soil Sample location
- WA Water Sample
- HS Headspace Analysis
- ⇒ Water Ingress

Job Title: **SOIL & GROUNDWATER INVESTIGATION**

Location: **LLANDARCY REFINERY**

Client: **BP LLANDARCY**

Job No: **39991-001-401**

DRAFT



DAMES & MOORE

STRATA DESCRIPTIONS

COMMENTS

SAMPLES

1. **Compacted GRAVEL** with grass at surface (**MADE GROUND**)
2. **Loose unconsolidated brown sandy GRAVEL** with **clinker**, becoming sandier from **1m** (**MADE GROUND**)
3. As above, becoming slightly clayey and silty at **2m**
4. **Poorly sorted coarse sub-rounded GRAVEL** and some building rubble (**MADE GROUND**)

Trial pit terminated @ 2.5 mbgl

- a. Black staining - strong diesel odour
- b. Water seepage at 1.5m
- c. Temporary well

PID RESULTS

0.5m - 35.2ppm
1.0m - 96.1ppm
1.5m - 137ppm
2.0m - 134ppm
2.5m - 127ppm

SOIL SAMPLES

MSTP72-1.50m

BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: RFSW016A		PAGE 1 of 1	
	NUMBER	TYPE					DRILLING DATES: 13/10/2000		DRILLING METHODS: Percussive	
							DRILLER: Geotechnical		BOREHOLE DIAMETER: 128mm	
							LOGGED BY: JG		SCREEN TYPE & DIAM: 50mm HDPE	
				CHECKED BY:		SCREEN SLOT SIZE: 1mm				
					0.0		GRAVEL Loose blackfine gravel with some fine to coarse sand and occasional clay	Moist	0.0	
					0.5		CLAY Firm, brown clay with fine to coarse sand and occasional fine gravel	Moist	0.5	
					1.0		CLAY Firm grey fine sand medium plastic clay	Moist	1.0	
					1.5		No Returns		1.5	
					2.0		SAND Firm grey sandy (coarse) with occasional gravel, becomes brown at 1.85m		2.0	
					2.5		SAND Loose black clayey (medium plastic) fine to coarse sand with some fine gravel	Moist	2.5	
					3.0		End of Borehole		3.0	
					3.5				3.5	
					4.0				4.0	
					4.5				4.5	
					5.0				5.0	

LOCATION / NOTES: NVO = No visual or laboratory evidence		LEGEND Disturbed Sample Undisturbed Sample Headspace Analysis Down Borehole Analysis Groundwater Table Perched Water Table		BOREHOLE LOG Job Title: Sentinel Wells Location: BP Llandarcy Refinery Client: BP Oil UK 		App'd: Drawn: AR Scale: Drg. Size:	Date: August 2002 Ref: Job No: 39991-016 BOREHOLE LOG
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BOREHOLE CONSTRUCTION	SAMPLE		SOIL VAPOUR (ppm)	GROUNDWATER	DEPTH (m)	GEOLOGY	BOREHOLE NUMBER: RFSW016		PAGE 1 of 1	
	NUMBER	TYPE					DRILLING DATES: 26/10/2000		DRILLING METHODS : Window Sampling	
							DRILLER : Geotechnical		BOREHOLE DIAMETER : 78,68,58	
							LOGGED BY : JG		SCREEN TYPE & DIAM: 50mm HDPE	
		CHECKED BY :		SCREEN SLOT SIZE: 1mm						
					0.0		CONCRETE			0.0
					0.5		MADE GROUND Firm medium plastic clay with fine sand and occasional fine gravel	Moist		0.5
					1.0		MADE GROUND Ash & Clinker			
			*27		1.0		MADE GROUND Soft to firm, grey, medium plastic clay with some fine sand	Wet		1.0
					1.5		MADE GROUND Wet Ash & Clinker			
			*523		1.5		SAND Firm grey clayey medium plastic, fine sand			1.5
					2.0					2.0
					2.5					2.5
					3.0					3.0
					3.5					3.5
						2.5	End of Borehole			2.5
						3.0				3.0
						3.5				3.5
						4.0				4.0
						4.5				4.5
						5.0				5.0

LOCATION / NOTES:	LEGEND	BOREHOLELOG		
NVO = No visual or olfactory evidence	Disturbed Sample Undisturbed Sample Headspace Analysis Down Borehole Analysis Groundwater Table Perched Water Table	Job Title: Sentinel Wells Location: BP Llandarcy Refinery Client: BP Oil UK		
			App'd:	Date: August 2002
			Drawn: AR	Ref:
			Scale:	Job No: 39991-016
			Dwg. Size:	BOREHOLELOG