

Appendix B Historical Field Logs

BOREHOLE LOG REPORT

PROJECT: CITY WEST DEVELOPMENT				BOREHOLE No: BH12A		SHEET		OF			
SITE/AREA: ATP SITE				JOB No: EA 3005		CO-ORDS:		E N			
METHOD: DRILL RIG				DRILLING DATE: 12/08/94		RL CASING:		m			
EQUIPMENT TYPE: INTERTECH BCD 450				BOREHOLE DEPTH: 3.0 m		LOGGED BY: D. G.		APPROVED BY:			
DRILLING METHOD:											
WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS		ROCKS			
						MOISTURE	CONSISTENCY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT
	BH12A/0.5m				FILL - LIGHT BROWN SAND, SOME GRAVEL.						
	BH12A/1.0m				FILL - BROWN SAND, SOME CHARCOAL PIECES.						
	BH12A/1.5m				FILL - YELLOW BROWN SAND, SOME CHARCOAL PIECES.						
	BH12A/2.0m				SANDS YELLOW, NATURAL MATERIAL.						
		3.0			BOREHOLE TERMINATED AT 3.0m.						
CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM SF - STIFF VSI - VERY STIFF H - HARD Fr - FRIABLE		WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL		STRENGTH EST. EW - EXTREMELY WEAK W - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE		FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE		WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS		SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION	
SAMPLES AND TESTS Uxxx - UNDISTURBED O - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH IS - POINT LOAD STRENGTH INDEX		MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED		DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE						COMMENTS/SKETCH	

BOREHOLE LOG REPORT

PROJECT: CITY WEST DEVELOPMENT				BOREHOLE No: BH12B		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EA 8005		CO-ORDS: E N	
METHOD: DRILL RIG				DRILLING DATE: 12/09/94		RL CASING: m RL SURFACE: m	
EQUIPMENT TYPE: INTERTECH BC450 DRILLING METHOD:				BOREHOLE DEPTH: 3.0 m		LOGGED BY: D. G. APPROVED BY:	

WATER SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			
					MOISTURE	CONSIST- ENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT
BH12B 0.5M				FILL - YELLOW/BROWN SANDY CLAY, SOME SANDSTONE FRAGMENTS.							
BH12B 1.0M				FILL - BLACK SAND, SOME STONE FRAGMENTS.							
BH12B 1.5M				FILL - BROWN SAND WITH ORANGE INCLUSIONS, SOME CHARCOAL.							
				SAND - DARK BROWN/ ORANGE NATURAL MATERIAL.							
	2.0										
	3.0			BOREHOLE TERMINATED AT 3.0M.							

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM SF - STIFF VSF - VERY STIFF H - HARD Fr - FRIABLE	WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH TEST EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH PL - 50t-POINT LOAD STRENGTH INDEX	MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE
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BOREHOLE LOG REPORT

PROJECT: CITY WEST DEVELOPMENT				BOREHOLE No: BH12		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EA8005		CO-ORDS: E N	
METHOD: DRILL RIG				DRILLING DATE: 12/06/94		RL CASING: m RL SURFACE: m	
EQUIPMENT TYPE: INTERTECH BCD 450 DRILLING METHOD:				BOREHOLE DEPTH: 3.0 m		LOGGED BY: D.G. APPROVED BY:	

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS				
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT	
	BH12/0.5M	0.5			FILL - LIGHT BROWN SANDY CLAY LOAM, SOME STONE FRAGMENTS								
	BH12/1.0M	1.0			FILL - LIGHT GREY SANDY CLAY LOAM, SOME STONE FRAGMENTS.								
	BH12/1.5M	1.5			FILL - GREY SAND.								
					FILL - BROWN/YELLOW SAND, SOME CLAY.								
					FILL - ORANGE/RED/GREY/WHITE/RED MOTTLED CLAY.								
					SAND - GREY, NATURAL MATERIAL.								
					BOREHOLE TERMINATED AT 3.0M.								

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM ST - STIFF VST - VERY STIFF H - HARD FR - FRIABLE	WEATHERING F ₁ - FRESH F ₂ - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK RS - MEDIUM S - STRONG VS - VERY STRONG ES - EXTREMELY STRONG ES - EXTREMELY FRIABLE	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER X - WATER LEVEL & DATE I - WATER INFLOW L - COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Mc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH Ts - 50k-POINT LOAD STRENGTH INDEX	MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE
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BOREHOLE LOG REPORT

PROJECT: CITYWEST DEVELOPMENT		BOREHOLE No: BH12		SHEET OF	
SITE/AREA: ATP SITE		JOB No: EA 8005		CO-ORDS: E N	
METHOD: DRILL RIG		DRILLING DATE: 12/08/94		RL CASING: m RL SURFACE: m	
EQUIPMENT TYPE: INTERTECH BCD 450 DRILLING METHOD:		BOREHOLE DEPTH: 3.6 m		LOGGED BY: P. G. APPROVED BY:	

WATER SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			
					MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRAGILITY	SUPPORT
BH12D/0.5M	0.5			FILL - LIGHT BROWN SANDY LOAM, SOME STONES.							
BH12D/1.0M	1.0			FILL - LIGHT BROWN SANDY CLAY, SOME STONES.							
BH12D/1.5M	1.5			FILL - DARK BROWN, FINE.							
BH12D/2.0M	2.0			SAND - BLACK/GREY/BROWN, FINE, SOME IRONSTONE INCLUSIONS, NATURAL MATERIAL.							
	2.5			CLAY - GREY WITH COLOURED INCLUSIONS, NATURAL MATERIAL.							
	3.0			SAND - BROWN, FINE, NATURAL MATERIAL.							
	3.6			BOREHOLE TERMINATED AT 3.6 M.							

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM ST - STIFF VS - VERY STIFF H - HARD Fr - FRIABLE	WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER T - WATER LEVEL & DATE I - WATER INFLOW L - COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE NC - CONE PENETROMETER PP - UCS HAND PENETR. S - SHEAR VANE STRENGTH IS150 - POINT LOAD STRENGTH INDEX	MOISTURE D - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE
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BOREHOLE LOG REPORT													
PROJECT: CITYWEST DEVELOPMENT					BOREHOLE No: BH18A		SHEET OF						
SITE/AREA: ATP SITE.					JOB No: EA 8005		CO-ORDS: E N						
METHOD: INTERTECH BCD 450					DRILLING DATE: 12/09/94		RL CASING: m RL SURFACE: m						
EQUIPMENT TYPE: DRILLING METHOD:					BOREHOLE DEPTH: 3.05 m		LOGGED BY: DG APPROVED BY:						
WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
	BH18A/0.5M	0.5			FILL - LIGHT BROWN SAND, SOME STONE FRAGMENTS.								
	BH18A/1.0M	1.0			FILL - ASH, GREY/BLACK, SOME STONE FRAGMENTS.								
	BH18A/1.5M	1.5			FILL - SAND, GREY/BROWN, SOME CLAY.								
		2.0			SAND - NATURAL MATERIAL.								
					CLAY - LIGHT BROWN, SANDY.								
					CLAY - IRONSTONE INCLUSIONS.								
		3.0			SAND - NATURAL MATERIAL.								
					TERMINATION AT 3.5M.								
CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM ST - STIFF VST - VERY STIFF H - HARD Fr - FRIABLE		WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL		STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK RS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE		FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE		WATER ▼ WATER LEVEL & DATE ► WATER INFLOW ► COMPLETE LOSS		SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION			
SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER Q - DISTURBED SAMPLE Hc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH ts150 - POINT LOAD STRENGTH INDEX		MOISTURE D - DRY M - MOIST W - WET S - SATURATED		DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE		COMMENTS/SKETCH							

BOREHOLE LOG REPORT

PROJECT: CITY WEST DEVELOPMENT				BOREHOLE No: BH14B		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EA 8005		CO-ORDS: E N	
METHOD: DRILL RIG				DRILLING DATE: 12/08/94		RL CASING: m RL SURFACE: m	
EQUIPMENT TYPE: INTERTECH BLD 450				BOREHOLE DEPTH: 2.05 m		LOGGED BY: APPROVED BY:	
DRILLING METHOD:							

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT
	BH14B 0.5m				FILL - LIGHT BROWN SAND, SOME STONES.							
	BH14B 1.0m				FILL - LIGHT BROWN SAND.							
	BH14B 1.5m				FILL - BLACK/GREY SLAG, SOME ASH.							
	BH14B 2.0m				SAND - LIGHT GREY/WHITE, NATURAL MATERIAL.							
					B.H. TERMINATED AT 2.5m							

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM ST - STIFF VST - VERY STIFF H - HARD FR - FRIABLE	WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HANO PENETR. S - SHEAR VANE STRENGTH Is1501 - POINT LOAD STRENGTH INDEX	MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE
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BOREHOLE LOG REPORT												
PROJECT: CITY WEST DEVELOPMENT						BOREHOLE No: BH12		SHEET OF				
SITE/AREA: ATP SITE						JOB No: EA 8065		CO-ORDS:		E N		
METHOD: DRILL RIG						DRILLING DATE: 12/08/94		RL CASING: m		RL SURFACE: m		
EQUIPMENT TYPE: INTERTECH BCD450						BOREHOLE DEPTH: 1.5 m		LOGGED BY: D.G. APPROVED BY:				
DRILLING METHOD:												
WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT
					FILL - BROWN, SANDY, SOME ROCKS.							
					FILL - DARK BROWN / BLACK SANDY LOAM.							
					SAND - GREY, FINE NATURAL MATERIAL.							
					BOREHOLE TERMINATED AT 1.5M							
CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM SI - STIFF VSI - VERY STIFF H - HARD FR - FRIABLE		WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL		STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE		FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE		WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS		SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION		
SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH 15150 - POINT LOAD STRENGTH INDEX						MOISTURE Or - DRY M - MOIST W - WET S - SATURATED		DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE		COMMENTS/SKETCH		

BOREHOLE LOG REPORT

PROJECT: CITY WEST DEVELOPMENT				BOREHOLE No: BH19D		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EAS005		CO-ORDS: E N	
METHOD: DRILL RIG				DRILLING DATE: 12/08/94		RL CASING: m RL SURFACE: m	
EQUIPMENT TYPE: INTERTECH BCD 450 DRILLING METHOD:				BOREHOLE DEPTH: 200 m		LOGGED BY: D.G. APPROVED BY:	

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT
	BH19D 0.5M	0.5			FILL - LIGHT BROWN SAND, SOME GRAVEL							
	BH19D 1.0M	1.0			FILL - BROWN SAND							
	BH19D 2.0M	2.0			FILL - SAND, GREY							
					SAND - LIGHT GREY, NATURAL MATERIAL.							
					BOREHOLE TERMINATED AT 2.0M							

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM SI - STIFF VSI - VERY STIFF H - HARD FR - FRIABLE	WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG CS - COMPLETELY STRONG ES - EXTREMELY STRONG	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH Is/501 - POINT LOAD STRENGTH INDEX	MOISTURE Dr - DRY H - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE
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BOREHOLE LOG REPORT																													
PROJECT: CITY WEST DEVELOPMENT					BOREHOLE No: BH24A		SHEET OF																						
SITE/AREA: ATP SITE					JOB No: EA8005		CO-ORDS:		E N																				
METHOD: DRILL RIG					DRILLING DATE: 12/08/94		RL CASING: RL SURFACE :		m m																				
EQUIPMENT TYPE: INTERTECH BCD 450					BOREHOLE DEPTH: 3.0 m		LOGGED BY: D.G. APPROVED BY:																						
WATER SAMPLE No./TEST No. DEPTH (m) GRAPHIC LOG SOIL CLASSIFICATION SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS. SOILS MOISTURE CONSISTENCY WEATHERING ROCKS STR. EST. FRIABILITY SUPPORT																													
BITUMEN																													
FILL - BROWN SAND, SOME SANDSTONE FRAGMENTS SAT (10, 11, 9).																													
FILL - BROWN/GREY SANDSTONE																													
PEAT - DARK GREY, SANDY. CRYSTALLINE HYDROCARBON ORGANIC.																													
SAND - LIGHT BROWN, NATURAL MATERIAL.																													
BOREHOLE TERMINATED AT 3.0 M.																													
CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM ST - STIFF VST - VERY STIFF H - HARD FR - FRIABLE					WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED HW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL					STRENGTH EST. EW - EXTREMELY WEAK W - WEAK VF - VERY WEAK MF - MEDIUM STRONG VS - VERY STRONG EF - EXTREMELY FRIABLE					FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE					WATER W - WATER LEVEL & DATE I - WATER INFLOW L - COMPLETE LOSS					SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION				
SAMPLES AND TESTS Uxxx - UNDISTURBED Q - SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH 1x150 - POINT LOAD STRENGTH INOEX					MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED					DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE					COMMENTS/SKETCH														

BOREHOLE LOG REPORT												
PROJECT: CITYWEST DEVELOPMENT						BOREHOLE No: BH248		SHEET OF				
SITE/AREA: ATP SITE						JOB No: EA 8005		CO-ORDS:		E N		
METHOD: DRILL RIG						DRILLING DATE: 12/09/14		RL CASING: RL SURFACE:		m m		
EQUIPMENT TYPE: INTERTECH BCD 450						BOREHOLE DEPTH: 2.5 m		LOGGED BY: D.G. APPROVED BY:				
DRILLING METHOD:												
WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			
						MOISTURE	CONSIST- DENS	WEATHERING	STR. EST.	FRIABILITY	SUPPORT	
	BH248 0.5M				FILL - CLAY, BROWN, SOME STONES.							
	BH248 1.0M				FILL - CLAY SANDY, BROWN/ORANGE, RUBBISH BRICKS.							
	BH248 1.5M				FILL - ASH LIKE MATERIAL, FINE, SOME CLAY, RUBBISH - NAILS, CLASS.							
					BECOMING DARK GREY SANDY PEAT.							
					BOREHOLE TERMINATED AT 2.5M.							
CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM SI - STIFF YSI - VERY STIFF H - HARD Fr - FRIABLE		WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL		STRENGTH/EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK NS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE		FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE		WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS		SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION		
SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER O - DISTURBED SAMPLE Nc - CONE PENETROMETER qp - UCS HAND PENETR. S - SHEAR VANE STRENGTH 1s1501 - POINT LOAD STRENGTH INDEX		MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED		DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE		COMMENTS/SKETCH						

BOREHOLE LOG REPORT

PROJECT: CITY WEST DEVELOPMENT	BOREHOLE No: BH24C	SHEET	OF
SITE/AREA: ATP SITE	JOB No: EA 8005	CO-ORDS:	E N
METHOD: DRILL RIG	DRILLING DATE: 12/08/94	RL CASING:	m
EQUIPMENT TYPE: INTERTECH BCD 450	BOREHOLE DEPTH: 3.1 m	RL SURFACE:	m
DRILLING METHOD:	LOGGED BY: D.G. APPROVED BY:		

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
	BH24C 0-8M	0			BITUMIN								
		1.0			FILL - LIGHT BROWN SAND, SOME SANDSTONE FRAGMENTS								
		2.0			FILL - CLAYEY SAND, RED/BROWN								
		3.0			PEAT - DARK GREY, SANDY								
					SAND - LIGHT BROWN, NATURAL MATERIAL.								
					BOREHOLE TERMINATED AT 3.1M.								

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM ST - STIFF VST - VERY STIFF H - HARD FR - FRIABLE	WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED HW - MODERATELY WEATHERED HS - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION		
SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH PL(50t) - POINT LOAD STRENGTH INDEX					MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE	COMMENTS/SKETCH

CMPS&F

BOREHOLE LOG REPORT												
PROJECT: CITY WEST DEVELOPMENT					BOREHOLE No: BH241		SHEET OF					
SITE/AREA: ATP SITE					JOB No: EA 8005		CO-ORDS:		E N			
METHOD: DRILL RIG					DRILLING DATE: 12/08/04		RL CASING:		m			
EQUIPMENT TYPE: INTERTECH BCD 450					BOREHOLE DEPTH: 3.3 m		RL SURFACE:		m			
DRILLING METHOD:					LOGGED BY: D.G.		APPROVED BY:					
WATER SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS				
					MOISTURE	CONSIST- ENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT	
X	1.0			FILL - LIGHT BROWN SAND, SOME SANDSTONE FRAGMENTS.								
	2.0			FILL - BROWN/GREY CLAY, VERY SANDY.								
	3.0			PEAT - DARK GREY, SANDY.								
				SAND - BROWN/GREY, NATURAL MATERIAL.								
BOREHOLE TERMINATED AT 3.3M.												
CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM SF - STIFF VST - VERY STIFF H - HARD FR - FRIABLE		WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL		STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE		FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE		WATER T - WATER LEVEL & DATE I - WATER INFLOW L - COMPLETE LOSS		SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH		
SAMPLES AND TESTS U - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH Is - POINT LOAD STRENGTH INDEX		MOISTURE Or - DRY M - MOIST W - WET S - SATURATED		DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE								

BOREHOLE LOG REPORT

PROJECT: CITY WEST DEVELOPMENT

BOREHOLE No: BH105 SHEET OF

SITE/AREA: ATP SITE

JOB No: EA 8005

CO-ORDS: E N

METHOD: DRILL RIG

DRILLING
DATE: 12/08/94RL CASING:
RL SURFACE: m mEQUIPMENT TYPE: INTERTECH BCD45D
DRILLING METHOD:BOREHOLE
DEPTH: 3.0 mLOGGED BY: D.G.
APPROVED BY:

WATER SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS		
					MOISTURE	CONSIST- ENCY	DENSITY	WEATHER- ING	STR. EST.	FRIABILITY
BH105/ 0.5M	0.5			FILL - ORANGE SANDY CLAY LOAM, SOME STONE FRAGMENTS.						
BH105/ 1.0M	1.0			FILL - BROWN SANDY CLAY LOAM, SOME STONE FRAGMENTS.						
BH105/ 1.5M	1.5			FILL - CONCRETE.						
	2.0			FILL - BLACK SANDY ASH, SOME STONE FRAGMENTS.						
	2.5			SAND - BLACK.						
	3.0			SAND - WHITE, NATURAL MATERIAL.						
				BOREHOLE TERMINATED AT 3.0M.						

CONSISTENCY	WEATHERING	STRENGTH EST.	FRIABILITY	WATER	SOIL CLASSIFICATION AND DESCRIPTION
VS - VERY SOFT S - SOFT SI - FIRM ST - STIFF VST - VERY STIFF H - HARD Fr - FRIABLE	Ff - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER LEVEL & DATE WATER INFLOW COMPLETE LOSS	REFER TO UNFIELD SOIL CLASSIFICATION
					COMMENTS/SKETCH

SAMPLES AND TESTS	MOISTURE	DENSITY
Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH 14501 - POINT LOAD STRENGTH INDEX	Dr - DRY M - MOIST W - WET S - SATURATED	VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE

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BOREHOLE LOG REPORT												
PROJECT: CITY WEST DEVELOPMENT					BOREHOLE No: BH107		SHEET OF					
SITE/AREA: ATP SITE					JOB No: EA 8005		CO-ORDS:		E N			
METHOD: DRILL RIG					DRILLING DATE: 12/08/94		RL CASING:		m			
EQUIPMENT TYPE: INTERTECH BCD 450					BOREHOLE DEPTH: 2.0 m		LOGGED BY: D.G. APPROVED BY:					
DRILLING METHOD:												
WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			
						MOISTURE	CONSISTENCY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT	
					FILL - BROWN/RED/WHITE MOTTLED SANDY CLAY, SOME SANDSTONE FRAGMENTS. SPT (10, 9, 9)							
	BH107 0.3m BH107 1.0m				FILL - BROWN SAND, SOME SANDSTONE FRAGMENTS							
		1.0			FILL - LIGHT GREY/ASH, SOME GRAVEL							
	BH107 1.3m				SAND - GRAY, NATURAL MATERIAL							
	BH107 1.9m	2.0			BOREHOLE TERMINATED AT 2.0m							
		3.0										
CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM St - STIFF VSt - VERY STIFF H - HARD Fr - FRIABLE		WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL		STRENGTH EST. EV - EXTREMELY WEAK VW - VERY WEAK W - WEAK MD - MEDIUM S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE		FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE		WATER ↓ WATER LEVEL & DATE → WATER INFLOW → COMPLETE LOSS		SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION		
SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH H(S) - POINT LOAD STRENGTH INDEX		MOISTURE Dr - DRY H - MOIST W - WET S - SATURATED		DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE		COMMENTS/SKETCH						

BOREHOLE LOG REPORT

PROJECT: CITY WEST DEVELOPMENT

BOREHOLE No: BH1003 SHEET OF

SITE/AREA: ATP SITE

JOB No: EA 8005

CO-ORDS: E N

METHOD: DRILL RIG

DRILLING DATE: 12/08/94

RL CASING: m
RL SURFACE: mEQUIPMENT TYPE: INTERTECH BCD 450
DRILLING METHOD:

BOREHOLE DEPTH: 3.4 m

LOGGED BY: D.G.
APPROVED BY:

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
					FILL - FINE SAND, LIGHT BROWN.								
	BH1003 1.2m	1.0											
	BH1003 1.6m				FILL - LIGHT BROWN SAND, SMALL STONE FRAGMENTS								
	BH1003 2.2m	2.0			FILL - ASH MATERIAL, BLACK.								
		3.0			SAND - BROWN, NATURAL MATERIAL.								
					BOREHOLE TERMINATED AT 3.4m.								
CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM ST - STIFF VST - VERY STIFF H - HARD FR - FRIABLE		WEATHERING Fr - FRESH Fs - STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL		STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK RS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE		FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE		WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS		SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH			
SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER O - DISTURBED SAMPLE Nc - CONE PENETROMETER dp - UCS HAND PENETR. S - SHEAR VANE STRENGTH L ₁ (50) - POINT LOAD STRENGTH INDEX		MOISTURE D - DRY M - MOIST W - WET S - SATURATED		DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE									

EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT				PIT No: TP 53A		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EA 8000		CO-ORDS: E N	
METHOD:				EXCAVATION DATE: 11-08-94		RL: DATUM: M	
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:				LOGGED BY: APPROVED BY:			

WATER	SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
	TP53A/0.5m				FILL - DK GRAY SAND WITH SOME ASH AND COAL. LAYERS OF ASH TO 250MM THICK WHICH DIP STEEPLY TOWARDS THE SOUTH.								
	TP53A/1.6m	1.0											
	TP53A/2.0m	2.0			FILL - ORANGE & BROWN CLAY FILL WITH SOME SAND & IRONSTONE FRAGMENTS.								
	TP53A/2.5m	2.5			FILL - DARK GRAY SAND, ASH AND COAL.								
	TP53A/3.8m	3.8			FILL - RED/BROWN & GRAY CLAY FILL WITH SOME SAND & IRONSTONE FRAGMENTS.								
	TP53A/3.8m	3.8			EXCAVATION DISCONTINUED @ 3.8M (EXCAVATOR LIMIT)								

CONSISTENCY VS-VERY SOFT S-SOFT F-FIRM SF-STIFF VSF-VERY STIFF H-HARD Fr-FRIABLE	WEATHERING Fr-FRESH Fs-FRESH STAINED SW-SLIGHTLY WEATHERED MW-MODERATELY WEATHERED HW-HIGHLY WEATHERED CW-COMpletely WEATHERED RS-RESIDUAL SOIL	STRENGTH EST. EW-EXTREMELY WEAK VW-VERY WEAK WEAK MS-MEDIUM STRONG S-STRONG VS-VERY STRONG ES-EXTREMELY STRONG FRIABLE	FRIABILITY NF-NON-FRIABLE SF-SLIGHTLY FRIABLE MF-MODERATELY FRIABLE HF-HIGHLY FRIABLE EF-EXTREMELY FRIABLE	WATER —X— WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx-UNDISTURBED SAMPLE & DIAMETER D -DISTURBED SAMPLE Nc -CONE PENETROMETER pp -UCS HAND PENETR. S -SHEAR VANE STRENGTH LPSI-POINT LOAD STRENGTH INDEX CAD REF - FORM22	MOISTURE Dr-DRY M-MOIST W-WET S-SATURATED	DENSITY VL-VERY LOOSE L-LOOSE MD-MEDIUM DENSE D-DENSE VD-VERY DENSE
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11/11/93

CMPSE

EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT		PIT No: TP 53C		SHEET OF	
SITE/AREA: ATP SITE		JOB No: EA 8000		CO-ORDS: E N	
METHOD:		EXCAVATION DATE: 11-08-94		RL: DATUM: m	
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:				LOGGED BY: APPROVED BY:	

WATER	SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS				ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY			
	TP53C/0.5M	0.5			FILL - DARK GREY SAND, ASH AND COAL WITH SOME SLAB. SOME LAYERS OF ASH TO 300MM THICK WHICH DIP STEEPLY TOWARDS SOUTH.									
	TP53C/1.9M	1.9			SLAB OF GREEN OXIDE, DIP STEEPLY TOWARDS SOUTH.									
	TP53C/2.3M	2.3			FILL - DARK GREY SAND, ASH AND COAL WITH SOME SLAB.									
	TP53C/3.4M	3.4			FILL - ORANGE, VERY SANDY CLAY, SOME MINOR GREY AND BROWN CLAY.									
		3.8			EXCAVATION DISCONTINUED @ 3.8M (LIMIT OF EXCAVATION)									

CONSISTENCY VS-VERY SOFT S-SOFT F-FIRM SF-STIFF VSI-VERY STIFF H-HARD Fr-FRIABLE	WEATHERING Fr-FRESH Fs-FRESH STAINED SW-SLIGHTLY WEATHERED MW-MODERATELY WEATHERED HW-HIGHLY WEATHERED CW-COMPLETELY WEATHERED RS-RESIDUAL SOIL	STRENGTH EST. ES-EXTREMELY WEAK VS-VERY WEAK MS-MEDIUM STRONG S-STRONG VS-VERY STRONG ES-EXTREMELY FRIABLE	FRIABILITY NF-NON-FRIABLE SF-SLIGHTLY FRIABLE MF-MODERATELY FRIABLE HF-HIGHLY FRIABLE EF-EXTREMELY FRIABLE	WATER - WATER LEVEL & DATE - WATER INFLOW - COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx-UNOBTAINED SAMPLE & DIAMETER D-DISTURBED SAMPLE Nc-CONE PENETROMETER PP-SHEAR VANE STRENGTH LPSM-POINT LOAD STRENGTH INDEX CAD REF - FORM 22	MOISTURE Dr-DRY M-MOIST W-WET S-SATURATED	DENSITY VL-VERY LOOSE L-LOOSE MD-MEDIUM DENSE D-DENSE VD-VERY DENSE
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11/11/93

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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT				PIT No: TP 64 A.		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EA 8000		CO-ORDS: E N	
METHOD:				EXCAVATION DATE: 12-08-94		RL: m DATUM:	
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:						LOGGED BY: APPROVED BY:	

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS				
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT	
		0.4			BITUMIN. GRAVELLY SANDY ASH DARK GRAY.								
		1.0			WHITE SAND								
		1.6			CLAYEY SAND, YELLOW ORANGE								
		2.0			END TEST PIT @ 1.6M.								
		3.0											

CONSISTENCY VS-VERY SOFT S-SOFT F-FIRM ST-STIFF VST-VERY STIFF H-HARD FR-FRIABLE	WEATHERING Fr-FRESH Fs-FRESH ST-STAINED SW-SLIGHTLY WEATHERED MW-MODERATELY WEATHERED HW-HIGHLY WEATHERED CW-COMpletely WEATHERED RS-RESIDUAL SOIL	STRENGTH EST. EW-EXTREMELY WEAK VW-VERY WEAK W-WEAK MS-MEDIUM S-STRONG VS-VERY STRONG ES-EXTREMELY FRIABLE	FRIABILITY NF-NON-FRIABLE SF-SLIGHTLY FRIABLE MF-MODERATELY FRIABLE HF-HIGHLY FRIABLE EF-EXTREMELY FRIABLE	WATER WATER LEVEL & DATE WATER INFLOW COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx-UNDISTURBED SAMPLE & DIAMETER D-DISTURBED SAMPLE Nc-CONE PENETROMETER pp-UCS HAND PENETR. S-SHEAR VANE STRENGTH Is(SOI-POINT LOAD STRENGTH INDEX CAD REF - FORM27	MOISTURE Or-DRY M-MOIST W-WET S-SATURATED	DENSITY VL-VERY LOOSE L-LOOSE MD-MEDIUM DENSE D-DENSE VD-VERY DENSE
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11/11/93

CMP&F

EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT				PIT No: TP 64 B.		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EAB 000		CO-ORDS: E N	
METHOD:				EXCAVATION DATE: 12-08-94		RL: DATUM: m	
EQUIPMENT TYPE:				LOGGED BY:			
EXCAVATION DIMENSIONS:				APPROVED BY:			

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS				
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT	
	TP64B 0-4M	0.4			BITUMIN. GRAVELLY SANDY SILT, DARK GRAY.								
	TP64B 1.0M	1.0			WHITE SAND								
					CLAYEY SAND, YELLOW ORANGE								
					END TEST PIT @ 1.6M.								

CONSISTENCY VS-VERY SOFT S-SOFT F-FIRM ST-STIFF VSH-VERY STIFF H-HARD FR-FRIABLE	WEATHERING Fr-FRESH Fs-FRESH STAINED SW-SLIGHTLY WEATHERED MW-MODERATELY WEATHERED HW-HIGHLY WEATHERED CW-COMpletely WEATHERED RS-RESIDUAL SOIL	STRENGTH/EST. ES-EXTREMELY WEAK VW-VERY WEAK W-WEAK MS-MEDIUM STRONG S-STRONG VS-VERY STRONG ES-EXTREMELY FRIABLE	FRIABILITY NF-NON-FRIABLE SF-SLIGHTLY FRIABLE MF-MODERATELY FRIABLE HF-HIGHLY FRIABLE EF-EXTREMELY FRIABLE	WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx-UNDISTURBED SAMPLE & DIAMETER O-DISTURBED SAMPLE Nc-CONE PENETROMETER JCS-JCS HAND PENETR. S-SHEAR VANE STRENGTH LPSI-POINT LOAD STRENGTH INDEX CAD REF - FORM 2	MOISTURE Dr-DRY M-MOIST W-WET S-SATURATED	DENSITY VL-VERY LOOSE L-LOOSE MD-MEDIUM DENSE D-DENSE VD-VERY DENSE
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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT	PIT No: TP 64C	SHEET OF
SITE/AREA: ATP SITE	JOB No: EA 8000	CO-ORDS: E N
METHOD:	EXCAVATION DATE: 12-08-94	RL: . m DATUM:
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:	LOGGED BY: APPROVED BY:	

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS		
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY
	TP64C 0.5M	0.5			BITUMIN DARK GREY SANDY, GRAVELLY ASH	M	MD				
	TP64C 0.6M	0.6			CLAY MOTLED - GREY - BROWN - RED.	M	MD				
		1.0			SAND - LIGHT BROWN	M	MD				
	TP64C 1.6M	1.6			SAND - LIGHT GREY / WHITE						
		2.0			END TEST PIT @ 1.8M.						
		3.0									

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM SF - STIFF VSF - VERY STIFF H - HARD FR - FRIABLE	WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED HW - MODERATELY WEATHERED HS - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MW - MEDIUM S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER ▽ WATER LEVEL & DATE ► WATER INFLOW ► COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION		
SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH 1s (50) - POINT LOAD STRENGTH INDEX CAD REF - FORM22					MOISTURE Or - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE	COMMENTS/SKETCH

11/11/95

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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT		PIT No: TP 64D		SHEET OF	
SITE/AREA: ATP SITE		JOB No: EA 8000		CO-ORDS: E N	
METHOD:		EXCAVATION DATE: 12-08-94		RL: DATUM: m	
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:				LOGGED BY: APPROVED BY:	

WATER	SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSIST- ENCY	DENSITY	WEATHER'G	STR. EST.	FRIABILITY		
	TP 64D 0.64D 53	0.6			BT MIN GRAVELLY SAND ASH.								
	TP 64D 1.6M	1.0			CLAY - SAME AS FOR 64C								
		1.6			YELLOW SAND SAME AS FOR 64C								
		2.0			END TEST PIT @ 1.8M.								
		3.0											

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM SI - STIFF VS1 - VERY STIFF H - HARD Fr - FRIABLE	WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	FRIABILITY MF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION		
SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH 1:501 - POINT LOAD STRENGTH INDEX CAO REF - FORM 22					MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE	COMMENTS/SKETCH

14-12-12 00:35

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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT		PIT No: TP 96		SHEET OF	
SITE/AREA: ATP SITE		JOB No: EA 8000		CO-ORDS: E N	
METHOD:		EXCAVATION DATE: 12-08-94		RL: DATUM: m	
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:				LOGGED BY: APPROVED BY:	

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY	SUPPORT
	TP 96/0.5M	0.5			GRASS TOPSOIL - BROWN.							
		0.5			ASH, ODOUROUS - PETROLEUM PRODUCT GRAVEL & SOLIDIFIED TPMS & SOIL							
		0.9			ORANGE, YELLOW BROWN SAND.							
	TP 96/0.9M	1.0			HIT SENE							
		2.0			END TEST PIT @ 1.4M.							

CONSISTENCY V3-VERY SOFT S-SOFT F-FIRM ST-STIFF VS1-VERY STIFF H-HARD Fr-FRIABLE	WEATHERING Fr-FRESH Fs-FRESH STAINED SW-SLIGHTLY WEATHERED HW-MODERATELY WEATHERED HW-HIGHLY WEATHERED CW-COMpletely WEATHERED RS-RESIDUAL SOIL	STRENGTH EST. EW-EXTREMELY WEAK VW-VERY WEAK W-WEAK MS-MEDIUM STRONG S-STRONG VS-VERY STRONG ES-EXTREMELY FRIABLE	FRIABILITY NF-NON-FRIABLE SF-SLIGHTLY FRIABLE MF-MODERATELY FRIABLE HF-HIGHLY FRIABLE EF-EXTREMELY FRIABLE	WATER - WATER LEVEL & DATE - WATER INFLOW - COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx-UNDISTURBED SAMPLE & DIAMETER D-DISTURBED SAMPLE Nc-CONE PENETROMETER pp-UCS HAND PENETR. S-SHEAR VANE STRENGTH Ix(5M)-POINT LOAD STRENGTH INDEX CAD REF - FORM22	MOISTURE Dr-DRY H-MOIST W-WET S-SATURATED	DENSITY VL-VERY LOOSE L-LOOSE MD-MEDIUM DENSE D-DENSE VD-VERY DENSE
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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT	PIT No: TP 97	SHEET OF
SITE/AREA: ATP SITE	JOB No: EA 8000	CO-ORDS: E N
METHOD:	EXCAVATION DATE: 11-08-94	RL: DATUM: m
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:	LOGGED BY: APPROVED BY:	

WATER	SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS		
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY
	TP97/0.7m	0.7			ASPHALT - UNDER LAY BY BRIGHT ROAD BASE		Vd				
	TP97/1.3m	1.0			FILL - DARK GREY ASH SAND AND COAL WITH SOME BUILDING RUBBLE.		MD				
	TP97/1.9m	1.3			FILL - ORANGE/BROWN SANDY CLAY.		M D				
	TP97/2.6m	1.8			SAND - LIGHT BROWN & YELLOW. FINE GRAINED.						
		2.0									
					EXCAVATION DISCONTINUED AT @ 2.6M. (difficult to maintain safety while excavating between pipes)						

CONSISTENCY VS-VERY SOFT S-SOFT F-FIRM ST-STIFF VS1-VERY STIFF H-HARD FR-FRIABLE	WEATHERING Fr-FRESH Fs-FRESH STAINED SW-SLIGHTLY WEATHERED MW-MODERATELY WEATHERED HW-HIGHLY WEATHERED CW-COMpletely WEATHERED RS-RESIDUAL SOIL	STRENGTH EST. EW-EXTREMELY WEAK VW-VERY WEAK W-WEAK MS-MEDIUM STRONG S-STRONG VS-VERY STRONG ES-EXTREMELY FRIABLE	FRIABILITY NF-NON-FRIABLE SF-SLIGHTLY FRIABLE MF-MODERATELY FRIABLE HF-HIGHLY FRIABLE EF-EXTREMELY FRIABLE	WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION		
SAMPLES AND TESTS Uxxx-UNOBTAINED SAMPLE & DIAMETER O-DISTURBED SAMPLE Nc-CONE PENETROMETER pp-UCS HAND PENETR. S-SHEAR VANE STRENGTH IS(50)-POINT LOAD STRENGTH INDEX CAD REF - FORM22					MOISTURE Dr-DRY M-MOIST W-WET S-SATURATED	DENSITY VL-VERY LOOSE L-LOOSE MD-MEDIUM DENSE D-DENSE VD-VERY DENSE	COMMENTS/SKETCH • 1 steel pipe (100mm Ø) at southern end of pit 50mm below surface • 1 steel pipe (100mm Ø) along eastern wall of pit 50mm below surface • 1 steel pipe (250mm Ø) at northern end of pit 10m below surface.

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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT				PIT No: TP98		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EA 8000		CO-ORDS: E N	
METHOD:				EXCAVATION DATE: 11-08-94		RL: M DATUM:	
EQUIPMENT TYPE: 6 Tonne excavator (Komatsu) with 650mm bucket						LOGGED BY:	
EXCAVATION DIMENSIONS: 4.0m x 1.0m x 3.2m (L x W x D)						APPROVED BY:	

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
	TP98 0.8m				ASPHALT 75mm THICK UNDERLAYING BASALT ROADBASE		VD						
					ROADBASE ORANGE COARSE SANDSTONE.		VD						
					FILL - DARK GREY ASH, SAND AND COAL, SOME MINOR BUILDING RUBBLE (INCLUDING BRICKS, CONCRETE AND STEEL PIPE/PLATE) - SLIGHT ORGANIC ODOUR ASSOCIATED WITH COAL		MD						
		0.9			LAYER OF BRICKS								
		1.0			SAND - LIGHT BROWN, FINE GRAINED								
		1.9											
		2.0											
		3.0											
					EXCAVATOR DISCONTINUED @ 3.2M								

CONSISTENCY VS-VERY SOFT S-VERY SOFT F-VERY FIRM ST-STIFF VST-VERY STIFF H-HARD FR-FRIABLE	WEATHERING Fr-FRESH Fz-FRESH STAINED SW-SLIGHTLY WEATHERED MW-MODERATELY WEATHERED HW-HIGHLY WEATHERED CW-COMpletely WEATHERED RS-RESIDUAL SOIL	STRENGTH EST. EW-EXTREMELY WEAK VW-VERY WEAK W-WEAK MS-MEDIUM STRONG S-STRONG VS-VERY STRONG ES-EXTREMELY FRIABLE	FRIABILITY NF-NON-FRIABLE SF-SLIGHTLY FRIABLE MF-MODERATELY FRIABLE HF-HIGHLY FRIABLE EF-EXTREMELY FRIABLE	WATER WATER LEVEL & DATE WATER INFLOW COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION		
SAMPLES AND TESTS Uxxx-UNDISTURBED SAMPLE & DIAMETER O-DISTURBED SAMPLE Hc-CONE PENETROMETER pp-UCS HAND PENETR. S-SHEAR VANE STRENGTH 1x501-POINT LOAD STRENGTH INDEX CAD REF - FORM22					MOISTURE Or-DRY M-MOIST W-WET S-SATURATED	DENSITY VL-VERY LOOSE L-LOOSE MD-MEDIUM DENSE D-DENSE VD-VERY DENSE	COMMENTS/SKETCH Concrete foundation along western wall of test pit, approx. 200mm below surface.

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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT				PIT No: TP99		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EA 8000		COORDS: E N	
METHOD:				EXCAVATION DATE: 12-08-94		RL: DATUM: m	
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:						LOGGED BY: APPROVED BY:	

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
	TP99/0-2M	0-2M			BITUMIN FILL - DARK GRAY SAND, SOME GRAVEL								
					CLAY, SAND AND GRAVEL, MOTTED GRAY, BROWN, RED BROWN, CLAYEY GRAVELLY SAND.								
	TP99/1-6M	1-6M			CLAY - AS ABOVE.								
	TP99/2-0M	2-0M			CLAYEY SAND, SMALL BAND OF OILY & OIL STAINED MATERIAL. APPROX. BETWEEN 1.8M - 2.2M								
	TP99/2-6M	2-6M			DEBRIS SAND NATURAL WHITE SAND								
		3-0			END TEST PIT @ 2.6M.								

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM V - STIFF VS - VERY STIFF H - HARD Fr - FRIABLE	WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED HW - MODERATELY WEATHERED HS - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH-EST. EW - EXTREMELY WEAK VW - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER ▽ - WATER LEVEL & DATE → - WATER INFLOW → - COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER O - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH Is (SV) - POINT LOAD STRENGTH INDEX CAD REF - FORM 22	MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE
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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT	PIT No: TP 106	SHEET OF
SITE/AREA: ATP SITE	JOB No: EA 8200	CO-ORDS: E N
METHOD:	EXCAVATION DATE: 12-08-94	RL: m
EQUIPMENT TYPE:	LOGGED BY:	
EXCAVATION DIMENSIONS:	APPROVED BY:	

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
		0.2			CONCRETE, BUILDING MATERIAL, PIPES etc.								
		0.5			BLACK SANDY ASH								
		0.5M			BLACK SANDY ASH WITH ORANGE CLAYEY SAND AND DARK GREY SAND.								
		1.0											
		1.6M			CONCRETE SLAB (FOOTING??). DARK BROWN/BROWN SAND. BANDS								
		2.0			BROWN SAND.								
		3.0											
		3.8			CLAY / ORANGE - BROWN MOTTLED RED & GREY								
		3.8			END PIT @ 3.8M.								
CONSISTENCY VS-VERY SOFT S-SOFT F-FIRM SF-STIFF VSF-VERY STIFF H-HARD FR-FRIABLE		WEATHERING Fc-FRESH Fs-FRESH STAINED SW-SLIGHTLY WEATHERED HW-MODERATELY WEATHERED WEATHERED HW-HIGHLY WEATHERED CW-COMpletely WEATHERED RS-RESIDUAL SOIL		STRENGTH EST. EW-EXTREMELY WEAK KW-VERY WEAK W-WEAK MS-MEDIUM S-STRONG VS-VERY STRONG ES-EXTREMELY FRIABLE		FRIABILITY NF-NON-FRIABLE SF-SLIGHTLY FRIABLE MF-MODERATELY FRIABLE HF-HIGHLY FRIABLE EF-EXTREMELY FRIABLE		WATER — WATER LEVEL — DATE — WATER INFLOW — COMPLETE LOSS		SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION			
SAMPLES AND TESTS Uxxx-UNDISTURBED SAMPLE & DIAMETER D-DISTURBED SAMPLE Nc-CONE PENETROMETER pp-UCS HAND PENETR. S-SHEAR VANE STRENGTH Is-SOIL POINT LOAD STRENGTH INDEX CAD REF - FORM22		MOISTURE D-DRY M-MOIST W-WET S-SATURATED		DENSITY VL-VERY LOOSE L-LOOSE MD-MEDIUM DENSE D-DENSE VD-VERY DENSE		COMMENTS/SKETCH							

EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT		PIT No: TP113		SHEET OF	
SITE/AREA: ATP SITE		JOB No: EA 8000		CO-ORDS: E N	
METHOD:		EXCAVATION DATE: 12-08-94		RL: DATUM: m	
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:				LOGGED BY: APPROVED BY:	

WATER	SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
					FILL - BROWN/GREEN SAND SOME BUILDING MATERIAL.								
	TP113/0.5M	0.5			SAND - ORANGE/BROWN, ELECTRICITY CABLE AND CAST IRON PIPE, PARALLEL TO EACH SIDE OF TRENCH.								
	TP113/1.6M	1.6											
		2.0											
		3.0			SAND - ORANGE/BROWN/GREY								
	TP113/3.9M	3.9			SAND - LIGHT GREY GROUNDWATER ENCOUNTERED AT 3.7M. FINISHED EXCAVATION @ 3.9M								

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM ST - STIFF VST - VERY STIFF H - HARD FR - FRIABLE	WEATHERING Fr - FRESH Fs - FRESH STAINED SW - SLIGHTLY WEATHERED MW - MODERATELY WEATHERED HW - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH EST. EW - EXTREMELY WEAK WV - VERY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER ▽ WATER LEVEL & DATE ► WATER INFLOW ► COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION		
SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Mc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH 1x50 - POINT LOAD STRENGTH INDEX CAD REF - FORM22					MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE	COMMENTS/SKETCH

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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT				PIT No: TP114		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EA 8000		CO-ORDS: E N	
METHOD:				EXCAVATION DATE: 12-08-94		RL: m	
EQUIPMENT TYPE:				LOGGED BY:			
EXCAVATION DIMENSIONS:				APPROVED BY:			

WATER	SAMPLE No./TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
					DARK BROWN SAND FILL CLAYEY SAND SOME CONCRETE & GRAVEL								
	TP114/0.4M	0.4			SAND - LIGHT BROWN / ORANGE / BROWN CLAY LENSES								
	TP114/2.2M	2.2											
					SAND - LIGHT GREY								
	TP114/4.0M	4.0			END OF TEST PIT @ 4.0M								

CONSISTENCY VS - VERY SOFT S - SOFT F - FIRM ST - STIFF VST - VERY STIFF H - HARD FR - FRIABLE	WEATHERING Fr - FRESH Fx - FRESH STAINED SW - SLIGHTLY WEATHERED HW - MODERATELY WEATHERED HS - HIGHLY WEATHERED CW - COMPLETELY WEATHERED RS - RESIDUAL SOIL	STRENGTH EST. EW - EXTREMELY WEAK W - WEAK MS - MEDIUM STRONG S - STRONG VS - VERY STRONG ES - EXTREMELY FRIABLE	FRIABILITY NF - NON-FRIABLE SF - SLIGHTLY FRIABLE MF - MODERATELY FRIABLE HF - HIGHLY FRIABLE EF - EXTREMELY FRIABLE	WATER — WATER LEVEL & DATE — WATER INFLOW — COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
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SAMPLES AND TESTS Uxxx - UNDISTURBED SAMPLE & DIAMETER D - DISTURBED SAMPLE Nc - CONE PENETROMETER pp - UCS HAND PENETR. S - SHEAR VANE STRENGTH q - POINT LOAD STRENGTH INDEX CAD REF - FORM2	MOISTURE Dr - DRY M - MOIST W - WET S - SATURATED	DENSITY VL - VERY LOOSE L - LOOSE MD - MEDIUM DENSE D - DENSE VD - VERY DENSE
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11/11/93

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EXCAVATION LOG

PROJECT: CITY WEST DEVELOPMENT				PIT No: TP115		SHEET OF	
SITE/AREA: ATP SITE				JOB No: EA 8000		CO-ORDS: E N	
METHOD:				EXCAVATION DATE: 12-08-94		RL: m DATUM:	
EQUIPMENT TYPE: EXCAVATION DIMENSIONS:						LOGGED BY: APPROVED BY:	

WATER	SAMPLE No./ TEST No.	DEPTH (m)	GRAPHIC LOG	SOIL CLASSIFICATION	SOIL/ROCK DESCRIPTION SOILS: TYPE, PLASTICITY OR PARTICLE CHARACTERISTICS, COLOUR, STRUCTURE, ACCESSORY COMPONENTS. ROCKS: TYPE, SECONDARY COMPONENTS, GRAIN CHARACTERISTICS, COLOUR, STRUCTURE, DISCONTINUITY CHARACTERISTICS.	SOILS			ROCKS			SUPPORT	
						MOISTURE	CONSISTENCY	DENSITY	WEATHERING	STR. EST.	FRIABILITY		
	TP115/0.3M	0.3			FILL - TOPSOIL, DARK GREY ASH & SOME GREEN TINE.	M	MD						
	TP115/0.6M	0.6			SEVERAL LAYERS/BANDS OF GREEN SANDY SOIL								
	TP115/0.9M	0.9			• EACH LAYER IS APPROXIMATELY 0.1 - 0.2M THICK								
		1.0			WHITE SAND DK GREY SAND ASH YELLOW SAND ORANGY RED.	M	D						
		2.0			NATURAL SAND - ORANGE/BROWN & GREY.	M	MD-D						
	TP115/3.0M	3.0			END OF TEST PIT AT 3.0M.	W	MD-D						

CONSISTENCY VS-VERY SOFT S-SOFT F-FIRM ST-STIFF VST-VERY STIFF H-HARD FR-FRIABLE	WEATHERING Fr-FRESH Fs-FRESH STAINED SW-SLIGHTLY WEATHERED HW-MODERATELY WEATHERED VS-VERY WEATHERED CW-COMpletely WEATHERED RS-RESIDUAL SOIL	STRENGTH/EST. EW-EXTREMELY WEAK VW-VERY WEAK WS-WEAK MS-MEDIUM STRONG S-STRONG VS-VERY STRONG ES-EXTREMELY FRIABLE	FRIABILITY NF-NON-FRIABLE SF-SLIGHTLY FRIABLE MF-MODERATELY FRIABLE HF-HIGHLY FRIABLE EF-EXTREMELY FRIABLE	WATER WATER LEVEL & DATE WATER INFLOW COMPLETE LOSS	SOIL CLASSIFICATION AND DESCRIPTION REFER TO UNFIELD SOIL CLASSIFICATION COMMENTS/SKETCH
--	---	--	--	---	--

SAMPLES AND TESTS Uxxx-UNDISTURBED SAMPLE & DIAMETER O-DISTURBED SAMPLE Nc-CONE PENETROMETER pp-UCS HAND PENETR. S-SHEAR VANE STRENGTH LcSP-POINT LOAD STRENGTH INDEX CAD REF - FORM22	MOISTURE Or-DRY M-MOIST W-WET S-SATURATED	DENSITY VL-VERY LOOSE L-LOOSE MD-MEDIUM DENSE D-DENSE VD-VERY DENSE
--	--	---

11/11/95

CMPSE

BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: A1
 PROJECT No: 45627.01
 DATE: 22 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.05	ASPHALT			0.0			
		FILLING - brown to dark brown, silty gravelly clay filling, some fine gravel		A				
	0.6	FILLING - red brown mottled grey, sandy clay filling with some fine gravel		A	0.6			
1				A				
				A	1.5			
2				A	2.0			
				A	2.5			
3				A	3.0			
	3.3	FILLING - dark brown, silty clay filling		A	3.3			
	3.5	FILLING - grey clayey sand filling		A	3.5			
4				A	4.0			
	4.2	SANDY CLAY - red brown, sandy clay		A	4.2			
	4.5	CLAY - pale brown clay (moist)			4.5			
5	5.0	Bore discontinued at 5.0m - target depth reached						
6								
7								
8								
9								

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength ls(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: ---
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/---

BORE No: A2
 PROJECT No: 45627.01
 DATE: 22 Jan 09
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.04	ASPHALT		A	0.0			
	FILLING - brown, silty sandy clay filling, some fine gravel		A	0.6			
1.7	FILLING - brown, silty sand filling, trace clay inclusions		A	1.7			
2.8	FILLING - grey clay filling		A	2.8			
	- becoming orange brown at 3.3m		A				
3.8	CLAY - grey clay		A	3.8			
4.4	CLAY - red brown clay		A	4.4			
5.0	Bore discontinued at 5.0m - target depth reached			5.0			

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PHD	Photo lensation detector
B	Bulk sample	S	Standard penetration test
UL	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water seep
		*	Water level

CHECKED

Initials:

Date:



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BORE No: A3
PROJECT No: 45627.01
DATE: 22 Jan 09
SHEET 1 OF 1

RIG: Multidrill DRILLER: Traccess LOGGED: AHP CASING: Uncased
TYPE OF BORING: Solid flight auger
WATER OBSERVATIONS: No free groundwater observed during drilling
REMARKS:

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: A4
 PROJECT No: 45627.01
 DATE: 22 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.04	ASPHALT			0.0			
		FILLING - brown, gravelly clayey sand filling, fine to coarse gravel, scrap metal, trace ash and slag		A				
	0.7	Bore discontinued at 0.7m - refusal on gravel and scrap metal			0.7			
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							

RIG: Multidril

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	PP	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (x80) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: B1
 PROJECT No: 45627.01
 DATE: 22 Jan 09
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.05	ASPHALT		A	0.0			
0.4	FILLING - black, silty gravelly sand filling, trace ash and slag, some fine gravel		A	0.3			
0.5	FILLING - brown, silty sandy clay filling with medium to coarse gravel		A	0.4			
0.5			A	0.5			
1.0	Bore discontinued at 0.5m - refusal on gravel						
2.0							
3.0							
4.0							
5.0							
6.0							
7.0							
8.0							
9.0							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cone drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



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CLIENT: Redfern Waterloo Authority
PROJECT: Grid Sampling of Hazardous & Restricted Waste
LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/---

BORE No: B2
PROJECT No: 45627.01
DATE: 22 Jan 09
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
0.04		ASPHALT		A	0.0			
		FILLING - dark brown to black, silty gravelly sand filling, fine gravel, trace ash and slag		A	0.6			
0.8		FILLING - red brown mottled grey, silty gravelly sandy clay filling, fine gravel		A	1.0			
1								
2								
3								
3.4		FILLING - grey clayey sand filling		A	3.5			
4								
4.4		CLAY - orange brown clay		A	4.5			
5		Bore discontinued at 5.0m - target depth reached			5.0			
6								
7								
8								
9								

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cora drilling	>	Water seep
		≡	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: ---
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/---

BORE No: B3
 PROJECT No: 45627.01
 DATE: 22 Jan 09
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.03	ASPHALT			0.0			
	FILLING - dark brown, gravelly clayey sand, fine to medium gravel		A				
1.0	FILLING - brown to gray, gravelly clay, fine to medium gravel			1.5 1.6			
3.5	SILTY SAND - grey to dark brown, silty sand			3.5 3.7			
4.3	SANDY CLAY - yellow brown, sandy clay		A	4.0			
5.0	Bore discontinued at 5.0m - target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: B4
 PROJECT No: 45627.01
 DATE: 22 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
0.04		ASPHALT			0.0				
		FILLING - brown, silty sand filling, trace fine gravel		A	0.5	A			
1.1		FILLING - black, silty gravelly sand filling, trace ash and slag, wire, trace rootlets, brick fragments		A	1.1				
				A	1.5				
2.2		FILLING - grey clay filling		A	2.2				
2.4		FILLING - light brown mottled grey, clay filling		A	2.4				
				A	3.0				
4.1		SANDY CLAY - grey sandy clay			4.1				
4.4		SANDY CLAY - yellow sandy clay		A	4.4				
5.0		Bore discontinued at 5.0m - target depth reached			5.0				

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		WL	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority SURFACE LEVEL: -- BORE No: B5
 PROJECT: Grid Sampling of Hazardous & Restricted Waste EASTING: PROJECT No: 45627.01
 LOCATION: Lot 12, Australian Technology Park, Eveleigh NORTHING: DATE: 21 Jan 09
 DIP/AZIMUTH: 90°/-- SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.0	FILLING - brown, silty clay filling, trace fine gravel, trace rootlets (landscaped garden filling)		A	0.0			
1.1	CLAY - red to orange brown clay		A	1.0			
1.5			A	1.5			
2.3	CLAY - pale grey clay		A	2.0			
2.5			A	2.5			
3.0	Bore discontinued at 3.0m - target depth reached		A	3.0			
4.0							
5.0							
6.0							
7.0							
8.0							
9.0							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	gp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength $I_e(50)$ MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	Δ	Water seep
		§	Water level

CHECKED

Initials:

Date:



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TEST BORE REPORT

BORE No: 143

CLIENT: ATP PRECINCT MANAGEMENT PTY LTD

PROJECT No: 35846

DATE: 29-30 MAR 03

PROJECT: PROPOSED BUILDING DEVELOPMENT

SURFACE LEVEL: 21.7 AHD

SHEET 1 OF 3

LOCATION: AUSTRALIAN TECHNOLOGY PARK, EVELEIGH DIP OF HOLE: 90°

AZIMUTH:

Depth (m)	Description of Strata	Degree of Weathering	Graphic Log	Rock Strength	Discontinuities	Fracture Spacing (m)	Sampling & In Situ Testing				Test Results & Comments
							Sample Type	Core Rec. %	RQD %		
0.1	BITUMEN/ROADBASE										
0.4	FILLING - brown, sandy gravel filling with brick and concrete fragments										
0.55	CONCRETE										
1.5	FILLING - dark brown, sandy ash filling with brick fragments - becoming brown clayey sand filling with ash, concrete and brick fragments from 0.8m						m				
2.0	FILLING - red brown clay with ironstone gravels						m				
3.0	- slightly sandy below 3.0m										
3.4	FILLING - brown grey, sandy clay and ripped shale filling with brick fragments and gravel						E				
5.0	FILLING - grey red brown, clay filling with ironstone gravel, brick fragments, metals and a trace of sand						E				
5.8	CLAY - grey mottled red clay with ironstone gravel						E				
8.0	CLAY - hard, light gray mottled red brown clay						S				8,15,20 N=35
8.3	SILTSTONE - low strength siltstone (driller's description)										

RIG: SCOUT

DRILLER: G COOPER

LOGGED: JARDINE/FOO

CASING: TO 10.5m

TYPE OF BORING: SFA TO 6.0m ROTARY TO 10.0m NMLC-CORING TO 20.4m

WATER OBSERVATIONS: DRILLING FLUID PRECLUDED GROUNDWATER LEVEL MEASUREMENT

REMARKS: E = ENVIRONMENTAL SAMPLE

SAMPLING & IN SITU TESTING LEGEND

A auger sample	PL point load strength I_p (50)MPa
B bulk sample	S standard penetration test
C core drilling	Ux x mm dia. tube
pp pocket penetrometer (kPa)	V Shear Vane (kPa)

CHECKED:

Initials: *AW*

Date: 23/5



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TEST BORE REPORT

CLIENT: ATP PRECINCT MANAGEMENT PTY LTD
PROJECT: PROPOSED BUILDING DEVELOPMENT
LOCATION: AUSTRALIAN TECHNOLOGY PARK, EVELEIGH

PROJECT No: 35846
SURFACE LEVEL: 21.7 AHD
DIP OF HOLE: 90°

BORE No: 143
DATE: 29-30 MAR 03
SHEET 2 OF 3
AZIMUTH:

Depth (m)	Description of Strata	Degree of Weathering	Graphic Log	Rock Strength	Discontinuities B - Bedding J - Joint S - Shear D - Drill Break	Fracture Spacing (mm)	Sampling & In Situ Testing				Test Results & Comments
							Sample Type	Core Rec. %	RQD %		
10	SILTSTONE - alternate bands of very low and low strength, highly weathered, unbroken, highly fractured and fractured, light and dark gray siltstone with 15% light gray, fine grained, sandstone laminae				Note: Unless otherwise stated, rock is fractured along smooth planar joints						
11					11.85-11.90m: core highly fractured, discontinuities observed 11.97-12.93m: core highly fractured & fractured, discontinuities observed		C	89	43		PL (A)=0.2MPa
12					12.43m: CORE LOSS 70mm						
12.43 12.80					12.73m: J45° 12.75m: J85° 12.90m: J45° 13.01m: J70°						
13	13.0-13.95m: slightly weathered							100	98		
14	14.0-14.70m: extremely low strength						C	75	30		
15					15.40m: CORE LOSS 600mm						
15.4											
16							C	100	47		
16.0							C	100	58		
17					17.40m: J80° 17.41m: J20°						
17.3	SILTSTONE - medium strength, fresh, slightly fractured, black siltstone										
18					18.88m: J80° 19.80m: J85° 19.89m: J70°		C	100	100		PL (A)=0.92MPa (F) PL (A)=1.8MPa PL (A)=1.5MPa
18.50	Below 18.50m: high strength										
19											
20											
20.4											

RIG: SCOUT

DRILLER: G COOPER

LOGGED: JARDINE/FOO

CASING: TO 10.5m

TYPE OF BORING: SFA TO 6.0m ROTARY TO 10.0m NMLC-CORING TO 20.4m

WATER OBSERVATIONS: DRILLING FLUID PRECLUDED GROUNDWATER LEVEL MEASUREMENT

REMARKS: E = ENVIRONMENTAL SAMPLE

SAMPLING & IN SITU TESTING LEGEND

A auger sample	PL point load strength I_s (50MPa)
B bulk sample	S standard penetration test
C core drilling	Ux x mm dia. tube
pp pocket penetrometer (kPa)	V Shear Vane (kPa)

CHECKED:

Initials:

Date:

RW
23/5



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TEST BORE REPORT

BORE No: 143

CLIENT: ATP PRECINCT MANAGEMENT PTY LTD

PROJECT No: 35846

DATE: 29-30 MAR 03

PROJECT: PROPOSED BUILDING DEVELOPMENT

SURFACE LEVEL: 21.7 AHD

SHEET 3 OF 3

LOCATION: AUSTRALIAN TECHNOLOGY PARK, EVELEIGH DIP OF HOLE: 90°

AZIMUTH:

Depth (m)	Description of Strata	Degree of Weathering	Graphic Log	Rock Strength	Discontinuities		Fracture Spacing (m)	Sampling & In Situ Testing			Test Results & Comments	
					B - Bedding S - Shear	J - Joint D - Drill Break		Sample Type	Core Rec. %	RQD %		
19.9	SILTSTONE - high strength, fresh, slightly fractured, black siltstone								C	100	100	
20.4	TEST BORE DISCONTINUED AT 20.4m											
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												

RIG: SCOUT

DRILLER: G COOPER

LOGGED: JARDINE/FOO

CASING: TO 10.5m

TYPE OF BORING: SFA TO 6.0m ROTARY TO 10.0m NMLC-CORING TO 20.4m

WATER OBSERVATIONS: DRILLING FLUID PRECLUDED GROUNDWATER LEVEL MEASUREMENT

REMARKS: E = ENVIRONMENTAL SAMPLE

SAMPLING & IN SITU TESTING LEGEND

A auger sample	PL point load strength I_p (50)MPa
B bulk sample	S standard penetration test
C core drilling	Ux x mm dia. tube
pp pocket penetrometer (kPa)	V Shear Vane (kPa)

CHECKED:

Initials:

Date:


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TEST BORE REPORT

CLIENT: ATP PRECINCT MANAGEMENT PTY LTD

PROJECT No: 35846

BORE No: 147B

PROJECT: PROPOSED BUILDING DEVELOPMENT

SURFACE LEVEL: 17.6 AHD

DATE: 5 APRIL 03

LOCATION: AUSTRALIAN TECHNOLOGY PARK, EVELEIGH DIP OF HOLE: 90°

SHEET 1 OF 2

AZIMUTH:

Depth (m)	Description of Strata	Degree of Weathering	Graphic Log	Rock Strength	Discontinuities B - Bedding J - Joint S - Shear D - Drill Break	Fracture Spacing (m)	Sampling & In Situ Testing				Test Results & Comments
							Sample Type	Core Rec. %	RQD %		
0.15	FILLING - crushed sandstone filling										
0.4	FILLING - grey sand filling with some gravel (driller's description)						E				
1.0	FILLING - dark brown, sand filling with some concrete gravel and a trace of metal Below 1.0m: less gravel						E				
1.8	FILLING - brown, sandy clay filling						E				
2.2	FILLING - grey, sand and gravel filling (driller's description)										
3.0	SANDY SILTY CLAY - hard, light grey, sandy silty clay with ironstone bands										18,16,25 N=41
4.2	SILTSTONE - extremely low strength siltstone										
5.15	SILTSTONE - low and very low to low strength, highly weathered, fractured, light grey and grey siltstone with 5% sandstone laminae				5.15-5.2m: rock is fractured along smooth planar ironstained bedding planes dipping 0° - 10° unless otherwise stated						25/130mm refusal
6.0	- some extremely low and very low strength bands						C	100	0		PL (A)=0.3MPa
7.07	SILTSTONE - medium strength, highly weathered, fractured, grey siltstone				6.86m: J70° smooth planar ironstained						
7.30	SILTSTONE - medium strength, fresh stained, fractured then slightly fractured, black siltstone										
8.0	Below 0.5m: fresh						C	100	83		PL (A)=0.4MPa PL (A)=0.6MPa
9.0	SILTSTONE - high strength, fresh, slightly fractured, black siltstone				9.60m: J80° - 90° rough undulating						PL (A)=0.9MPa
9.30-9.60m	fractured						C	100	96		

RIG: SCOUT

DRILLER: DRIVER

LOGGED: JARDINE

CASING: TO 2.7m

TYPE OF BORING: SFA TO 2.7m ROTARY TO 5.15m NMLC-CORING TO 11.0m

WATER OBSERVATIONS: NO FREE GROUNDWATER OBSERVED WHILST AUGERING

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A auger sample	PL point load strength I_s (50)MPa
B bulk sample	S standard penetration test
C core drilling	U x mm dia. tube
pp pocket penetrometer (kPa)	V Shear Vane (kPa)

CHECKED:

Initials:

Date:

Ruv

23/5


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BORE No: 147B

CLIENT: ATP PRECINCT MANAGEMENT PTY LTD

PROJECT No: 35846

DATE: 5 APRIL 03

PROJECT: PROPOSED BUILDING DEVELOPMENT

SURFACE LEVEL: 17.6 AHD

SHEET 2 OF 2

LOCATION: AUSTRALIAN TECHNOLOGY PARK, EVELEIGH DIP OF HOLE: 90°

AZIMUTH:

Depth (m)	Description of Strata	Degree of Weathering	Graphic Log	Rock Strength	Discontinuities B - Bedding J - Joint S - Shear D - Drill Break	Fracture Spacing (m)	Sampling & In Situ Testing				Test Results & Comments
							Sample Type	Core Rec. %	RQD %		
10	SILTSTONE - High strength, fresh, slightly fractured, black siltstone				10.08m: J40° smooth planar		C	100	96		PL (A)=1.2MPa
11	TEST BORE DISCONTINUED AT 11.0m										
12											
13											
14											
15											
16											
17											
18											
19											
20											

RIG: SCOUT

DRILLER: DRIVER

LOGGED: JARDINE

CASING: TO 2.7m

TYPE OF BORING: SFA TO 2.7m ROTARY TO 5.15m NMLC-CORING TO 11.0m

WATER OBSERVATIONS: NO FREE GROUNDWATER OBSERVED WHILST AUGERING

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A sugar sample	PL point load strength I_s (50)MPa
B bulk sample	S standard penetration test
C core drilling	U x mm dia. tube
pp pocket penetrometer (kPa)	V Shear Vane (kPa)

CHECKED:

Initials: *RW*

Date: 23/5

**Douglas Partners**
Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: ATP PRECINCT MANAGEMENT LTD

DATE: 29 MARCH 03

BORE No: 149

PROJECT: PROPOSED BUILDING DEVELOPMENT

PROJECT No: 35846A

LOCATION: AUSTRALIAN TECHNOLOGY PARK, EVELEIGH SURFACE LEVEL: 21.8 AHD

SHEET 1 of 1

Depth (m)	Description of Strata	Graphic Log	Sampling & Testing				Contamination Observations	Water	Well Construction Details	
			Type	Depth	Tests	Results				
1									Basic Cover Backfill Material Bentonite	
2										
3									Backfilled with Gravel	
4										
5									Machine Slotted PVC Screen	
6										
7									End Cap	
8										
9										
10										
11										
12										
13										
14										

RIG: SCOUT

DRILLER: G COOPER

LOGGED: HENNESSY

CASING: UNCASSED

TYPE OF BORING: SPIRAL FLIGHT AUGER TO 6.6m ROTARY TO 9.0m

WATER OBSERVATIONS: FREE GROUNDWATER OBSERVED AT 6.6m (1/5/03)

REMARKS: GROUNDWATER SAMPLE (149) COLLECTED ON 1/5/03

SAMPLING & IN SITU TESTING LEGEND

W water	PID _a ambient PID
D disturbed soil sample	PID _h headspace PID
U _x tube sample (x mm dia.)	pp pocket penetrometer kPa
S standard penetration test	

CHECKED:

Initials: *DLH*

Date: 29/3/03


Douglas Partners
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TEST BORE REPORT

BORE No: 149

CLIENT: ATP-PRECINCT-MANAGEMENT-PTY-LTD

PROJECT No: 35846

DATE: 29-MAR-03

PROJECT: PROPOSED BUILDING DEVELOPMENT

SURFACE LEVEL: 21.8 AHD

SHEET 2 OF 2

LOCATION: AUSTRALIAN TECHNOLOGY PARK, EVELEIGH

DIP OF HOLE: 90°

AZIMUTH:

Depth (m)	Description of Strata	Degree of Weathering	Graphic Log	Rock Strength	Discontinuities B - Bedding J - Joint S - Shear D - Drill Break	Fracture Spacing (m)	Sampling & In Situ Testing			Test Results & Comments
							Sample Type	Core Rec. %	RQD %	
10.0	SILTSTONE - very low to low strength, highly weathered, unbroken, light grey and grey siltstone with 25% to 30% light grey or orange brown, fine grained sandstone laminae. Some extremely low and very low strength bands									
11.0	Below 10.79m: low strength				11.33m J70 smooth planar		C	96	88	PL (A)=0.2MPa
12.0	SILTSTONE - low strength, fresh stained, slightly fractured, black siltstone with 5% fine grained, light grey sandstone laminae				11.70m J47 smooth planar					PL (A)=0.26MPa
13.0	Below 12.55m: medium strength				12.82m J45 smooth planar					PL (A)=1.1MPa
14.0	Below 13.0m: medium to high strength				12.85m J45 smooth planar			73	71	PL (A)=1.0MPa
14.72	Below 14.50m: high strength									PL (A)=1.1MPa PL (A)=1.4MPa
14.8	TEST BORE DISCONTINUED AT 14.80m				14.72m CORE LOSS 60mm					

RIG: SCOUT

DRILLER: G COOPER

LOGGED: JARDINE/FOO

CASING: TO 5.6m

TYPE OF BORING: SFA TO 5.5m ROTARY TO 9.0m NMLC-CORING TO 14.8m

WATER OBSERVATIONS: WATER LEVEL AT 6.6m ON 1/5/03

REMARKS: E = ENVIRONMENTAL SAMPLE, EX = FIELD REPLICATE SAMPLE ZI TAKEN

SAMPLING & IN SITU TESTING LEGEND

A auger sample	PL point load strength I_2 (50)MPa
B bulk sample	S standard penetration test
C core drilling	Ux x mm dia. tube
pp pocket penetrometer (kPa)	V Shear Vane (kPa)

CHECKED:

 Initials: *AW*
 Date: 23/5

Douglas Partners
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TEST BORE REPORT

BORE No: 149

DATE: 29 MAR 03

SHEET 1 OF 2

AZIMUTH:

CLIENT: ATP PRECINCT MANAGEMENT PTY LTD

PROJECT No: 35848

PROJECT: PROPOSED BUILDING DEVELOPMENT

SURFACE LEVEL: 21.8 AHD

LOCATION: AUSTRALIAN TECHNOLOGY PARK, EVELEIGH DIP OF HOLE: 90°

Depth (m)	Description of Strata	Degree of Weathering	Graphic Log	Rock Strength	Discontinuities B - Bedding J - Joint S - Shear D - Drill Break	Fracture Spacing (mm)	Sampling & In Situ Testing				Test Results & Comments
							Sample Type	Core Rec. %	RQD %		
0.05	BITUMEN						E*				
0.10	ROADBASE						E*				
0.80	FILLING - brown, silty gravelly sand filling with brick and concrete fragments and traces of ash/coal						E				
1.20	FILLING - dark brown black, sandy ash and slag filling with brick fragments						E				
	FILLING - red mottled grey, clay filling						E				
	- grey brown, clayey sand with gravels from 1.5m						E				
	- becoming grey clay with brick fragments at 2.1m						E				
	- becoming grey clayey sand filling from 2.6m						E				
	- with clay from 4.0m						E				
4.70	SAND - grey sand						E				
5.75	CLAY - hard, grey mottled red clay, with ironstone gravel						S				
7.15	SHALE - very low to low strength, grey shale						S				15.25/refusal
9.0	SILTSTONE - very low to low strength, highly weathered, unbroken, light grey and grey siltstone with 25% to 30% light grey or orange brown, fine grained sandstone laminæ				9.0m: CORE LOSS 100mm		C	96	86		PL (A)=0.1MPa

RIG: SCOUT

DRILLER: G COOPER

LOGGED: JARDINE/FOO

CASING: TO 5.5m

TYPE OF BORING: SFA TO 5.5m ROTARY TO 9.0m NMLC-CORING TO 14.8m

WATER OBSERVATIONS: WATER LEVEL AT 6.6m ON 1/5/03

REMARKS: E - ENVIRONMENTAL SAMPLE. E* = FIELD REPLICATE SAMPLE ZI TAKEN

SAMPLING & IN SITU TESTING LEGEND

A auger sample	PL point load strength I_s (50)MPa
B bulk sample	S standard penetration test
C core drilling	Ux x mm dia. tube
pp pocket penetrometer (kPa)	V Shear Vane (kPa)

CHECKED:

Initials:

Date: 03/5


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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area A1
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.4 AHD
 EASTING:
 NORTHING:
 DIPI/AZIMUTH: 90°/-

BORE No: 301
 PROJECT No: 43078A
 DATE: 25-May 05
 SHEET 1 OF 2

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
				Type	Depth	Results & Comments	
	0.01	GRASS		A	0.1		Gratic cover
	0.3	FILLING - grey brown sandy clay and gravel filling with a trace of charcoal and organic matter		E	0.3	PID < 10ppm	Benlontite
	0.5	FILLING - brown crushed sandstone filling		A	0.5		
	0.7	FILLING - grey and brown clayey sand filling, with some gravel and a trace of charcoal and plastic		A	1.0	2.2.2 N = 4	
	1.3	FILLING - grey sand/clay/clayey sand filling with a trace of gravel and ash		S	1.45		
	1.7	SILTY SANDY CLAY - soft, mottled light grey, orange and red brown silty sandy clay with some ironstone gravel		E	1.5	PID < 1ppm	
				S	2.5	1.1.2 N = 3	
				E	2.95	PID < 1ppm	
				S	3.0		
				S	4.0	2.1.2 N = 3	
				S	4.45		
	5.3	SILTY CLAY - hard, dark and light grey laminated silty clay (extremely weathered laminites)		S	5.5	9.18.24 N = 42	
	6.0	LAMINITE - very low to low then extremely and very low strength, extremely and highly weathered, light grey and grey brown siltstone and fine grained sandstone, interlaminated		S	5.95		Backfilled with gravel
				S	6.0		Machine slotted PVC screen
	7.0	LAMINITE - low strength, highly weathered, fractured and slightly fractured, light and dark grey and yellow brown siltstone and fine grained sandstone, interlaminated		S	7.0		
	7.1	LAMINITE - low strength, highly weathered, fractured and slightly fractured, light and dark grey and yellow brown siltstone and fine grained sandstone, interlaminated		S	7.28	PL(A) = 0.2MPa	
	7.7	LAMINITE - low to medium strength, slightly weathered, fractured to slightly fractured, dark grey siltstone and light grey and yellow brown fine grained sandstone, interlaminated		C	8.26	PL(A) = 0.3MPa	
		Below 8.89m: medium strength		C	8.85		
	9.0	SILTSTONE - medium strength, slightly weathered, fractured, fractured to slightly fractured and slightly fractured, dark grey siltstone with 5% light grey fine grained sandstone laminae		C	9.18	PL(A) = 0.5MPa	

RIG: Scout

DRILLER: Driver

LOGGED: Jardine/Henrikson

CASING: HQ to 5.7m

TYPE OF BORING: Solid flight auger to 5.50m; Rotary to 6.0m; NMLC-Coring to 14.0m

WATER OBSERVATIONS: No free groundwater observed whilst augering; measured at 5.28m bgl on 17/6/05

REMARKS: *Denotes replicate sample BD2/250505. E = Environmental sample. Standpipe installed

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
S	Bulk sample	SL	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (x50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		F	Water level

CHECKED

Initials: *BE*

Date: 15/7



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BORE No: 301
PROJECT No: 43078A
DATE: 25 May 05
SHEET 2 OF 2

RIG: Scoop DRILLER: Driver LOGGED: Jardine/Henrikson CASING: HQ to 5.7m
TYPE OF BORING: Solid flight auger to 5.50m; Rotary to 6.0m; NMLC-Coring to 14.0m
WATER OBSERVATIONS: No free groundwater observed whilst augering; measured at 5.28m bgl on 17/6/05
REMARKS: *Denotes replicate sample BD2/250505. E = Environmental sample. Standpipe installed



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area A1
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.7 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 315
 PROJECT No: 43078A
 DATE: 26-27 May 05
 SHEET 1 OF 2

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
16.7	0.0	GRASS		A	0.1				Gallic cover
	0.2	FILLING - brown sandy clay filling with some fine gravel		A/E	0.5		PID < 1ppm		Bentonite
	0.7	FILLING - light brown and grey clayey sand filling, with a trace of slag							
		SAND - very loose, grey and brown fine grained sand		A	1.0		1.2, 1 N = 3		
	1.7			S	1.45		PID < 1ppm		
		SILTY CLAY - light brown grey silty clay		E	1.5				
	2.4			E	2.0		PID < 1ppm		
		SILTY CLAY - stiff, light grey and red brown silty clay with some ironstone gravel. Slight hydrocarbon odour			2.5		2.4, 10 N = 14		
	3.2			E	2.95		PID = 34ppm		
		SILTY CLAY - grey brown, red brown and light grey silty clay, with some ironstone gravel. Faint hydrocarbon odour			3.0				
	4.0			F	4.0		PID = 12ppm 5, 13, 18 N = 31		
		SILTY CLAY - very stiff to hard, light grey silty clay (extremely weathered laminite)		S	4.45				
	5.69			E	5.0		PID < 1ppm		
	5.8	LAMINITE - extremely low and low to medium strength, extremely and highly weathered, fractured, dark grey, light grey and orange brown siltstone and fine grained sandstone, interlaminated		C	5.6				
	6.33				5.8				
		SILTSTONE - medium strength, slightly weathered, fractured, dark grey siltstone with 7% light grey fine grained sandstone laminae			6.3		PL(A) = 0.4MPa		
	7.6			C					
		SILTSTONE - medium to high strength, fresh stained fractured and slightly fractured, dark grey siltstone with 5% fine grained sandstone laminae			7.71		PL(A) = 1.1MPa		
	8.5				8.5		PL(A) = 1.1MPa		
	8.8				8.8				
	9.3	SILTSTONE - high strength, fresh, fractured to slightly fractured, dark grey siltstone		C	9.3		PL(A) = 1.4MPa		
									Backfilled with gravel Machine slotted PVC screen
									End case

RIG: Scout

DRILLER: Driver

LOGGED: Jardine/Henrikson

CASING: HQ to 5.6m

TYPE OF BORING: Solid flight auger to 5.60m; NMLC-Coring to 11.80m

WATER OBSERVATIONS: Free groundwater observed at 4.0m during drilling; measured at 2.80m bgl on 17/6/05

REMARKS: E = Environmental sample. Standpipe installed

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Packet penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength ts(50) MPa
V	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water seep
		W	Water level

CHECKED	
Initials:	<i>[Signature]</i>
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area A1
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.7 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 315
 PROJECT No: 43078A
 DATE: 26-27 May 05
 SHEET 2 OF 2

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
10.0		SILTSTONE - high strength, fresh, fractured and slightly fractured, dark grey siltstone			10.5		PL(A) = 1.8MPa	
11				C	11.63		PL(A) = 2.9MPa	
11.8		Bore discontinued at 11.8m			11.8			
12								
13								
14								
15								
16								
17								
18								
19								

RIG: Scout

DRILLER: Driver

LOGGED: Jardine/Henrikson

CASING: HQ to 5.6m

TYPE OF BORING: Solid flight auger to 5.60m; NMLC-Coring to 11.80m

WATER OBSERVATIONS: Free groundwater observed at 4.0m during drilling; measured at 2.80m bgl on 17/6/05

REMARKS: E = Environmental sample. Standpipe installed

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (KPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength ts(50) MPa
W	Water sample	V	Shear Vane (KPa)
C	Core drilling	Δ	Water seep
		▽	Water level

CHECKED	
Initials:	X
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment
 LOCATION: Site B, Australian Technology Park

SURFACE LEVEL: 19.6 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 318
 PROJECT No: 43078A
 DATE: 20 May 05
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Water	Well Construction Details
				Type	Depth	Sample		
19.05	0.05	ASPHALT						Gate and cap
19.0	0.2	FILLING - light brown gravelly silty sand filling, with a trace of clay		E	0.2		PID < 1ppm	
18.5	0.5	FILLING - black ash and gravel filling, with a trace of slag and brick		E/ASS	0.5		PID < 1ppm	
18.0	1.0			E/ASS	1.0		PID < 1ppm	
17.5	1.2	FILLING - grey gravelly sandy clay, with a trace of ash, slag and brick		E/ASS	1.5		PID < 1ppm	
17.0	1.5	FILLING - black ash and gravelly sandy clay filling, with a trace of slag and brick		E/ASS	2.0		PID < 1ppm	
16.5	2.0			E/ASS	2.5		PID < 1ppm	
16.0	2.5			E/ASS	3.0		PID < 1ppm	
15.5	3.0			E/ASS	3.5		PID < 1ppm	
15.0	3.5			E/ASS	4.0		PID < 1ppm	
14.5	4.0			E/ASS	4.5		PID < 1ppm	
14.0	4.3	FILLING - grey and brown silty sand filling with a trace of clay and pockets of dark brown silty peaty clay		E/ASS	5.0		PID < 1ppm	
13.5	5.0			E/ASS	5.5		PID < 1ppm	
13.0	5.2	SILTY CLAY - soft, grey silty clay		E/ASS	6.0		PID < 1ppm	
12.5	5.7	SILTY CLAY - grey mottled red and yellow silty clay, with a trace of ironstone gravel		E/ASS	6.5		PID < 1ppm	
12.0	6.0							
11.5	6.5							
11.0	7.0							
10.5	7.5							
10.0	8.0	Bore discontinued at 8.0m - target depth reached						

RIG: Scout

DRILLER: Cooper

LOGGED: Edwards

CASING: Uncased

TYPE OF BORING: Solid flight auger to 8.0m

WATER OBSERVATIONS: Free groundwater observed at 5.3m during drilling; measured at 5.25m bgl on 17/6/05

REMARKS: E = Environmental sample; ASS = Acid Sulphate Soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
U	Disturbed sample	PID	Photo ionization detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength ls(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		?	Water level

CHECKED	
Initials:	IE
Date:	15/7



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TEST PIT LOG

CLIENT: ATP Partnership Pty Ltd
 PROJECT: ATP-Seven, Area 2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 17.0 ^
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

PIT No: 610A
 PROJECT No: 44050B-4
 DATE: 10 Oct 07
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Dynamic Penetrometer Test (blows per mm)			
				Type	Depth	Sample	Results & Comments				
4	0.05	BRICK PAVEMENT									
		FILLING - grey brown crushed sandstone and silty sand filling with some gravel and bricks		A*	0.1		PID<1ppm				
	0.5	FILLING - grey mottled red clay filling, with some ironstone, sandstone and shale fragments		A	0.5		PID<1ppm				
	1			A	1.0		PID<1ppm				
				A	1.5		PID<1ppm				
	2.0	FILLING - red mottled grey clay and dark grey silty sand filling, with some ash, slag, sandstone fragments and trace bricks		A	2.0						
				A	2.5		PID<1ppm				
	2.8	CLAY - soft, grey mottled yellow clay		A	2.8		PID<1ppm				
				A	2.9						
	3.0	Pit discontinued at 3.3m in clay			3.2						
12	4										
12	5										
11	6										
11	7										
10	8										
10	9										
9	10										
9	11										
8	12										
8	13										
7	14										
7	15										
6	16										
6	17										
5	18										
5	19										
4	20										

RIG: Backhoe

LOGGED: R Lobo

WATER OBSERVATIONS: No free groundwater observed

☐ Sand Penetrometer AS1289.6.3.3REMARKS: *Replicate BDS/101007 & Triplicate BDSA/101007 collected between 0.1-0.5m
^Surveyed by Rygate & Company Pty Ltd☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (60) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	Δ	Water soap
		Σ	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
PROJECT: Contamination Assessment
LOCATION: Site B, Australian Technology Park

SURFACE LEVEL: 21.5 AHD
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: 318A
PROJECT No: 43078A
DATE: 20 May 05
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
9.05	0.05	GRAVEL (roadbase) FILLING - dark grey black gravely silty sand and ash filling, with trace clay							
1.4	1.4	CONCRETE Bore discontinued at 1.5m - refusal on concrete							

RIG: Scout DRILLER: Cooper
TYPE OF BORING: Solid flight auger to 1.5m
WATER OBSERVATIONS: No free groundwater observed
REMARKS:

LOGGED: Edwards

CASING: Uncased

SAMPLING & IN SITU TESTING LEGEND			
A Auger sampler	PO Pocket penetrometer (kPa)		
D Disturbed sample	PID Photo Ionization detector		
B Bulk sample	S Standard penetration test		
U Tube sample (x mm dia.)	PL Point load strength test (kPa)		
W Water sample	V Shear Vane (kPa)		
C Core drilling	W Water level		

CHECKED	
Initials:	✓
Date:	8/8



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment
 LOCATION: Site B, Australian Technology Park

SURFACE LEVEL: 21.6 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 319B
 PROJECT No: 43078A
 DATE: 20 May 05
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.65	GRAVEL (roadbase)						
	FILLING - dark grey black gravelly silty sand and ash filling, with trace clay						
1.4	CONCRETE						
1.6	Bore discontinued at 1.6m - refusal on concrete						
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
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49							
50							

RIG: Scout

DRILLER: Cooper

LOGGED: Edwards

CASING: Uncased

TYPE OF BORING: Solid flight auger to 1.6m

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	cp	Peckel penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	SP	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength test (kPa)
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials: *JB*

Date: 8/8



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment
 LOCATION: Site B, Australian Technology Park

SURFACE LEVEL: 21.3 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 319C
 PROJECT No: 43078A
 DATE: 26 May 05
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
21.3	0.0	GRASS		E	0.1		PID < 1ppm		Galv end cap
	0.4	FILLING - dark grey silty sandy filling with some ash, gravel and slag		E/ASS	0.5		PID < 1ppm		
		FILLING - brown silty sandy clay filling							
	1.1	FILLING - red brown silty clay filling with some sand		E/ASS	1.0		PID < 1ppm		
				E/ASS	1.5		PID < 1ppm		
	2.1	FILLING - light brown fine grained silty sand filling		E/ASS	2.0		PID < 1ppm		
				E/ASS	2.5		PID < 1ppm		Backfill
	3.0	FILLING - brown sandy clay filling, with a trace of ironstone		E/ASS	3.2		PID < 1ppm		
	4.0	FILLING - brown sandy clay/clayey sand filling		E/ASS	4.0		PID < 1ppm		
	4.8	FILLING - red brown sandy clay filling		E/ASS	5.0		PID < 1ppm		
	5.2	SILTY SAND - dark brown fine grained silty sand		ASS	5.5				
	5.75	SILTY SAND - dark brown and light grey fine grained silty sand		ASS	6.0				Bentonite
				ASS	6.3				
	6.5	SAND - yellow fine grained sand							
									Backfilled with gravel
		Below 8.0m: yellow and grey							Machine slotted PVC screen
	8.5	SAND - orange fine grained sand							
	9.2	SANDY CLAY - red brown and dark brown sandy clay							End cap

Bore discontinued at 10.0m

RTG: Scout, DRILLER: Grimmer

LOGGED: Henrikson

CASING: HQ from GL to 10.0m

TYPE OF BORING: Solid flight auger to 10.0m

WATER OBSERVATIONS: Free groundwater observed at 8.5m during drilling; measured at 7.76m bgl on 17/6/05

REMARKS: *Denotes field replicate sample BD1/260505. E = Environmental sample; ASS = Acid Sulphate Soil sample

SAMPLING & IN SITU TESTING LEGEND			
A Auger sample	pp Pocket penetrometer (kPa)		
D Disturbed sample	PID Photo ionisation detector		
B Bulk sample	S Standard penetration test		
U Tube sample (x mm dia.)	PL Point load strength test (50) MPa		
W Water sample	V Shear Vane (kPa)		
C Core drilling	Δ Water seep	W Water level	

CHECKED	
Initials:	K
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment
 LOCATION: Site C1, Australian Technology Park

SURFACE LEVEL: 16.2
 EASTING:
 NORTHING:
 DIPIAZIMUTH: 90°/-

BORE No: 322
 PROJECT No: 43078A
 DATE: 19 May-05
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.04	ASPHALT		E*	0.04		PID < 1ppm	Casement cover
0.4	FILLING - brown gravelly clayey sand filling, with a trace of slag		E*	0.4			Backfill
1.1	FILLING - orange brown silty clay filling, with a trace of sand 0.8-0.9m: sandstone boulder		E	1.0		PID < 1ppm	Bentonite plug
1.8	FILLING - grey silty sandy clay filling, with a trace of gravel		E	1.5		PID < 1ppm	
2.0	FILLING - dark grey silty sand filling with a trace of clay, gravel and scrap metal		E	2.0		PID < 1ppm	2 Backfilled with gravel
2.5			E	2.5		PID < 1ppm	
2.8	SILTY SAND - brown silty sand		E	2.8		PID < 1ppm	
3.2	SAND - yellow brown sand		E	3.5		PID < 1ppm	3 Machine slotted PVC screen
4.0			E	4.0		PID < 1ppm	
4.5	Bore discontinued at 4.5m - target depth reached						End cap

RIG: Scout

DRILLER: Cooper

LOGGED: Edwards

CASING: Uncased

TYPE OF BORING: Solid flight auger to 4.5m

WATER OBSERVATIONS: Free groundwater observed at 3.1m during drilling; measured at 2.90m on 17/6/05

REMARKS: *Denotes field replicate sample BD3/190505
 E = Environmental sample; ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength ts(50) kPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		WL	Water level

CHECKED

Initials: *NE*

Date: 15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.3 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 324
 PROJECT No: 43078A
 DATE: 19 May 05
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Water	Well Construction Details
				Type	Depth	Results & Comments		
	0.1	GRAVEL (roadbase)		E	0.0	PID<1ppm		
	0.5	FILLING - brown gravelly sand and crushed sandstone filling		ASS	0.5	PID=1ppm		
	1.0	FILLING - grey & brown silty clayey sand filling, with ash inclusions and some gravel		E*	1.0	25/0mm refusal		
	1.2	FILLING - slag and railway ballast filling		ASS	1.5	PID<1ppm		
	1.7	FILLING - grey sandy clay filling, with some ash and gravel		E/ASS	2.0	PID<1ppm		
	2.0	SAND - dark brown sand		E/ASS	2.5	PID<1ppm		
	2.0	SAND - light yellow brown and grey white sand		E/ASS	2.5	PID<1ppm		
	2.8	Below 2.5m: loose		S	2.95	PID<1ppm 5,4,5 N=9		
	2.8	SILTY SAND - brown silty sand		E/ASS	3.0	PID<1ppm		
	3.8			E/ASS	3.8	PID<1ppm		
	4.0	Below 4.0m: medium dense		ASS	4.0	4,7,13 N=28 PID<1ppm		
	4.45	Bore discontinued at 4.45m - target depth reached		ASS/S	4.45			

RIG: Scout DRILLER: Cooper

LOGGED: Edwards

CASING: Uncased

TYPE OF BORING: Solid flight auger to 4.0m

WATER OBSERVATIONS: Free groundwater observed at 2.7m

REMARKS: *Denotes replicate sample BD1/190505. E = Environmental sample. ASS = Acid Suphate Soil sample

SAMPLING & IN SITU TESTING LEGEND	
A Auger sample	pp Pocket penetrometer (kPa)
D Disturbed sample	PID Photo Ionisation detector
B Bulk sample	S Standard penetration test
U Tube sample (x mm dia.)	PL Point load strength ls(50) MPa
W Water sample	V Shear Vane (kPa)
C Core drilling	D Water seep
	W Water level

CHECKED	
Initials:	KE
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.5 AHD
 EASTING:
 NORTHING:
 DIPIAZIMUTH: 90°/-

BORE No: 325
 PROJECT No: 43078A
 DATE: 01 Jun 05
 SHEET 1 OF 2

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
				Type	Depth	Results & Comments	
	0.06	ASPHALT		E	0.0	PID<1ppm	
		FILLING - brown silty sand filling, slightly clayey, with concrete, roadbase and slag		A	0.1		
	0.5			E	0.3	PID<1ppm	
	0.66	SANDSTONE BOULDER		A	0.6		
	0.8	FILLING - dark grey brown silty clay filling, with a trace of sand and sandstone gravel		E	0.8	PID<1ppm	
	0.9	FILLING - crushed concrete, sandstone and sand filling		A	1.0	4,27,14 N = 41	
		FILLING - dark grey brown and brown silty sand filling, with some clay, clay nodules, sandstone gravel and coal		S			
					1.45		
				E*	1.6	PID=3ppm	
				A	2.0		
	2.6	SAND - loose to medium dense, grey fine grained sand		S	2.6	4,5,6 N = 11	
				E	2.8	PID<1ppm	
					2.95		
					3.0		
	3.5	SAND - medium dense to dense, dark yellow brown fine grained sand		E	3.8	PID<1ppm	
				S	4.0	8,10,20 N = 38	
					4.45		
					5.5	1,0,2 N = 2	
	5.7	CLAY - soft, grey clay		S	5.95		
	6.5	SILTY CLAY - very stiff, light grey and orange brown silty clay, with some red brown ironstone gravel		S	7.0	7,10,12 N = 22	
					7.45		
	8.0	SILTSTONE - extremely low strength, extremely weathered, light grey siltstone with a trace of decomposed rock		S	8.5	14,25,30/100mm refusal	
					8.8		
						25,25/100mm	

RIG: Scout

DRILLER: L Cooper/Driver

LOGGED: Jardine

CASING: to 5.5m

TYPE OF BORING: Solid flight auger to 5.5m; Rotary with Mud to 11.8m; NMLC-Coring to 17.3m

WATER OBSERVATIONS: Free groundwater observed at 3.30m

REMARKS: *Denotes field replicate sample BD1/010605. E = Environmental sample

SAMPLING & IN SITU TESTING LEGEND	
A	Auger sample
D	Disturbed sample
B	Bulk sample
U	Tube sample (x mm dia.)
W	Water sample
C	Core drilling
gp	Pocket penetrometer (kPa)
PID	Photo ionisation detector
S	Standard penetration test
FL	Point load strength Is(50) MPa
V	Shear Vane (kPa)
W	Water seep
W	Water level

CHECKED	
Initials:	<i>[Signature]</i>
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.5 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 325
 PROJECT No: 43078A
 DATE: 01 Jun 05
 SHEET 2 OF 2

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	10.0	SILTSTONE - extremely low strength, extremely weathered, light grey siltstone with red brown medium strength ironstone bands		S	10.0		refusal		
					10.25				
	11								
				S	11.5		25.50/70mm refusal		
					11.72				
	11.89				11.8				
	12	SILTSTONE - very low to low strength							
	12.0	SILTSTONE - medium strength, moderately to slightly weathered, highly fractured, dark grey and orange brown siltstone with 5% fine grained sandstone. Some clay bands							
	13								
	13.5	Below 13.4m: fresh stained			13.4		PL(A) = 0.5MPa		
					13.5				
	13.85								
	14	SILTSTONE - medium strength, fresh stained, fractured and fractured to slightly fractured, dark grey/black siltstone. Some clay bands		C	14.3		PL(A) = 0.8MPa		
	15								
	15.23	SILTSTONE & SANDSTONE - high strength, slightly weathered, slightly fractured, grey siltstone and light grey and yellow brown fine grained sandstone, interbedded and interlaminated (bedding disturbed by bioturbation)			15.25		PL(A) = 1.2MPa		
					15.3				
	16	15.58-15.78m: medium strength			15.6		PL(A) = 0.7MPa		
	16				16.11		PL(A) = 1.2MPa		
	17				16.67		PL(A) = 1.2MPa		
	17.3	Bore discontinued at 17.3m			17.3				
	18								
	19								

RIG: Scout

DRILLER: L Cooper/Driver

LOGGED: Jardine

CASING: to 5.5m

TYPE OF BORING: Solid flight auger to 5.5m; Rotary with Mud to 11.8m; NMLC-Coring to 17.3m

WATER OBSERVATIONS: Free groundwater observed at 3.30m

REMARKS: *Denotes field replicate sample BD1/010605. E = Environmental sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		W	Water level

CHECKED	
Initials:	<i>[Signature]</i>
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.1 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 326
 PROJECT No: 43078A
 DATE: 2-3 June 05
 SHEET 1 OF 3

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
16.08	0.2	ASPHALT		A/E	0.2		PID<1ppm	
	0.3	FILLING - red brown mottled brown silty clay filling with some gravel		E	0.3		PID<1ppm	
	0.5	FILLING - dark yellow brown medium grained sand filling with some clay, silt, crushed sandstone and blue metal		A	0.5			
	0.8			E*	0.8		PID<1ppm	
1	1.0			A	1.0		12,16,16 N=32	
	1.2	SAND - dense, light grey fine to medium grained sand. Some light brown layers		S	1.3		PID<1ppm	
				P	1.45			
					1.5			
2	2.0			E	2.0		PID<1ppm	
	2.3				2.3		PID<1ppm	
	2.5	Below 2.5m: very loose to loose			2.5		2,2,3 N=5	
	2.8	2.8-2.9m: dark brown, weakly cemented (coffee rock)		S	2.8		PID<1ppm	
3	2.95			E	2.95			
	3.0				3.0			
	3.5			E	3.5		PID<1ppm	
4	4.0	SAND - medium dense, brown fine to medium grained sand		E	4.0		PID<1ppm	
				S			2,2,16 N=24	
	4.45			E	4.45		PID<1ppm	
5	4.5				4.5			
	5.5			S	5.5		6,8,6 N=14	
	5.95				5.95			
6.5	6.5	SILTY CLAY - very stiff, light grey silty clay, with a trace of red brown ironstone						
7	7.0			S	7.0		5,8,12 N=20	
	7.45				7.45			
8	8.5	Below 8.50m: hard, high SPT value maybe due to iron cementation		S	8.5		12,20,26 N=45	
	8.95				8.95			
							10,18,25/100mm	

RIG: Scout

DRILLER: Driver

LOGGED: Jardine/Piambeck

CASING: HQ to 8.6m

TYPE OF BORING: Solid flight auger to 8.60m; Rotary to 12.90m; NMLC-Coring to 20.85m

WATER OBSERVATIONS: Free groundwater observed at 2.5m whilst augering

REMARKS: *Denotes field replicate sample BD2/020605. E = Environmental sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
S	Soil sample	PL	Standard penetration test
U	Tube sample (x mm dia.)	V	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials: *KE*

Date: 15/7



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BOREHOLE LOG

CLIENT: Sydney Broadcast Property Pty Ltd
 PROJECT: ATP - Seven
 LOCATION: Australian Technology Park

SURFACE LEVEL: 21.22 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 401A
 PROJECT No: 44050B
 DATE: 19 Jun 07
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.05	ASPHALT PAVEMENT						Gate cover
0.2	BRICK		A	0.2			
				0.3			
	FILLING - brown crushed sandstone filling, with trace slag		A	0.5			
				1.0			
1.2	FILLING - grey sand filling, with trace gravel		A	1.2			
				1.5			
				2.0			
2.2	FILLING - light yellow brown sand filling (possibly natural)		A	2.5			
				3.0			
3.5	SAND - light brown sand		A	3.5			
				4.0			
				4.5			
			A	5.0			
				5.5			
			A*	6.0			Bentonite
	- moist from 6.5m						Backfilled with gravel
7.5	CLAYEY SAND - dark yellow brown clayey sand			7.6			Machine slotted PVC screen
7.6	SANDY CLAY - grey mottled yellow/orange sandy clay		A**				End cap
8.0	Bore discontinued at 8.0m - target depth reached			8.0			

RIG: Truck

DRILLER: G Cooper

LOGGED: NLE

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling. Groundwater observed at 7.38m bgl on 22/6/07

REMARKS: *Field replicate samples BD1/19060 and **BD2/190607 collected

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		f	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.1 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 326
 PROJECT No: 43078A
 DATE: 2-3 June 05
 SHEET 2 OF 3

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
10.0	10.0	SILTSTONE - extremely low strength, extremely weathered, light grey siltstone		S	10.0		refusal	
	10.4				10.4			
11								
	11.3	Below 11.3m: with red brown ironstone bands		S	11.3		14.25/90mm refusal	
	11.54				11.54			
12								
12.8	12.8	SILTSTONE - very low to low strength, highly weathered, dark grey and orange brown carbonaceous siltstone		S	12.8		25/70mm refusal	
13	13.0	SANDSTONE & SILTSTONE - low to medium and medium strength, highly weathered, fractured, dark grey carbonaceous siltstone and medium grained sandstone interbedded		S	12.87			
	13.5				12.9			
					13.75			
14	14.05	SILTSTONE - medium strength, slightly weathered, slightly fractured and fractured to slightly fractured, grey siltstone with 5% fine grained sandstone. Some low strength bands		C	14.17		PL(A) = 0.4MPa	
	14.8				14.42		PL(A) = 0.2MPa	
15					14.8			
					15.25		PL(A) = 0.4MPa	
16		16.19-16.36m: high strength			16.27		PL(A) = 1.2MPa	
16.58	16.58	SANDSTONE - medium strength, slightly weathered, slightly fractured and fractured to slightly fractured, light grey and yellow brown fine grained sandstone			16.7		PL(A) = 0.9MPa	
17		MITTAGONG FORMATION						
		16.95-17.05m low to medium strength siltstone band			17.48		PL(A) = 1.3MPa	
		Below 17.05m high strength			17.8			
17.8	17.8	SANDSTONE - high strength, slightly fractured, light grey medium and coarse grained sandstone			17.8			
18		HAWKESBURY SANDSTONE			18.42		PL(A) = 1.4MPa	
				C				
19								

RIG: Scout

DRILLER: Driver

LOGGED: Jardine/Plambeck

CASING: HQ to 8.6m

TYPE OF BORING: Solid flight auger to 8.60m; Rotary to 12.90m; NMLC-Coring to 20.85m

WATER OBSERVATIONS: Free groundwater observed at 2.5m whilst augering

REMARKS: *Denotes field replicate sample BD2/020605. E = Environmental sample

SAMPLING & IN SITU TESTING LEGEND			
A Auger sample	pp Pocket penetrometer (kPa)		
D Disturbed sample	PID Photo ionisation detector		
B Bulk sample	S Standard penetration test		
U Tube sample (x mm dia.)	PL Point load strength ls(50) MPa		
W Water sample	V Shear Vane (kPa)		
C Core drilling	W Water soap		Water level

CHECKED	
Initials:	E
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.1 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 326
 PROJECT No: 43078A
 DATE: 2-3 June 05
 SHEET 3 OF 3

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
20.00		SANDSTONE - high strength, slightly fractured, light grey medium and coarse grained sandstone HAWKESBURY SANDSTONE 20.19-20.50m: extremely low strength Below 20.50m: fractured		c	20.05		PL(A) = 1.8 MPa	
20.85		Bore discontinued at 20.85m			20.85			
21								
22								
23								
24								
25								
26								
27								
28								
29								

RIG: Scout

DRILLER: Driver

LOGGED: Jardine/Plambeck

CASING: HQ to 8.6m

TYPE OF BORING: Solid flight auger to 8.60m; Rotary to 12.90m; NMLC-Coring to 20.85m

WATER OBSERVATIONS: Free groundwater observed at 2.5m whilst augering

REMARKS: *Denotes field replicate sample BD2/020605. E = Environmental sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Rockot penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	b	Water seep
		z	Water level

CHECKED

Initials: *JS*

Date: 15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 15.9 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 327
 PROJECT No: 43078A
 DATE: 30 May 05
 SHEET 1 OF 2

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.1	ASPHALT		E*	0.0		PID < 1ppm	
		FILLING - brown fine grained sand filling, with some sandstone gravel		A	0.1			
				A	0.5			
				E	0.8		PID < 1ppm	
	1.0	SAND - dark grey fine grained sand, slightly silty and clayey, with some sandstone gravel		A	1.0		7, 10, 10 N = 20	
	1.1	SAND - medium dense, brown fine grained sand		S				
					1.45			
				E	1.8		PID < 1ppm	
					2.0			
				S	2.2		PID < 1ppm	
					2.3		2, 3, 6 N = 9	
	2.5	SAND - loose, dark grey fine grained sand, slightly silty		S				
					2.85			
				E	3.3		PID < 1ppm	
					3.5			
	4.0	SAND - dense, light brown fine grained sand		S			9, 20, 25 N = 46	
					4.45			
					5.5		4, 6, 22 N = 28	
		Below 5.5m: medium dense		S	5.95			
					7.0		2, 5, 6 N = 11	
	7.0	SILTY CLAY - stiff, light grey and yellow brown silty clay		S				
	7.3	SILTY CLAY - stiff, mottled light grey, orange and red brown silty clay with some ironstone gravel bands			7.45			
					8.5		4, 10, 13 N = 23	
	8.5	SILTY CLAY - very stiff, light grey, light red brown and orange brown silty clay, with ironstone gravel bands		S				
					8.95			
							10, 22, 25/100mm	

RIG: Scout

DRILLER: Grimmer

LOGGED: Jardine/Plambeck

CASING: to 5.5m

TYPE OF BORING: Solid flight auger to 5.5m; Rotary/Mud to 10.0m

WATER OBSERVATIONS: Free groundwater observed at 2.2m whilst augering

REMARKS: *Denotes replicate sample BD1/300505. E = Environmental sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionization detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water seep
		¥	Water level

CHECKED	
Initials:	JE
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 15.9 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 327
 PROJECT No: 43078A
 DATE: 30 May 05
 SHEET 2 OF 2

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	10.4	SILTY CLAY - very stiff, light grey, light red brown and orange brown silty clay, with ironstone gravel bands (continued) Below 10.0m: hard, SPT refusal probably due to ironstone Bore discontinued at 10.4m		S	10.0 10.4		refusal	
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
	19							
	20							
	21							
	22							
	23							
	24							
	25							
	26							
	27							
	28							
	29							
	30							

RIG: Scout

DRILLER: Grimmer

LOGGED: Jardine/Plambeck

CASING: to 5.5m

TYPE OF BORING: Solid flight auger to 5.5m; Rotary/Mud to 10.0m

WATER OBSERVATIONS: Free groundwater observed at 2.2m whilst augering

REMARKS: *Denotes replicate sample BD1/300505, E = Environmental sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pa	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
UL	Tube sample (x mm dia.)	PL	Point load strength ls(50) MPa
WV	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		WL	Water level

CHECKED	
Initials:	AE
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.0 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 328
 PROJECT No: 43078A
 DATE: 31/5-1/6/05
 SHEET 1 OF 3

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details	
				Type	Depth	Sample	Results & Comments		
16	0.1	ASPHALT		A/E	0.0		PID<1ppm		
15.8	0.2	ROADBASE		A	0.1		PID<1ppm		
	0.3	FILLING - brown sandy silty clay filling, with some gravel and roots		E/ASS	0.3		PID<1ppm		
	0.5			A	0.5		PID<1ppm		
	0.8			E/ASS	0.8		PID<1ppm		
15	1.0	FILLING - grey brown silty clay filling, with siltstone and ironstone gravel		A	1.0		5.4.5 N=9		
	1.3			E/ASS	1.3		PID<1ppm		
	1.45				1.45				
14.5	1.5	FILLING - brown silty clay filling			1.5				
	2.0			E/ASS	2.0		PID<1ppm		
	2.5			E/ASS	2.5		PID<1ppm		
	2.8	Below 2.5m: with crushed sandstone		S	2.8		4.6.9 N=15		
	2.95			E/ASS	2.95		PID<1ppm		
	3.0				3.0				
	3.3			E/ASS	3.3		PID<1ppm		
	3.5				3.5				
	4.0			E/ASS	4.0		PID<1ppm		
14	4.0	SAND - medium dense, light brown grey fine grained sand. Some light grey bands		S	4.3		4.7.12 N=18		
	4.45			E/ASS	4.45		PID<1ppm		
	4.5				4.5				
	5.5	Below 5.5m: very dense		S	5.5		13,25,28 N=53		
	5.95				5.95				
	7.0			S	7.0		3.7.8 N=15		
	7.45	SILTY CLAY - stiff to very stiff, light grey mottled red and orange brown silty clay with iron cemented bands			7.45				
	8.5			S	8.5		8,16,28 N=44		
	8.95				8.95				
	8.6	SILTY CLAY - hard, light grey silty clay							
							14,29,25/50mm		

RIG: Scout

DRILLER: Grimmer

LOGGED: Jardine/Plambeck

CASING: HW to 5.5m

TYPE OF BORING: Solid flight auger to 5.50m; Rotary to 13.50m; NMLC-Coring to 20.80m

HQ to 10.5m

WATER OBSERVATIONS: Free groundwater observed at 2.5m whilst augering; measured at 2.63m bgl on 17/6/05

REMARKS: *Denotes replicate sample BD1/310505. Standpipe installed. E = Environmental sample, ASS = Acid Sulphate Soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U _s	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cores drilling	D	Water seep
		W	Water level

CHECKED	
Initials:	15
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh.

SURFACE LEVEL: 16.0 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 328
 PROJECT No: 43078A
 DATE: 31/5-1/6/05
 SHEET 2 OF 3

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	10.0	SILTSTONE - extremely low strength, extremely weathered, light grey siltstone. Exhibits hard clay properties		S	10.0		refusal	
					10.35			
	11							
				S	11.5		15,25/130mm refusal	
					11.75			
	12							
		SILTSTONE - extremely low and very low strength, extremely weathered and highly weathered, grey and dark orange brown siltstone. Some clay bands and low strength bands		S	13.0		11,19,25/100mm refusal	
	13				13.4			
					13.5			
		SILTSTONE - medium strength, very low then extremely low strength, slightly, highly and extremely weathered, grey and light grey siltstone		C	14.05		PL(A) = 0.4MPa	
	14							
	14.55							
		Core loss probably due to clay			14.8			
	15	SILTSTONE - medium strength, slightly weathered, fractured to slightly fractured and slightly fractured, dark grey siltstone and 30% light grey fine grained sandstone. Some very low strength bands						
	14.95							
					15.75		PL(A) = 0.8MPa	
		SANDSTONE - medium then high strength, fresh, unbroken, light grey and grey fine grained sandstone						
	16				16.12		PL(A) = 0.9MPa	
	16.07							
	16.39				16.55		PL(A) = 2.8MPa	
	16.53							
	17	Below 17.0m: slightly weathered MITTAGONG FORMATION						
		SANDSTONE - high strength, fresh, slightly fractured to unbroken, medium grained light grey medium grained sandstone						
	17.3				17.55		PL(A) = 1.2MPa	
					17.8			
		HAWKESBURY SANDSTONE						
	18							
				C	19.2		PL(A) = 1.7MPa	
	19							

RIG: Scout

DRILLER: Grimmer

LOGGED: Jardine/Plambeck

CASING: HW to 5.5m
HQ to 10.5m

TYPE OF BORING: Solid flight auger to 5.50m; Rotary to 13.50m; NMLC-Coring to 20.80m

WATER OBSERVATIONS: Free groundwater observed at 2.5m whilst augering; measured at 2.63m bgl on 17/6/05

REMARKS: *Denotes replicate sample BD1/310505. Standpipe installed. E = Environmental sample. ASS = Acid Sulphate Soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
S	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength 1st(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water ausp
		L	Water level

CHECKED

Initials: *JK*

Date: 15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Contamination Assessment - Area C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.0 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 328
 PROJECT No: 43078A
 DATE: 31/5-1/6/05
 SHEET 3 OF 3

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
20.0		SANDSTONE - high strength, fresh, slightly fractured, medium grained light grey medium grained sandstone HAWKESBURY SANDSTONE		C	20.18		PL(A) = 1.7MPa	
20.8		Bore discontinued at 20.8m			20.8			
21								
22								
23								
24								
25								
26								
27								
28								
29								

RIG: Scout

DRILLER: Grimmer

LOGGED: Jardine/Plambeck

CASING: HW to 5.5m

TYPE OF BORING: Solid flight auger to 5.50m; Rotary to 13.50m; NMLC-Coring to 20.80m

HQ to 10.5m

WATER OBSERVATIONS: Free groundwater observed at 2.5m whilst augering; measured at 2.63m bgl on 17/6/05

REMARKS: *Denotes replicate sample 8D1/310505. Standpipe installed. E = Environmental sample. ASS = Acid Sulphate Soil sample

SAMPLING & IN SITU TESTING LEGEND			
A Auger sample	pp Pocket penetrometer (kPa)		
D Disturbed sample	PID Photo ionisation detector		
B Bulk sample	S Standard penetration test		
U Tube sample (x mm dia.)	PL Point load strength (50) MPa		
W Water sample	V Shear Vane (kPa)		
C Core drilling	W Water seep		

CHECKED	
Initials:	JS
Date:	15/7



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
PROJECT: ATP Site C3
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.0 AHD* BORE No: 403
EASTING: 5.6 PROJECT No: 45231
NORTHING: 28.3 DATE: 23 Nov 07
DIP/AZIMUTH: 90°/--- SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
			Type	Depth	Results & Comments	
0.1	ASPHALT		A	0.1		Grille cover
0.3	FILLING - brown and orange brown clayey sand filling, with fine to medium gravel		A	0.3	PID < 1ppm	
0.5	FILLING - light grey to brown clayey sand filling		A	0.5		
1.1	FILLING - dark grey silty sand filling, with some clay		A	0.8	PID < 1ppm	Bentonite
	SAND - light grey sand		A	1.0	PID < 1ppm	
1.8	SAND - brown sand with some clay		A*	1.5		
2.1	SAND - light brown sand			1.8		
				2.0		
				2.3	PID < 1ppm	
				2.5		
				3.0		Backfilled with sand
3.4	SAND - brown sand		A	3.5		Machine slotted PVC screen
				4.0		
5.0	Bore discontinued at 5.0m - target depth reached					End cap

RIG: Hydra power

DRILLER: Macquarie Drilling

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Auger

WATER OBSERVATIONS: Free groundwater observed at 2.5m

REMARKS: * Relative to BH 326 (16.11 AHD) DP 43087A (2005)

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Packet penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
V	Water sample	V	Sugar Vane (kPa)
C	Core drilling	P	Water temp
		W	Water level

CHECKED	
Initials:	AHP
Date:	24/01/08



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BOREHOLE LOG

CLIENT: Sydney Broadcast Property Pty Ltd
 PROJECT: ATP - Seven
 LOCATION: Australian Technology Park

SURFACE LEVEL: 17.22 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 402A
 PROJECT No: 44050B
 DATE: 20 Jun 07
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.4	FILLING - grey sandy clay filling, with some crushed sandstone, gravel, ash and slag		A*	0.4			Grille cover
1.0			A	1.0			
1.2				1.2			
1.6	SAND - light brown sand						Bentonite
3.5			S	3.5			
3.95				3.95		1,4,21 N = 25	
4.7			A	4.7			
5.0				5.0			
5.7	SILTY CLAY - grey silty clay		A	5.7			Backfilled with gravel
6.0				6.0			
6.3				6.3			
6.7	Bore discontinued at 7.0m - target depth reached			6.7			Machine slotted PVC screen
7.0				7.0			
							End cap

RIG: Truck

DRILLER: G Cooper

LOGGED: NLE

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 3.8m. Groundwater measured at 3.4m on 22/6/07

REMARKS: *Field replicate sample BD1/200607 collected

SAMPLING & IN SITU TESTING LEGEND				
A	Auger sample	DP	Pocket penetrometer (kPa)	
D	Disturbed sample	PID	Photo lenscap detector	
B	Bulk sample	S	Standard penetration test	
U	Tube sample (x mm dia.)	PL	Pocket load strength (kPa)	
W	Water sample	V	Shear Vane (kPa)	
C	Cone drilling	W	Water seep	
			W	Water level

CHECKED	
Initials:	K
Date:	7/9



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BOREHOLE LOG

CLIENT: Sydney Broadcast Property Pty Ltd
PROJECT: ATP - Seven
LOCATION: Australian Technology Park

SURFACE LEVEL: 18.56 AHD
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: 402B
PROJECT No: 44050B
DATE: 21 Jun 07
SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.05	ASPHALT PAVEMENT						
	FILLING - light grey crushed sandstone filling						
1.0	- broke drill bit at 1.0m possibly on ballast or steel		A	0.8			
	FILLING - dark grey sand filling, with some ballast, gravel, wood and trace ash and slag			1.0			
			A	1.5			
2.0	- ash and slag layers			2.0			
			A	2.7			
3.0				3.0			
3.5	SAND - light brown sand						
			A	4.9			
5.0				5.0			Bentonite
			A	5.5			Backfilled with gravel
6.0				6.0			
7.0	SAND - medium dense to dense, orange brown sand		S	7.0		12, 15, 18 N = 30	Machine slotted PVC screen
				7.45			
8.0	SILTY CLAY - grey mottled orange silty clay, with ironstone nodules from approximately 8.3m		S	8.0		1, 3, 6 N = 9	End cap
8.45	Bore discontinued at 8.45m Target depth reached			8.45			

RIG: Truck

DRILLER: G Cooper

LOGGED: NLE

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 4.6m during drilling. Groundwater observed at 4.77m on 22/6/07

REMARKS: Attempted to drill near 402A, refusal in 4 locations at 0.5m

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	PP	Pocket penetrometer (kPa)
D	Disturbed sample	PLD	Photo lens/scale detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (80) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cut-off drilling	D	Water seep
		W	Water level

CHECKED	
In/Out:	✓
Date:	7/9



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BOREHOLE LOG

CLIENT: Sydney Broadcast Property Pty Ltd
 PROJECT: ATP - Seven
 LOCATION: Australian Technology Park

SURFACE LEVEL: 17.36 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 403B
 PROJECT No: 44050B
 DATE: 20 Jun 07
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.0	FILLING - dark grey clayey sand filling, with some ash and slag, wet						Grille cover
1.8	- layer of hard slag (?) between 1.8 and 2.0m						
2.2	FILLING - grey sand filling, with trace ash and slag, moist			2.5			
3.0				3.0			
3.3	SILTY SAND - brown silty sand filling, wet			3.5			Bentonite
4.0			A	4.0			
4.5			A	4.5			
5.0				5.0			
5.5			A	5.5			Backfilled with gravel
5.7				5.7			
6.7			A	6.7			Machine slotted PVC screen
7.3	SILTY CLAY - grey silty clay, slight sulphur odour		A	7.3			End cap
7.5				7.5			
8.0	Bore discontinued at 8.0m - target depth reached						

Rigs: Truck

DRILLER: G Cooper

LOGGED: NLE

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 3.5m during drilling

REMARKS: *Field replicate sample BD3/200607 collected

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo lensation detector
B	Blank sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (x50) MPa
W	Water sample	V	Shrink Value (kPa)
C	Core drilling	D	Water seep
		W	Water level

CHECKED	
Initials:	<i>[Signature]</i>
Date:	7/9



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BOREHOLE LOG

CLIENT: Sydney Broadcast Property Pty Ltd
 PROJECT: ATP - Seven
 LOCATION: Australian Technology Park

SURFACE LEVEL: 17.33 AHD
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 403C
 PROJECT No: 44050B
 DATE: 21 Jun 07
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
			Type	Depth	Results & Comments	
1.0	FILLING - dark gray clayey sand filling, with some ash and slag, moist		A	1.0		Grout cover
2.2	FILLING - grey sand filling, with trace ash and slag, and pockets of clayey sand, moist		A	2.2		Bentonite
3.3	SILTY SAND - brown silty sand		A	3.3		Back-filled with gravel
4.5			A	4.5		Machine slotted PVC screen
5.5	Bore discontinued at 5.5m - target depth reached					End cap

RIG: Truck

DRILLER: G Cooper

LOGGED: NLE

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 3.2m during drilling

REMARKS: *Field replicate sample BD1/210807 collected

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Rockfall penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength test (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		W	Water level

CHECKED	
Initials:	719
Date:	



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BOREHOLE LOG

CLIENT: Redfern-Waterloo Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.18
 EASTING: 14645
 NORTHING: 7570
 DIP/AZIMUTH: 90°/-

BORE No: 501
 PROJECT No: 45253
 DATE: 17 Jan 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
16.18	0.05	ASPHALT		A	0.0				
		FILLING - brown grey silty sand filling, with fine to medium gravel		A	0.1				
				A	0.4				
				A	0.5				
15.0	0.6	FILLING - yellow brown silty sand filling, with some fine to medium gravel, crushed sandstone		A	0.9				
				A	1.0				
13.5	1.3	FILLING - red brown silty sandy clay filling, with some fine to medium gravel, trace ash and slag		A	1.4				
				A	1.5				
12.5	1.7	FILLING - dark grey to brown silty sand filling, trace ash		A	1.9				
				A	2.0				
11.5	2.1	SILTY CLAYEY SAND - grey silty clayey sand		A	2.4				
				A	2.5				
10.5	2.6	SILTY CLAY - brown grey silty clay		A	2.9				
				A	3.0				
9.5	3.1	SILTY CLAYEY SAND - grey silty clayey sand		A	3.9				
				A	4.0				
8.5	4.0	Bore discontinued at 4.0m - target depth reached							

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PLD	Photo location detector
B	Bulk sample	S	Standard penetration test
U	Tubo sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cone drilling	D	Water seep
		W	Water level

CHECKED
Initials: AHP
Date: 18 April 2008



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 15.63
 EASTING: 14648
 NORTHING: 7544
 DIP/AZIMUTH: 90°/-

BORE No: 502
 PROJECT No: 45253
 DATE: 17 Jan 08
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.05	ASPHALT		A	0.0			
0.3	FILLING - brown silty sand filling, with some medium to fine gravel		A	0.4			
	FILLING - yellow brown silty sand filling, with fine to medium gravel, crushed sandstone, some clay inclusion		A	0.5			
1.1	FILLING - grey silty clayey sand filling with fine rounded gravel		A	0.9			
1.3	FILLING - dark grey silty gravelly sand filling, fine to medium gravel, some ash and peat inclusions		A	1.0			
1.6	FILLING - sandstone floaters		A	1.4			
1.8	FILLING - dark brown black silty clay filling, with trace ash and slag		A	1.5			
2.0	SILTY CLAY - red brown and grey silty clay		A	1.9			
2.8	SILTY SAND - grey silty sand		A	2.0			
			A	2.4			
			A	2.5			
			A	2.9			
			A	3.0			
3.4	SILTY SAND - yellow brown silty sand		A	3.4			
			A	3.5			
4.0	Bore discontinued at 4.0m - target depth reached						

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 3.1m

REMARKS: ASS = Acid Sulphate Soil Sample
 No auger recovery at 4.0m (too wet)

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
S	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength ls(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water seep
		≡	Water level

CHECKED
Initials: AHP
Date: 28/04/08



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BORE No: 503
PROJECT No: 45253
DATE: 21 Jan 08
SHEET 1 OF 1

RIG: P160 DRILLER: Macquarie LOGGED: AHP CASING: to 2.0m
TYPE OF BORING: Solid flight auger to 2.0m; Rotary drilling (mud) to 6.0m
WATER OBSERVATIONS: No free groundwater observed during augering
REMARKS: ASS = Acid Sulphate Soil Sample

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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.16
 EASTING: 14654
 NORTHING: 7573
 DIP/AZIMUTH: 90°/-

BORE No: 504
 PROJECT No: 45253
 DATE: 21 Jan 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Water	Well Construction Details
				Type	Depth	Sample	Results & Comments	
16	0.02	ASPHALT		A	0.0			Gate cover Backfill Bentonite
		FILLING - brown and yellow brown silty sand filling, with some fine to medium gravel (crushed sandstone)		A	0.1			
				A	0.4			
				A	0.5			
				A	0.9			
15	0.85	FILLING - sandstone floater		A	1.0			1
	0.95	FILLING - brown silty clayey sand filling, with some fine to medium gravel, crushed sandstone		A	1.3			
				A	1.4			
				A	1.5			
				A	1.6			
14	1.7	FILLING - black silty peaty sand		A	2.0			2
	2.0	SILTY SAND - grey silty sand						
13								3
12								4
11								5
10								6
9								7
8								8
7								9
6	6.0	Bore discontinued at 6.0m - target depth reached						End cap

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: to 2.0m

TYPE OF BORING: Solid flight auger to 2.0m; Rotary drilling (mud) to 6.0m

WATER OBSERVATIONS: No free groundwater observed during augering

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND	
A Auger sample	PP Pocket penetrometer (kPa)
D Disturbed sample	PID Photo ionisation detector
S Bulk sample	S Standard penetration test
U Tube sample (x mm dia.)	PL Point load strength ls(50) MPa
W Water sample	V Shear Vane (kPa)
C Core drilling	W Water seep
	W Water level

CHECKED	
Initials: AHP	
Date: 08/04/08	



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.25
 EASTING: 14659
 NORTHING: 7558
 DIP/AZIMUTH: 90°/-

BORE No: 505
 PROJECT No: 45253
 DATE: 17 Jan 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
16.0	0.0	TOPSOIL - dark brown silty sand filling (topsoil) with fine gravel, some rootlets, landscaped bark, wire		A	0.0				
	0.1	- concrete block encountered at 0.3m to 0.4m		A	0.1				
15.5	0.5	FILLING - dark brown silty sand filling, with clay inclusion		A	0.5				
15.0	0.7			A	0.6				
14.5	0.9	FILLING - brown silty sand filling, with clay, some fine to medium gravel		A	0.9				
14.0	1.1			A	1.0				
13.5	1.4	FILLING - yellow brown silty sand filling, with fine to medium gravel, crushed sandstone		A	1.4				
13.0	1.6			A	1.5				
12.5	1.8	FILLING - red brown silty clay filling, trace fine rounded gravel, slag and charcoal		A	1.8				
12.0	2.0			A	2.0				
11.5	2.4	FILLING - grey brown silty sand filling, trace slag and ash		A	2.4				
11.0	2.5			A	2.5				
10.5	2.6	SILTY CLAYEY SAND - grey brown silty clayey sand		A	2.6				
10.0	2.9			A	2.9				
9.5	3.0			A	3.0				
9.0	3.4			A	3.4				
8.5	3.5			A	3.5				
8.0	3.9			A	3.9				
7.5	4.0	Bore discontinued at 4.0m - target depth reached		A	4.0				

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 2.6m

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U _s	Tube sample (x mm dia.)	PL	Point load strength test (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	▷	Water seep
		W	Water level

CHECKED

Initials: AHP
 Date: 06/04/08



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.19
 EASTING: 14677
 NORTHING: 7542
 DIP/AZIMUTH: 90°/-

BORE No: 508
 PROJECT No: 45253
 DATE: 16 Jan 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
14.08	0.08	ASPHALT		A	0.0			
				A	0.1			
		FILLING - yellow brown silty clayey sand filling, with fine to medium gravel and sandstone		A	0.2			
		- wire encountered		A	0.3			
				A	0.4			
				A	0.5			
				A	0.6			
				A	0.7			
		- grading to light grey		A	0.8			
				A	0.9			
				A	1.0			
				A	1.2			
				A	1.3			
				A	1.4			
				A	1.5			
		FILLING - brown silty clayey sand filling, with fine to medium gravel, ballast, trace ash and slag		A	1.6			
				A	2.0			
		FILLING - black brown silty sand and ballast filling, with some ash and some fine to medium gravel		A	2.4			
				A	2.5			
		SILTY SANDY CLAY - grey silty sandy clay		A	2.9			
				A	3.0			
				A	3.2			
				A	3.3			
		CLAYEY SILTY SAND - grey clayey silty sand		A	3.9			
				A	4.0			
		Bore discontinued at 4.0m						
		- target depth reached						

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 2.7m

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	P	Water seep
		W	Water level

CHECKED	
Initials:	AHP
Date:	06/04/08



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: ATP Site C1 and C2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.53
 EASTING: 14685
 NORTHING: 7585
 DIP/AZIMUTH: 90°/-

BORE No: 507
 PROJECT No: 45253
 DATE: 21 Jan 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
15.5	0.05	ASPHALT		A	0.0				Gatic cover
15.0		FILLING - brown to yellow brown silty clayey sand filling, some fine to medium gravel, crushed sandstone		A	0.1				
				A	0.4				Backfill
				A	0.5				
14.5	0.7	FILLING - grey mottled black silty sand filling, some fine to medium gravel, trace ash and ballast and slag		A	0.9				
14.0	0.9			A	1.0				1 Bentonite
		FILLING - brown silty clayey sand filling with some fine to medium gravel, crushed sandstone, some clay inclusion, trace ash		A	1.4				
				A	1.5				
13.5	1.6	FILLING - dark grey silty sand filling, some fine to medium gravel, trace charcoal		A*	1.8				
				A	1.9				2 Backfilled with gravel
				A	2.0				
13.0	2.5	SAND - grey and yellow brown sand		A	2.4				
				A	2.5				
12.5									4 Machine slotted PVC screen
12.0									
11.5									
11.0									
10.5									
10.0									
9.5									
9.0									
8.5									
8.0									
7.5									
7.0									
6.5									
6.0									6 End cap
5.5		Bore discontinued at 6.0m - target depth reached							
5.0									
4.5									
4.0									
3.5									
3.0									
2.5									
2.0									
1.5									
1.0									
0.5									

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: to 2.5m

TYPE OF BORING: Solid flight auger to 2.5m; Rotary drilling (mud) to 6.0m

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
			Water level

CHECKED	
Initials	AHP
Date	08/01/08



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.18
 EASTING: 14698
 NORTHING: 7554
 DIP/AZIMUTH: 90°/-

BORE No: 508
 PROJECT No: 45253
 DATE: 21 Jan 08
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
			Type	Depth	Sample	Results & Comments
0.05	ASPHALT		A	0.0		Gate cover
	FILLING - yellow brown to brown silty sand filling, with some fine to medium gravel, crushed sandstone, concrete		A	0.1		Backfill
			A	0.4		
			A	0.5		
			A	0.9		Bentonite
			A	1.0		
1.3	FILLING - dark grey silty clayey sand filling, with trace ash, some brick fragments		A	1.4		
1.5	FILLING - grey to light grey silty sand filling, trace charcoal		A	1.5		
			A	1.9		
2.0	SAND - grey and yellow brown sand		A	2.0		
			ASS	4.1		Backfilled with gravel
			ASS	4.5		
			ASS	4.8		Machine slotted PVC screen
			ASS	5.0		
			ASS	5.1		
			ASS	5.5		
			ASS	5.6		
6.0	Bore discontinued at 6.0m - target depth reached		ASS	6.0		End cap

RIG: P160

DRILLER: Macquarie

LOGGED: AMP

CASING: from 2.0m, mud drilling

TYPE OF BORING: Solid flight auger to 2.0m; Rotary drilling (mud) to 6.0m

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		WL	Water level

CHECKED	
Initials:	AMP
Date:	06/04/08



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BOREHOLE LOG

CLIENT: Redfern-Waterloo-Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.17
 EASTING: 14708
 NORTHING: 7559
 DIP/AZIMUTH: 90°/--

BORE No: 509
 PROJECT No: 45253
 DATE: 16 Jan 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
16.05	0.05	ASPHALT		A	0.0				
		FILLING - yellow brown silty clayey sand filling with some fine to medium gravel, sandstone gravel		A	0.1				
				A	0.2				
				A	0.3				
				A	0.9				
				A	1.0				
				A	1.4				
				A	1.5				
	2.0	FILLING - yellow brown silty clayey sand filling, some fine to medium gravel, trace ash and slag		A	2.2				
				A	2.3				
				A	2.4				
				A	2.5				
	2.6	FILLING - brown grey clayey silty sand filling, with some wire, trace rootlets and twigs		A	2.8				
		2.7m: wire frequently encountered at 3.0m		A	3.0				
				A	3.1				
				A	3.4				
				A	3.5				
	4.0	Bore discontinued at 4.0m - target depth reached		A	3.9				
				A	4.0				

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 2.0m

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PiO	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED	
Initials:	AHP
Date:	06/04/08



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BORE No: 510
PROJECT No: 45253
DATE: 17 Jan 08
SHEET 1 OF 1

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BOREHOLE LOG

CLIENT: Redfern-Waterloo-Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.37
 EASTING: 14752
 NORTHING: 7604
 DIPIAZIMUTH: 90°/-

BORE No: 511
 PROJECT No: 45253
 DATE: 18 Jan 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
				Type	Depth	Results & Comments	
	0.05	ASPHALT		A	0.0		Gate cover
		FILLING - yellow brown silty sand filling with fine to medium gravel, some clay inclusion, crushed sandstone		A	0.1		
				A	0.4		Backfill
	0.6	FILLING - dark brown silty sand filling, with fine to medium gravel, some ballast, trace rootlets, trace slag		A	0.5		
				A	0.9		
	1			A	1.0		Bentonite
	1.4	FILLING - grey to light grey silty sand filling, some sandstone, fine gravel		A	1.4		
	1.7	FILLING - dark brown to black, silty peaty sand filling, trace peat inclusion		A	1.5		
				A	1.9		
	2			A	2.0		
				A	2.4		
				A	2.5		
				A	2.8		
				A	3.0		
	3.5	SILTY SAND - yellow grey silty sand					Backfilled with gravel
							Machine slotted PVC screen
	5.0	Bore discontinued at 6.0m - target depth reached					End cap

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: to 2.5m

TYPE OF BORING: Solid flight auger to 2.0m; Rotary drilling (mud) to 6.0m

WATER OBSERVATIONS: Free groundwater observed at 2.5m

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pn	Packet penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water sump
		?	Water level

CHECKED

Initials: *MHP*
 Date: 08/04/08



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CLIENT: Redfern Waterloo Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.22
 EASTING: 14756
 NORTHING: 7596
 DIP/AZIMUTH: 90°/--

BORE No: 512
 PROJECT No: 45253
 DATE: 17 Jan 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
15.02	0.0	ASPHALT		A	0.0			
		FILLING - yellow brown silty sand filling, some fine to medium gravel, crushed sandstone, trace slag fragments		A	0.1			
				A	0.4			
				A	0.5			
15.0	0.0	FILLING - dark grey silty sand filling with ash, some medium gravel		A	0.9			
				A	1.0			
14.5	1.5	FILLING - dark grey silty sand filling, with ash and trace rootlets and trace clay		A	1.4			
				A	1.5			
14.7	1.7	SILTY SAND - light grey mottled dark grey silty sand		A	1.8			
				A	2.0			
14.1	2.1	SILTY PEATY SAND - dark brown silty peaty sand, with fine gravel		A	2.3			
				A	2.5			
				A	2.9			
				A	3.0			
13.1	3.1	SILTY SAND - light grey silty sand		A	3.4			
				A	3.5			
				A	3.9			
12.0	4.0	Bore discontinued at 4.0m - target depth reached		A	4.0			

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 2.6m

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		W	Water level

CHECKED
Initials: MHP
Date: 08/04/08



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: ATP Site CI and CL
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 15.88
 EASTING: 14762
 NORTHING: 7574
 DIP/AZIMUTH: 90°/--

BORE No: 513
 PROJECT No: 45253
 DATE: 17 Jan 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
0.05		ASPHALT		A	0.0			Gate cover
		FILLING - silty sandy filling with fine to medium gravel, crushed sandstone, some organic matter		A	0.1			Backfill
				A	0.4			
				A	0.5			
		FILLING - light grey mottled brown, silty gravelly clay filling with fine to medium gravel, some silty sandy peaty inclusions		A	0.6			
				A	0.7			
				A	0.9			
				A	1.0			Bentonite
		FILLING - brown silty sand filling		A	1.4			
				A	1.5			
		FILLING - dark brown silty peaty sand filling, with some glass and ceramic fragments		A	1.8			
				A	2.0			Backfilled with gravel
		SAND - light grey with some brown sand		A	2.4			
				A	2.5			
				A	2.8			
				A	3.0			
				A	3.4			
				A	3.5			
				A	3.9			
				A	4.0			Machine slotted PVC screen
				A	4.4			
				A	4.5			
				A	4.8			
				A	5.0			
				A	5.4			
				A	5.5			
				A	5.9			
				A	6.0			End cap
	6.0	Bore discontinued at 6.0m - target depth reached						

RIG: P160

DRILLER: Macquarie

LOGGED: AHP

CASING: to 2.0m

TYPE OF BORING: Solid flight auger to 2.0m; Rotary drilling (mud) to 6.0m

WATER OBSERVATIONS: Free groundwater observed at 2.4m

REMARKS: ASS = Acid Sulphate Soil Sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
T	Tube sample (x mm dia.)	PL	Point load strength (s(80) MPa)
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials: AHP

Date: 08/04/08



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.5
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/---

BORE No: 600
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.02	ASPHALT		A	0.1		PID < 1ppm	
0.2	FILLING - grey brown, silty sand filling, fine to medium grained		A	0.2		PID < 1ppm	
			A	0.3		PID < 1ppm	
			A	0.4			
			A	0.5			
0.8	FILLING - dark brown to black, silty sand filling, some fine gravel, slag		A	0.9		PID < 1ppm	
1	FILLING - grey brown, silty sandy clay, fine gravel		A	1.0			
1.8	FILLING - red brown mottled grey, clay filling, some fine to medium gravel		A	1.9		PID < 1ppm	
2			A	2.0			
2.9			A	2.9		PID < 1ppm	
3			A	3.0			
3.7	- becoming red brown at 3.7m		A	3.9		PID < 1ppm	
4			A	4.0			
4.7	CLAY - grey mottled red brown clay, some fine gravel		A	4.8		PID < 1ppm	
5			A	5.0			
5.9	SHALY CLAY - grey shaly clay		A	6.0		PID < 1ppm	
6			A	6.4		PID < 1ppm	
7	- clay becoming moist at 7.1m		A	7.0			
8	Bore discontinued at 8.0m Target depth reached		A	7.9		PID < 1ppm	
8.0			A	8.0			

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A Auger sample
 D Disturbed sample
 B Bulk sample
 U Tube sample (x mm dia.)
 W Water sample
 C Core drilling

pp Pocket penetrometer (kPa)
 PID Photo ionisation detector
 S Standard penetration test
 PL Point load strength Is(50) MPa
 V Shear Vane (kPa)
 b Water seep & Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.4
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 601
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.07	ASPHALT						
	FILLING - brown, gravelly sand filling, fine to medium gravel, roadbase materials		A	0.4 0.5		PID<1ppm	
0.9	FILLING - brown clayey sand filling, some medium gravel		A	0.9 1.0		PID<1ppm	
1.5	FILLING - brown mottled grey, sandy clay filling (moist)		A	1.9 2.0		PID<1ppm	
			A	2.9 3.0		PID<1ppm	
3.5	CLAY - grey clay, some fine gravel (moist)		A	3.9 4.0		PID<1ppm	
4.8	SAND - dark brown, sandy clay, some fine gravel		A	4.9 5.0		PID<1ppm	
	5.5m: as above, becoming grey		A	5.9 6.0		PID<1ppm	
6.5	SHALY CLAY - brown grey shaly clay		A	6.9 7.0		PID<1ppm	
			A	7.9 8.0		PID<1ppm	
8.0	Bore discontinued at 8.0m target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample. Moisture at 3.5m

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
S	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (60) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.7
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 602
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
21.7	0.0	ASPHALT		A	0.0		PID < 1 ppm water added by drier	
21.5	0.3	FILLING - brown sandy gravel filling, fine to medium gravel, trace brown clay inclusions, trace slag		A	0.2			
21.3	0.5	CONCRETE		A	0.4			
21.1	0.8	FILLING - dark brown, silty sand filling with ash		A	0.9		PID < 1 ppm	
20.9		FILLING - brown clay filling, with some fine to medium gravel, ironstone		A	1.0			
20.7				A	1.9		PID < 1 ppm	
20.5				A	2.0			
20.3				A	2.9		PID < 1 ppm	
20.1				A	3.0			
19.9				A	3.9		PID < 1 ppm	
19.7				A	4.0			
19.5				A	4.9		PID < 1 ppm	
19.3				A	5.0			
19.1				A			PID < 1 ppm	
18.9				A	6.0			
18.7				A	6.9		PID < 1 ppm	
18.5				ASS	7.0			
18.3				ASS	7.5			
18.1				A	7.9		PID < 1 ppm	
17.9				ASS	8.0			
17.7	8.0	Bore discontinued at 8.0m - target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x ram dia.)	PL	Point load strength la(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	b	Water seep
		W	Water level

CHECKED	
Initials:	
Date:	



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.6
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 603
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.01	ASPHALT						
	0.2	CONCRETE						
		FILLING - red brown, gravelly silty clay filling, frequent fine to medium gravel, (moist)		A	0.4		PID < 1ppm	
				A	0.5			
				A	0.9		PID < 1ppm	
				A	1.0			
	1.5	FILLING - red brown mottled grey clay filling, some fine gravel, some large ironstone gravel						
				A	1.9		PID < 1ppm	
				A	2.0			
				A	2.9		PID < 1ppm	
				A	3.0			
	3.8	FILLING - grey sandy clay filling, trace rootlets (moist)						
				A	3.8		PID < 1ppm	
				A	4.0			
	4.5	CLAY - red brown mottled grey clay, moist						
				A	4.9			
				A	5.0			
	6.5	CLAY - grey clay, some fine ironstone gravel, (moist)						
				A	6.9		PID < 1ppm	
				A	7.0			
				A	8.9		PID < 1ppm	
				A	7.0			
				A			PID < 1ppm	
	8.0	Bore discontinued at 8.0m target depth reached			8.0			

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: *Denotes field duplicate sample BD1/040808 collected. ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pockel penetrometer (kPa)
D	Disturbed sample	PID	Photo lithiation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		E	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.9
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 604
 PROJECT No: 45627
 DATE: 04 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.0	ASPHALT		A	0.1		PID < 1ppm	
		FILLING - brown silty gravelly sand filling, fine to medium gravel, some clay inclusions, metal washer		A	0.2		PID < 1ppm	
				A	0.4		PID < 1ppm	
	0.8	FILLING - red brown mottled grey, clay filling, some fine to medium gravel		A	0.5		possibly reworked fill	
				A	0.9		PID < 1ppm	
				A	1.0			
	1.6	FILLING - grey clay filling, some fine to medium gravel, brick fragments		A	1.9		PID < 1ppm	
				A	2.0			
	2.8	SAND - grey silty sand, medium grained		A	2.8		PID < 1ppm	
				A	3.0			
	3.4	SAND - orange brown, clayey sand, medium grained, trace fine gravel		A	3.9		PID < 1ppm	
				A	4.0			
	4.6	SHALY CLAY - grey shaly clay		A	4.9		PID < 1ppm	
				A	5.0			
				A	5.9		PID < 1ppm	
				A	6.0			
				A	6.9		PID < 1ppm	
				A	7.0			
	8.0	Bore discontinued at 8.0m target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (< 3mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water soap
			Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.9
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/---

BORE No: 605
 PROJECT No: 45627
 DATE: 04 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
21.9	0.0	ASPHALT		A	0.1		PID < 10 ppm		
21.5	0.4	FILLING - brown gravelly sand filling, fine to medium gravel, some clay inclusions			0.2				
21.0	0.5	CONCRETE							
		Bore discontinued at 0.5m - refusal on concrete							
	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								
	11								
	12								

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	PP	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.9
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: 605A
 PROJECT No: 45627
 DATE: 04 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	0.0	ASPHALT							
	0.5	FILLING - brown gravelly sand filling, fine to medium grained, some clay inclusions		A	0.4 0.5		PID<1ppm		
	0.8	FILLING - light yellow, clayey gravel filling							
	1.0	FILLING - dark brown to black, ash sand filling, glass fragments		A	0.9 1.0		PID<4ppm		
	1.5	FILLING - brown mottled grey, sandy clay filling, some fine to medium gravel							
	2.0			A	1.8 2.0		PID<1ppm		
	3.0			A	2.8 3.0		PID<1ppm		
	3.9	SAND - yellow brown, clayey sand, some ironstone gravel (moist)		A	3.9 4.0		PID<1ppm		
	4.9			A	4.9 5.0		PID<1ppm		
	5.0	SHALY CLAY - grey shaly clay, with some ironstone gravel		A	5.0 5.0		PID<1ppm		
	6.9			A	6.9 7.0		PID<1ppm		
	7.7m	as above, but becoming brown grey							
	8.0	Bore discontinued at 8.0m - target depth reached							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x run dia.)	PL	Point load strength (s(50) MPa)
W	Water sample	V	Shear Vane (kPa)
C	Cone drilling	Δ	Water seep
		W	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.8
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 606
 PROJECT No: 45627
 DATE: 04 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
21.8	0.02	ASPHALT		A	0.1		PID<1ppm	Cable cover
		FILLING - dark brown, clayey gravelly sand filling with ash and slag		A	0.2			
				A	0.4		PID<1ppm	
				A	0.6			
				A	0.9		PID<1ppm	
				A	1.0			
20.3	1.5	FILLING - brown mottled grey, silty clay filling, trace fine gravel (reworked natural materials)		A	1.9		PID<1ppm	Bentonite
				A	2.0			
				A	2.9		PID<1ppm	
				A	3.0			
17.8	3.0	CLAY - grey mottled red clay, some fine to coarse ironstone gravel (moist)		A	3.9		PID<1ppm	
				A	4.0			Backfilled with sand
				A	4.9		PID<1ppm	
				A	5.0			
		- becoming light grey at 6.0m		A	5.9		PID<1ppm	Machine slotted PVC screen
				A	6.0			
				A	6.9		PID<1ppm	
				A	7.0			
14.2	7.6	SHALY CLAY - grey shaly clay (dry)		A	7.9		PID<1ppm	
				A	8.4			
9.0	9.0	Bore discontinued at 9.0m - target depth reached						End cap

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: 3m PVC casing
6m PVC screen

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
UL	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		£	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.8

EASTING:

NORTHING:

DIP/AZIMUTH: 90°/-

BORE No: 607

PROJECT No: 45627

DATE: 04 Aug 08

SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
				Type	Depth	Results & Comments	
0.04		ASPHALT		A	0.1	PID<1ppm	
		FILLING - brown to dark brown, silty gravelly sand filling, fine to medium gravel		A	0.2		
				A	0.4	PID<1ppm	
0.6		FILLING - red brown mottled grey clay filling, some fine to medium ironstone gravel (reworked material)		A	0.5	PID<1ppm	
					1.0		
					1.9	PID<1ppm	
					2.0		
					2.9	PID<1ppm	
					3.0		
3.8		CLAY - grey mottled brown clay		A	3.9	PID<1ppm	
					4.0		
					4.9	PID<1ppm	
					5.0		
					5.9	PID<1ppm	
					6.0		
6.8		SHALY CLAY - grey brown shaly clay, some fine ironstone gravel, becoming extremely weathered shale		A	6.9	PID<1ppm	
					7.0		
					7.9	PID<1ppm	
					8.0		
		Bore discontinued at 8.0m target depth reached					

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: *Denotes field replicate sample BD2/040808 collected
 ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength la(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials:
Date:



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CLIENT: Redfern Waterloo Authority
PROJECT: Lot 12, ATP
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.4
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: 608
PROJECT No: 45627
DATE: 04 Aug 08
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Water	Well Construction Details
				Type	Depth	Sample		
	0.02	ASPHALT		A	0.1			
	0.4	FILLING - brown silty sand filling, with fine to medium gravel		A	0.2			
				A	0.4			
		FILLING - dark brown sandy clay filling, some fine gravel		A	0.5			
				A	0.9			
				A	1.0			
	1.8	FILLING - red brown clay filling, trace fine to medium ironstone gravel		A	1.8			
				A	2.0			
	2.0	FILLING - gray brown sandy clay filling, trace medium ironstone gravel (moist)		A	2.0			
				A	3.0			
	3.8	CLAY - brown grey clay		A	3.8			
				A	4.0			
				A	4.9			
				A	5.0			
		- becoming shaly clay at 6.0m						
				A	6.9			
				A	7.0			
				A	7.9			
	8.0	Bore discontinued at 8.0m target depth reached		A	8.0			

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x met dia.)	PL	Point load strength 1s(50) MPa
V	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water soap
		W	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 808A?
 PROJECT No: 45627
 DATE: 04 Aug 08
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.02	ASPHALT		A	0.1			
	FILLING - dark brown sandy clay filling, with fine to medium gravel		A	0.2			
			A	0.4			
			A	0.5			
			A	0.8			
			A	1.0			
1.8	FILLING - red brown clay filling, trace fine to medium ironstone gravel		A	1.8			
			A	2.0			
2.9	FILLING - red brown sandy clay filling, trace medium ironstone gravel, moist		A	2.9			
			A	3.0			
3.8	CLAY - light grey clay		A	3.8			
			A	4.0			
			A	4.9			
			A	5.0			
			A	5.9			
			A	6.0			
			A	6.9			
			A	7.0			
			A	7.9			
8.0	Bore discontinued at 8.0m - target depth reached		A	8.0			

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A Auger sample
 D Disturbed sample
 B Bulk sample
 U Tube sample (x mm dia.)
 W Water sample
 C Core drilling
 pp Pocket penetrometer (kPa)
 PID Photo ionisation detector
 S Standard penetration test
 PL Point load strength ls(SU) MPa
 V Shear Vane (kPa)
 > Water seep & Water level

CHECKED

Initials:

Date:



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CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.4
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 609
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.03	ASPHALT		A	0.1		PID<10ppm	
	0.3	FILLING - brown sandy gravelly clay filling, fine to medium gravel		A	0.4		PID<10ppm	
		FILLING - brown clayey sand filling			0.6			
	0.9	FILLING - red brown mottled grey clay filling, some fine to coarse gravel		A	0.9		PID<41ppm	
					1.0			
				A	1.8		PID<1ppm	
					2.0		possible reworked natural	
	2.5	SAND - grey silty sand		A	2.9		PID<1ppm	
					3.0			
		3.5m: as above, but becoming orange brown		A*	3.8		PID<1ppm	
					4.0			
	4.5	SHALY CLAY - grey shaly clay		A	4.9		PID<41ppm	
					5.0			
				A	5.9		PID<1ppm	
					6.0			
				A	6.9		PID<1ppm	
					7.0			
				A	7.9			
	8.0	Bore discontinued at 8.0m target depth reached			8.0			

RIG: Multidrill

DRILLER: Tracass

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 6.0m during drilling

REMARKS: *Denotes field replicate sample BD3/060808 collected
 ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Ia(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.3
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 610
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
21.02	0.02	ASPHALT		A	0.1			
21.0	0.4	FILLING - grey brown, silty gravelly sand filling		A	0.2			
20.8	0.8	FILLING - brick rubble		A	0.6		PID < 1 ppm	
20.6	0.9	FILLING - orange brown clay filling, some fine to medium sand		A	0.7		PID < 1 ppm	
20.4		FILLING - brown grey silty clay filling		A	0.9			
20.2	1.5	CLAY - red brown clay, trace fine gravel		A	1.0			
20.0				A	1.5		PID < 1 ppm	
19.8	2.0			A	2.0			
19.6				A	2.9		PID < 1 ppm	
19.4	3.5	CLAY - light grey mottled brown silty clay, some fine gravel, moist		A	3.0			
19.2				A	3.9		PID < 1 ppm	
19.0	4.0			A	4.0			
18.8				A	4.9		PID < 1 ppm	
18.6	5.0			A	5.0			
18.4				A	5.9			
18.2	6.0			A	6.0			
18.0	6.7	CLAY - grey clay with ironstone gravel, low plasticity		A	6.7			
17.8	7.0	CLAY - grey clay, medium plasticity		A	7.0			
17.6				A	7.9			
17.4	8.0	Bore discontinued at 8.0m target depth reached		A	8.0			
17.2								
17.0								
16.8								
16.6								
16.4								
16.2								
16.0								
15.8								
15.6								
15.4								
15.2								
15.0								
14.8								
14.6								
14.4								
14.2								
14.0								
13.8								
13.6								
13.4								
13.2								
13.0								
12.8								
12.6								
12.4								
12.2								
12.0								

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 6.0m during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength 1s(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cone drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



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TEST PIT LOG

CLIENT: ATP Partnership Pty Ltd
 PROJECT: ATP-Seven, Area 2
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 17.0 ^
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

PIT No: 610A
 PROJECT No: 44050B-4
 DATE: 10 Oct 07
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Dynamic Penetrometer Test (blows per mm)			
				Type	Depth	Sample	Results & Comments				
4	0.05	BRICK PAVEMENT									
		FILLING - grey brown crushed sandstone and silty sand filling with some gravel and bricks		A*	0.1		PID<1ppm				
	0.5	FILLING - grey mottled red clay filling, with some ironstone, sandstone and shale fragments		A	0.5		PID<1ppm				
	1			A	1.0		PID<1ppm				
				A	1.5		PID<1ppm				
	2.0	FILLING - red mottled grey clay and dark grey silty sand filling, with some ash, slag, sandstone fragments and trace bricks		A	2.0						
				A	2.5		PID<1ppm				
	2.8	CLAY - soft, grey mottled yellow clay		A	2.8		PID<1ppm				
				A	2.9						
	3.0	Pit discontinued at 3.3m in clay			3.2						
12	4										
12	5										
11	6										
11	7										
10	8										
10	9										
9	10										
9	11										
8	12										
8	13										
7	14										
7	15										
6	16										
6	17										
5	18										
5	19										
4	20										

RIG: Backhoe

LOGGED: R Lobo

WATER OBSERVATIONS: No free groundwater observed

☐ Sand Penetrometer AS1289.6.3.3REMARKS: *Replicate BDS/101007 & Triplicate BDSA/101007 collected between 0.1-0.5m
^Surveyed by Rygate & Company Pty Ltd☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (60) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	Δ	Water soap
		Σ	Water level

CHECKED
Initials:
Date:



Douglas Partners
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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.4
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: 611
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
				Type	Depth	Results & Comments	
21.4	0.02	ASPHALT		A	0.1	PID<1ppm	
21.3	0.3	FILLING - brown silty sand filling, with frequent fine to medium gravel		A	0.2		
21.2				A	0.4	PID<1ppm	
21.1	0.7	FILLING - dark brown to black, silty sand filling, fine to medium gravel, some light grey clay inclusions		A	0.5		
21.0	1.1	FILLING - dark red brown clay filling, some coarse sand		A	0.9	PID<1ppm	
20.9		CLAY - brown clay clay, some fine to medium ironstone gravel, trace medium sand			1.0		
20.8				A	1.9	PID<1ppm	
20.7					2.0		
20.6				A	2.9	PID<1ppm	
20.5					3.0		
20.4	3.5	CLAY - light brown clay, some ironstone gravel (wet)					
20.3				A	3.9	PID<1ppm	
20.2					4.0		
20.1				A	4.9	PID<1ppm	
20.0					5.0		
19.9	5.5	CLAY - light grey clay, trace coarse sand (moist)					
19.8				A	5.9	PID<1ppm	
19.7					6.0		
19.6	6.5	CLAY - grey clay					
19.5				A	6.9	PID<1ppm	
19.4					7.0		
19.3				A	7.9	PID<1ppm	
19.2	8.0	Bore discontinued at 8.0m - target depth reached			8.0		

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 4.0m during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionization detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cone drilling	>	Water seep
		W	Water level

CHECKED	
Initials:	
Date:	



Douglas Partners
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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.9
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 612
 PROJECT No: 45627
 DATE: 07 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.4	FILLING - topsoil, dark brown to black, silty sandy gravel filling, trace rootlets, trace ash and slag, some large gravel and pale grey clay inclusions, 50mm diameter metal washer		A	0.1		PID<1ppm	
				A	0.2			
				A	0.4		PID<1ppm	
				A	0.5			
	1	FILLING - as above, excluding large gravel		A	0.9		PID<1ppm	
				A	1.0			
	2			A	1.9		PID<1ppm	
				A	2.0			
	3			A	2.9		PID<1ppm	
				A	3.0			
		- becoming moist at 3.4m						
	3.5	SHALY CLAY - grey clay						
	4			A	3.8		PID<1ppm	
				A	4.0			
	5			A	4.8		PID<1ppm	
				A	5.0			
	6			A	5.9		PID<1ppm	
				A	6.0			
		- moist at 6.5m						
	7	7.0m: as above, frequent small to medium gravel		A	6.9			
				A	7.0			
	8	Bore discontinued at 8.0m - target depth reached		A	7.9			
				A	8.0			
	9							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 22.0
 EASTING:
 NORTHING:
 DIP/azimuth: 90°/-

BORE No: 613
 PROJECT No: 45627
 DATE: 07 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
22.0	0.0	FILLING - dark brown to black, silty gravelly clayey sand filling, with fine to medium gravel, some ceramics, glass, trace rootlets. Grass at surface		A	0.1		PID<1ppm	
	0.2			A	0.2		PID<1ppm	
	0.4			A	0.4		PID<1ppm	
	0.5			A	0.5		PID<1ppm	
21.0	1.0			A	0.9		PID<1ppm	
	1.0			A	1.0		PID<1ppm	
	1.4	SILTY CLAY - grey brown silty clay, trace fine to medium gravel		A	1.4		PID<1ppm	
	1.5			A	1.5		PID<1ppm	
20.0	2.0			A	1.9		PID<1ppm	
	2.0			A	2.0		PID<1ppm	
19.0	3.0	CLAY - orange brown clay, trace fine gravel		A	2.9		PID<1ppm	
	3.0			A	3.0		PID<1ppm	
18.0	4.0	SHALY CLAY - grey brown shaly clay		A	3.9		PID<1ppm	
	4.0			A	4.0		PID<1ppm	
17.0	5.0	Bore discontinued at 8.0m target depth reached		A	4.9		PID<1ppm	
	5.0			A	5.0		PID<1ppm	
16.0	6.0			A	5.9		PID<1ppm	
	6.0			A	6.0		PID<1ppm	
15.0	7.0			A	6.9		PID<1ppm	
	7.0			A	7.0		PID<1ppm	
14.0	8.0			A	7.9		PID<1ppm	
	8.0			A	8.0		PID<1ppm	

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
C	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	Δ	Water seep
		▽	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 21.9
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/—

BORE No: 614
 PROJECT No: 45627
 DATE: 07 Aug 08
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.06	FILLING - TOPSOIL		A	0.1		PID < 1ppm	
			A	0.2			
			A	0.4		PID < 1ppm	
			A	0.5			
	- white sand encountered between 0.8 to 0.85m		A	0.9		PID < 1ppm	
			A	1.0			
			A	1.8		PID < 1ppm	
	- as above, with grey clay from 1.9m		A	2.0			
			A	2.9		PID < 1ppm	
			A	3.0			
3.0	FILLING - grey brown silty clay filling, some fine gravel, moist		A	3.9		PID < 1ppm	
			A	4.0			
4.5	CLAY - orange brown clay with some grey mottling, moist, trace fine ironstone gravel		A	4.9		PID < 1ppm	
			A	5.0			
			A	5.9		PID < 1ppm	
			A	6.0			
6.5	CLAY - brown gray clay (moist)		A	6.9		PID < 1ppm	
			A	7.0			
			A	7.8		PID < 1ppm	
			A	8.0			
8.0	Bore discontinued at 8.0m target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (s(50) MPa)
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		W	Water level

CHECKED	
Initials:	
Date:	



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 22.1
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 615
 PROJECT No: 45627
 DATE: 07 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
N		FILLING - topsoil, clayey gravelly filling, fine to medium gravel, some large gravel		A	0.1			
				A	0.2			
				A	0.3			
				A	0.4			
	0.5	Bore discontinued at 0.5m - refusal on rubble						
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		\$	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 22.0
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 615A
 PROJECT No: 46627
 DATE: 07 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
R-0		FILLING - dark brown to black, silty sandy clay filling, trace rootlets with fine to medium gravel, some brick fragments, ash and slag		A	0.1		PID < 10ppm			Gate cover
				A	0.2					
				A	0.4		PID < 10ppm			
				A	0.5					
R-1	0.9	FILLING - dark brown to black, silty sand filling with ash and slag		A	0.9		PID < 40ppm			Backfill
				A	1.0					
R-2	1.0	FILLING - gray brown, silty clayey sand filling		A	1.9		PID < 1ppm			Bentonite
				A	2.0					
R-3				A	2.0		PID < 1ppm			
				A	3.0					
R-4	3.5	CLAY - light grey brown clay, medium plasticity		A	3.9					Backfilled with sand
				A	4.0					
R-5	4.4	CLAY - dark grey to brown, silty clay, low plasticity (moist)		A	4.9					
				A	5.0					
R-6				A	5.9					Machine slotted PVC screen
				A	6.0					
R-7	6.4	SHALY CLAY - grey shaly clay		A	6.9		PID < 1ppm			
				A	7.0					
R-8				A	7.9		PID < 1ppm			End cap
				A	8.0					
R-9	9.0	Bore discontinued at 9.0m - target depth reached								

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water snap
		%	Water level

CHECKED

Initials:

Date:



Douglas Partners
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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.9
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/---

BORE No: 616
 PROJECT No: 45627
 DATE: 05 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.02	ASPHALT		A	0.1		PID<1ppm	
	0.4	FILLING - brown silty sand filling, with fine to medium gravel, metal bolt		A	0.2			
		FILLING - dark brown, silty sand filling, some fine gravel, brick fragments, trace clay inclusions		A	0.4		PID<1ppm	
				A	0.5			
	1.0			A	0.9		PID<1ppm	
				A	1.0			
	1.8	CLAY - grey brown sandy clay (moist)		A	1.8		PID<1ppm	
				A	2.0			
	3.0			A	2.9		PID<1ppm	
				A	3.0			
	3.8	SHALY CLAY - light to dark grey shaly clay		A	3.9		PID<1ppm	
				A	4.0			
	5.0			A	4.9		PID<1ppm	
				A	5.0			
	6.0			A	5.9		PID<1ppm	
				A	6.0			
	7.0	- wet at 7.0m		A	6.9			
				A	7.0			
	8.0	Bore discontinued at 8.0m - target depth reached		A	7.9			
				A	8.0			

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x rim dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water soap
		W	Water level

CHECKED
Initials:
Date:



Douglas Partners
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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.6
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: 618
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
0.02		ASPHALT		A	0.1		PID < 1ppm	
				A	0.2			
	0.4	FILLING - brown silty sand filling, some fine gravel, trace wood inclusions		A	0.4		PID < 1ppm	
				A	0.5			
		FILLING - dark brown silty sand filling, some fine sandstone gravel, trace clay inclusions			0.9		PID < 1ppm	
				A	1.0			
		- becoming moist at 1.5m						
	1.6	CLAY - orange brown clay (moist)		A	1.9		PID < 1ppm	
				A	2.0			
	2.8	CLAY - orange grey mottled grey clay (moist)		A	2.9		PID < 1ppm	
				A	3.0			
	3.4	SHALY CLAY - grey brown shaly clay with soft light grey clay inclusions			3.9		PID < 1ppm	
				A	4.0			
					4.9		PID < 1ppm	
				A	5.0			
	5.4	SHALY CLAY - grey shaly clay (dry)			5.9		PID < 1ppm	
				A	6.0			
					6.9		PID < 1ppm	
				A	7.0			
					7.9		PID < 1ppm	
				A	8.0			
	8.0	Bore discontinued at 8.0m target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling. Minor seepage at 1.5m

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Pokl load strength Is (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water seep ? Water level

CHECKED

Initials:

Date:



Douglas Partners
 Geotechnics • Environment • Groundwater

BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.8
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: 619
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
16.8	0.2	ASPHALT		A	0.1		PID<1ppm	Gable cover
		FILLING - grey brown to brown, silty sand filling, some orange brown clay inclusions, some fine to medium gravel		A	0.2			Backfill
				A	0.4		PID<1ppm	
				A	0.5			
				A	0.9		PID<1ppm	
				A	1.0			
				A	1.2		metallic colour at 1.2m	
	1.5	CLAY - grey mottled red brown clay, trace rootlets, trace sand		A	1.9		PID<1ppm	
				A	2.0			
				A	2.8		PID<1ppm	
				A	4.0			
	3.5	SHALY CLAY - brown shaly clay		A	3.9		PID<1ppm	
				A	4.0			4 Backfilled with sand
				A	4.9		PID<1ppm	
				A	5.0			5 Sand from 0.5-0.9m. Hole collapsed before bentonite could be added
	5.5	SHALY CLAY - dark grey shaly clay (dry)		A	5.9		PID<1ppm	
				A	6.0			6 Machine slotted PVC screen
				A	6.9			
				A	7.0			7
				A	7.9		7.0m: drilling getting harder	
	8.1	SAND - brown to yellow brown sand (dry)						
	9.0	Bore discontinued at 9.0m - target depth reached						8 End cap

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: 3m PVC casing
6m PVC screen

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 7.0m during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength test (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		f	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: 620
 PROJECT No: 45627
 DATE: 05 Aug 08
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.02	ASPHALT						
0.4	FILLING - clayey gravel filling		A	0.3			
0.6	CONCRETE			0.4			
1.5	FILLING - brown silty sand filling, metal bolt, river rock, sheet metal, fibre shed						
1.5	Bore discontinued at 1.5m - refusal						
2							
3							
4							
5							
6							
7							
8							
9							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Not recorded

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength ls(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cora drilling	P	Water seep
		W	Water level

CHECKED

Initials:

Date:



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CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 16.8
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: 620A
 PROJECT No: 45627
 DATE: 06 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
16.8	0.05	ASPHALT		A	0.1			
		FILLING - brown silty clay sand filling		A	0.2			
	0.4	FILLING - grey brown sandy clay filling, frequent fine gravel		A	0.4			
				A	0.5			
15.8	0.8	FILLING - dark grey clay filling, moist, with some fine to medium grained sand		A	0.8			
				A	1.0			
14.7	1.7	CLAY - grey brown clay, some extremely weathered shale bands		A	1.9		PID<1ppm	
		- becoming grey brown mottled		A	2.0			
				A	2.9		PID<1ppm	
				A	3.0			
13.5	3.5	CLAY - brown clay, dry		A	3.9		PID<1ppm	
				A	4.0			
				A	4.9		PID<1ppm	
				A	5.0			
11.5	5.5	CLAY - grey clay, very soft, (wet), some coarse sand and fine gravel		A	5.9		PID<1ppm	
				A	6.0			
				A	6.9			
				A	7.0			
				A	7.9			
	8.0	Bore discontinued at 8.0m larger depth reached		A	8.0			

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 6.5m during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shane Vane (kPa)
C	Core drilling	>	Water seep
		%	Water level

CHECKED

Initials:

Date:



Douglas Partners
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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 17.8

BORE No: 621

EASTING:

PROJECT No: 45627

NORTHING:

DATE: 05 Aug 08

DIP/AZIMUTH: 90°/-

SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
17.0	0.0	ASPHALT						
16.8	0.2	GRAVEL ROADBASE						
16.6	0.4	METAL SHEETING						
16.4	0.7	CONCRETE						
16.2		Bore discontinued at 0.7m - refusal on rubble and metal sheet						
16.0								
15.8								
15.6								
15.4								
15.2								
15.0								
14.8								
14.6								
14.4								
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0.8								
0.6								
0.4								
0.2								
0.0								

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: 150mm diacore to 0.7m

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:


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BORE No: 621A
PROJECT No: 45627
DATE: 07 Aug 08
SHEET 1 OF 1

RIG: Multidrill DRILLER: Tracessa LOGGED: AHP CASING: Uncased

TYPE OF BORING:

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: Re-drill. ASS = Acid sulphate soil sample

CHECKED
Initials:
Date:



Douglas Partners
Geotechnics • Environment • Groundwater

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 17.8
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: 621B
 PROJECT No: 45627
 DATE: 07 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.03	ASPHALT		A	0.1		PID<1ppm	
	0.3	FILLING - silty clayey sand, brown filling, some fine gravel, metal bolt		A	0.2			
		FILLING - orange brown sandy clay filling		A	0.4		PID<1ppm	
				A	0.5			
	1.7			A	0.9		PID<1ppm	
				A	1.0			
	1.6	FILLING - dark brown silty sand filling (moist)		A	1.9		PID<1ppm	
				A	2.0			
	2.7	FILLING - dark grey clay filling (moist), trace fine rounded gravel		A	3.9		PID<1ppm	
				A	5.0			
	3.5	SHALY CLAY - grey shaly clay (dry)		A	3.9		PID<1ppm	
				A	4.0			
				A	4.9		no PID bag very similar to (3.9-4.0m)	
				A	5.0			
	5.9	SHALY CLAY - brown shaly clay (dry)		A	5.9		PID<1ppm	
				A	6.0			
				A	6.9		PID<1ppm	
				A	7.0			
	7.5	CLAY - dark grey clay, trace fine angular gravel (moist)					PID<1ppm	
	8.0	Bore discontinued at 8.0m target depth reached			8.0			

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
S	Soil sample	S	Standard penetration test
PL	Point load sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
			Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 17.7
 EASTING:
 NORTHING:
 DIPIAZIMUTH: 90°/-

BORE No: 622
 PROJECT No: 46627
 DATE: 05 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
0.06	0.1	ASPHALT & CONCRETE		A	0.2		PID=6ppm	
		BRICK RUBBLE		A	0.3		PID<1ppm	
		FILLING - dark brown to black, silty sand filling with sash and some coarse brick fragments, some grey brown clay inclusion, slag		A	0.4			
				A	0.5			
				A	0.9		PID=11ppm	
				A	1.0			
	1.2	FILLING - brown to red brown silty sand filling, fine to medium grained sand, some fine to medium gravel, slag		A	1.3		PID=21ppm	
				A	2.0			
				A	2.9		PID<1ppm	
				A	3.0			
	3.1	SAND - light brown clayey sand, trace fine gravel (moist)		A	3.9		PID<1ppm	
				A	4.0			
	4.8	CLAY - light grey clay (moist)		A	4.9		PID<1ppm	
				A	5.0			
				A	5.9		PID=2ppm	
				A	6.0			
	6.0	SHALY CLAY - gray brown shaly clay (dry)		A	6.9		PID<1ppm	
				A	7.0			
				A	7.9		PID<1ppm	
				A	8.0			
	8.0	Bore discontinued at 8.0m - target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: 150mm diacore to 0.06m; Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 6.0m during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (s(60) MPa)
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
PROJECT: Lot 12, ATP
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 17.75
EASTING:
NORTHING:
DIPIAZIMUTH: 90°/-

BORE No: 623
PROJECT No: 46627
DATE: 05 Aug 08
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
				Type	Depth	Results & Comments	
0.15	0.2	ASPHALT & CONCRETE					Gate cover
0.2	0.45	ROADBASE					
0.45		SANDSTONE & CONCRETE FOOTING					
		FILLING - dark brown to black, silty sand filling, trace fine gravel		A	0.9 1.0	PID < 1ppm	Backfill
				A	1.9 2.0	PID < 1ppm	Benlonite
		2.5m: as above, becoming grey		A	2.9 3.0	PID < 1ppm	
				A	3.9 4.0	PID < 1ppm	Backfilled with sand
		CLAY - red brown clay with medium grained sand (moist)		A	4.9 5.0		
		CLAY - gray mottled red clay		A	5.9 6.0	PID < 1ppm	Machine slotted PVC screen
		CLAY - grey clay with trace medium grained sand		A	6.9 7.0	PID < 1ppm	
		- moist from 7.0m		A	7.9 8.0	PID < 1ppm	
				A	8.9 9.0		End cap
		Bore discontinued at 9.0m - target depth reached					

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: 3m PVC casing
6m PVC screen

TYPE OF BORING: 150mm dia core to 0.45m then solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
UL	Tube sample (x mm dia.)	PL	Point load strength ls(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED
Initials:
Date:



Douglas Partners
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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 17.6
 EASTING:
 NORTHING:
 DIP/azimuth: 90°/-

BORE No: 624
 PROJECT No: 45627
 DATE: 05 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
17.03	0.03	ASPHALT						
17.02	0.2	COARSE GRAVEL & SANDSTONE		B	0.3			
17.00	0.6	FILLING - dark brown to black, clayey gravel filling			0.5			
16.98		FILLING - dark brown and black, silty sand filling with ash			0.9			
16.96				A	1.0			
16.94	1.5	FILLING - grey brown clay filling						
16.92				A	1.9			
16.90					2.0			
16.88	2.7	CLAY - orange brown mottled grey shaly clay (moist)						
16.86				A	2.9			
16.84				3.0				
16.82								
16.80								
16.78								
16.76								
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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Lot 12, ATP
 LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 17.7
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: 625
 PROJECT No: 45627
 DATE: 05 Aug 08
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
				Type	Depth	Results & Comments	
17.17	0.17	ASPHALT & CONCRETE		A	0.2	PID<1ppm	
		FILLING - dark brown, silty sand filling with ash and slag, some dark grey clay inclusion		A	0.3	PID<2ppm	
				A	0.4		
				A	0.5		
				A	0.9	PID=4ppm	
				A	1.0		
17.18	1.8	SAND - brown silty clayey sand, medium grained (moist)		A	1.8	PID<1ppm	
				A	2.0		
17.22	2.2	CLAY - grey sandy clay (moist), trace fine gravel					
				A	2.9	PID<1ppm	
				A	3.0		
17.35	3.5	SHALY CLAY - grey brown shaly clay, dry					
				A	3.8	PID=1ppm	
				A	4.0		
				A	4.8	PID<1ppm	
				A	5.0		
				A	5.8		
				A	6.0		
				A	6.8		
				A	7.0		
		- as above, becoming grey at 7.5m					
				A	7.8	PID<1ppm	
				A	8.0		
		Bore discontinued at 8.0m target depth reached					

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: 150mm diameter diacore to 0.17m; Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
UL	Tube sample (x mm dia.)	PL	Point load strength ls(SO) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water soap
		W	Water level

CHECKED
Initials:
Date:



Douglas Partners
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CLIENT: Redfern Waterloo Authority
PROJECT: Lot 12, ATP
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: 17.7
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: 626
PROJECT No: 45627
DATE: 05 Aug 08
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
17.17	0.17	ASPHALT & CONCRETE		A	0.2		PID=6ppm			
17.4	0.4	FILLING - dark brown silty sand filling, with pale grey clay inclusions, ash and slag, some fine gravel		A	0.3					
		FILLING - brown silty sand filling, ash and slag, some fine to medium gravel		A	0.4					
				A	0.5					
	1			A	0.9		PID=5ppm			
				A	1.0					
	1.8	FILLING - brown grey clayey sand filling, some fine to medium gravel (moist)		A	1.9		PID=12ppm			
				A	2.0					
				A	2.9		PID<1ppm			
				A	3.0					
	3.5	CLAY - light grey clay (moist), trace medium ironstone gravel (moist)		A	3.9		PID<1ppm			
				A	4.0					
				A	4.9		PID<1ppm			
				A	5.0					
				A	5.9		PID<1ppm			
				A	6.0					
				A	6.9		PID<1ppm			
				A	7.0					
	8.0	Bore discontinued at 8.0m target depth reached								

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: 150mm diacore to 0.17m then solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS: ASS = Acid sulphate soil sample

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		WL	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: C1
 PROJECT No: 45627.01
 DATE: 20 Jan 09
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.01	ASPHALT		A	0.1			
	FILLING - brown silty gravelly sand filling, trace ash and slag		A	0.2			
			A	0.5			
			A	0.9			
1.2	CLAY - red clay		A	1.5			
			A	2.0			
2.1	CLAY - brown clay		A	2.5			
			A	3.0			
3.3	SAND - dark grey to grey sand		A	3.3			
3.5	SANDY CLAY - red brown, sandy clay		A	3.5			
			A	4.0			
4.0	Bore discontinued at 4.0m - target depth reached						
6							
8							
10							
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							
36							
38							
40							
42							
44							
46							
48							
50							
52							
54							
56							
58							
60							
62							
64							
66							
68							
70							
72							
74							
76							
78							
80							
82							
84							
86							
88							
90							
92							
94							
96							
98							
100							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (60) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cave drilling	D	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: C2
 PROJECT No: 45627.01
 DATE: 20 Jan 09
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.0	ASPHALT						
	ROADBASE						
0.8	FILLING - brown mottled grey, clay filling, some fine to medium gravel		A	0.8			
1.0				1.0			
1.3	CLAY - grey clay						
1.8	SANDY CLAY - red brown, sandy clay						
2.3	SAND - brown to grey brown sand						
4.0	Bore discontinued at 4.0m - target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionization detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (a(50) MPa)
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED
Initials:
Date:



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BORE No: C3
PROJECT No: 45627.01
DATE: 20 Jan 09
SHEET 1 OF 1

RIG: Multidrill DRILLER: Traccess LOGGED: AHP CASING: Uncased
TYPE OF BORING: Solid flight auger
WATER OBSERVATIONS: No free groundwater observed during drilling
REMARKS:

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority SURFACE LEVEL: -- BORE No: C5
 PROJECT: Grid Sampling of Hazardous & Restricted Waste EASTING: PROJECT No: 45627.01
 LOCATION: Lot 12, Australian Technology Park, Eveleigh NORTHING: DATE: 21 Jan 09
 DIP/AZIMUTH: 90°/-- SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.04	ASPHALT			0.0					
		FILLING - dark brown, sandy gravelly clay filling, trace ash and slag		A						
	1.1	FILLING - dark brown to black, silty gravelly sand filling		A	1.0 1.1					
	1.7	CLAY - pale brown clay		A	1.5					
	2.3	CLAY - grey clay (wet)		A	2.0 2.5					
	3.0	Bore discontinued at 3.0m - target depth reached		A	3.0					

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A Auger sample
 D Disturbed sample
 B Bulk sample
 U Tube sample (x mm dia.)
 W Water sample
 C Core drilling

pp Pocket penetrometer (kPa)
 PLO Photo lithiation detector
 S Standard penetration test
 PL Point load strength (kPa) MPa
 V Shear Vane (kPa)
 > Water seep
 & Water level

CHECKED

Initials:

Date:



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CLIENT: Redfern Waterloo Authority
PROJECT: Grid Sampling of Hazardous & Restricted Waste
LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/---

BORE No: C6
PROJECT No: 45627.01
DATE: 21 Jan 09
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
0.07	0.08	ASPHALT						
0.12		FILLING - gravel roadbase			0.2			
		CONCRETE		A	1.0			
1.3		FILLING - black, silty sand filling, trace slag and ash, some fine gravel, building rubble			1.4			
				A	1.6			
2		CLAY - pale grey to pale brown clay						
		- becoming more consistently grey at 2.2m						
3	3.0	Bore discontinued at 3.0m - target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AMP

CASING: Uncased

TYPE OF BORING: Diatube to 0.12m; Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: D1
 PROJECT No: 45627.01
 DATE: 20 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.03	ASPHALT		A	0.1			
		FILLING - dark brown to black, silty gravelly sand filling		A	0.2			
				A	0.5			
				A	0.8			
1	1.1	FILLING - pale grey to brown, silty gravelly clay filling, fine to medium gravel		A	1.5			
				A	2.0			
2				A	2.5			
				A	3.0			
3	3.2	CLAYEY SAND - grey clayey sand						
	3.6	SANDY CLAY - orange brown, sandy clay						
4	4.0	Bore discontinued at 4.0m - target depth reached						
6								
8								
7								
8								
9								

RIG: Mulldrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	gp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		E	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: ---
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/---

BORE No: D2
 PROJECT No: 45627.01
 DATE: 20 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	0.05	ASPHALT			0.1				
		FILLING - grey, gravelly sand filling		A	1.0				
	1.5	FILLING - rubble and metal reo and metal joint			1.8				
	1.8	FILLING - red brown, clay filling		A	2.0				
					2.5				
					3.0				
	3.5	CLAYEY SAND - brown to pale brown, clayey sand		A	3.6				
					4.0				
	4.5	Bore discontinued at 4.5m - target depth reached							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	gp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Blank sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water soap
		W	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority

SURFACE LEVEL: --

BORE No: D3

PROJECT: Grid Sampling of Hazardous & Restricted Waste

EASTING:

PROJECT No: 45627.01

LOCATION: Lot 12, Australian Technology Park, Eveleigh

NORTHING:

DATE: 20 Jan 09

DIP/AZIMUTH: 90°/-

SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.03	ASPHALT			0.1			
	FILLING - brown, silty sand filling, some fine gravel, trace ash and slag		A	1.0			
1.2	FILLING - dark brown, clay filling, trace fine gravel		A	1.2			
2.1	CLAY - brown mottled grey clay			1.8			
				2.5			
				3.0			
3.5	SILTY SAND - brown grey to dark grey, silty sand		A	3.5			
4.3	CLAY - orange brown clay			4.0			
				4.5			
5.0	Bore discontinued at 5.0m - target depth reached		A	5.0			

RIG: Multidrill

DRILLER: Tracocore

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	Δ	Water seep
		z	Water level

CHECKED

Initials:

Date:


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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/---

BORE No: D6
 PROJECT No: 45627.01
 DATE: 21 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
0.03		ASPHALT		A	0.1				
		FILLING - brown to grey brown, sandy clay filling, some fine gravel							
0.9		FILLING - pale brown, clay filling, trace glass fragments, coal, wood fragments		A	0.8				
1.0				A	1.0				
1.6		CLAY - pale grey clay		A	1.6				
2.0				A	2.0				
		- becoming shaly clay at 2.5m							
3.0		Bore discontinued at 3.0m - target depth reached							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	Δ	Water seep
		W	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Australian Technology Park Management
PROJECT: Groundwater and Air Quality Assessment
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/---

BORE No: DP101
PROJECT No: 71546
DATE: 03 Feb 10
SHEET 1 OF 2

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	0.2	FILLING - topsoil, grass at surface		A	0.0				Roadbox Concrete
	0.3	FILLING - grey, medium grained sand filling		A	0.3				
	0.7	FILLING - yellow brown, medium to coarse grained, sand filling with some sandstone fragments		A	0.7				
	1.2	FILLING - mottled yellow brown with some black inclusions, medium to coarse grained sand		A	1.2				
	1.5	SAND - dark yellow with some black inclusions, medium to coarse grained sand		A	1.5				
	1.7	SAND - sand		A	1.7				
	2.2	SAND - yellow, medium to coarse grained sand		A	2.2				
	2.5	CLAY - red and grey mottled orange clay, medium to low plasticity, some rootlets present		A	2.5				Backfill
	2.5	CLAY - red brown, medium to low plasticity clay, damp to moist							
	4.5	SANDSTONE - pink, medium to coarse grained sandstone, clayey in part		A	4.5				
	6.5	SHALE - shale		A	6.5				
	8.0	8.0m: moist		A	8.0				
									Sentonite
									Backfilled with sand
									Machine slotted PVC screen

RIG: Bobcat Auger

DRILLER: Geoff Trippett

LOGGED: Kate Graham

CASING: Uncased

TYPE OF BORING: Hand auger then Solid flight auger

WATER OBSERVATIONS: Moisture observed at 11.0m

REMARKS: Standpipe installed to 12.7m; Screen 6.7m to 12.7m. 12.7m to 13.3m sand cave in

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength ls(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
			Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Australian Technology Park Management
PROJECT: Groundwater and Air Quality Assessment
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: DP101
PROJECT No: 71546
DATE: 03 Feb 10
SHEET 2 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
			Type	Depth	Sample	Results & Comments		
11	SHALE - shale (continued)		A	11.0				Backfilled with sand Machine slotted PVC screen End cap
12								
13								
13.3	Bore discontinued at 13.3m - target depth reached		A	13.3				
14								
15								
16								
17								
18								
19								

RIG: Bobcat Auger

DRILLER: Geoff Trippett

LOGGED: Kate Graham

CASING: Uncased

TYPE OF BORING: Hand auger then Solid flight auger

WATER OBSERVATIONS: Moisture observed at 11.0m

REMARKS: Standpipe installed to 12.7m; Screen 6.7m to 12.7m. 12.7m to 13.3m sand cave in

SAMPLING & IN SITU TESTING LEGEND	
A Auger sample	pp Pocket penetrometer (kPa)
D Disturbed sample	PID Photo ionisation detector
B Bulk sample	S Standard penetration test
U Tube sample (x mm dia.)	PL Point load strength ls(50) MPa
W Water sample	V Shear Vane (kPa)
C Core drilling	▷ Water seep ✕ Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Australian Technology Park Management
PROJECT: Groundwater and Air Quality Assessment
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: DP102
PROJECT No: 71546
DATE: 08 Feb 10
SHEET 1 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
			Type	Depth	Sample	Results & Comments		
0.2	FILLING - topsoil, grass at surface		A	0.0				Roadbox Well cap Grout
1.0	FILLING - light brown, gravelly sand filling with some brick fragments, rootlets, coal, slag and rocks - becoming lighter with depth		A	0.1				
2.0	FILLING - silty sand and gravel filling		A	1.0				
4.0	SAND - light grey, medium grained sand with some black clay inclusions		A	2.0				Backfill
6.5	SAND - yellow brown, medium grained sand - lighter with depth		A	4.0				Bentonite
8.0	SAND - orange, medium grained sand with orange mottled grey clay inclusions, low plasticity		A	6.5				
9.5	8.0m: clay inclusions increasing, becoming silty with depth		A	8.0				Backfilled with gravel
	SILTY SAND - grey silty sand							

RIG: Bobcat Auger

DRILLER: Geoff Trippett

LOGGED: Kate Graham

CASING: Uncased

TYPE OF BORING: Hand auger then Solid flight auger

WATER OBSERVATIONS: Moisture observed at 11.0m

REMARKS: Standpipe installed to 12.0m; Screen 6.0 to 12.0m. Backfill 11.0m to 12.0m

SAMPLING & IN SITU TESTING LEGEND	
A Auger sample	pp Pocket penetrometer (kPa)
D Disturbed sample	PID Photo ionisation detector
B Bulk sample	S Standard penetration test
U Tube sample (x mm dia.)	PL Point load strength ls(50) MPa
W Water sample	V Shear Vane (kPa)
C Core drilling	Δ Water seep
	▽ Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Australian Technology Park Management
PROJECT: Groundwater and Air Quality Assessment
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: DP102
PROJECT No: 71546
DATE: 08 Feb 10
SHEET 2 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
			Type	Depth	Sample	Results & Comments		
11.0	SILTY SAND - grey silty sand (continued)		A	11.0				Backfilled with gravel
11.5	SILTY CLAY - grey silty clay, balling		A	11.5				Machine slotted PVC screen
12.3	Bore discontinued at 12.3m - target depth reached		A	12.3				End cap
13								
14								
15								
16								
17								
18								
19								

RIG: Bobcat Auger

DRILLER: Geoff Trippett

LOGGED: Kate Graham

CASING: Uncased

TYPE OF BORING: Hand auger then Solid flight auger

WATER OBSERVATIONS: Moisture observed at 11.0m

REMARKS: Standpipe installed to 12.0m; Screen 6.0 to 12.0m. Backfill 11.0m to 12.0m

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength ts(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		WL	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Australian Technology Park Management
PROJECT: Groundwater and Air Quality Assessment
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: ---
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/---

BORE No: DP103
PROJECT No: 71546
DATE: 08 Feb 10
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Water	Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.1	PAVING & SAND						Roadbox Well cap Grout
	0.4	CONCRETE		A	0.4			
	0.7	FILLING - white sandstone filling with some black gravel		A	0.7			
	0.9	FILLING - dark brown, sand filling with rock fragments, asphalt pieces, some orange mottling		A	0.9			
	1.3	FILLING - mottled orange red with grey, clay with dark brown, medium to coarse grained sand		A	1.3			
		SAND - orange brown, medium grained sand with some gravel						
	4.0	SAND & CLAY - grey mottled, medium to coarse grained sand and clay, low to medium plasticity, damp to moist		A	4.0			
	7.0	GRAVELLY SAND - fine grained, gravelly sand with clay inclusions		A	7.0			
		- grey, possible shale						
	9.5	Bore discontinued at 9.5m - target depth reached						

RIG: Bobcat Auger

DRILLER: Geoff Trippett

LOGGED: Kate Graham

CASING: Uncased

TYPE OF BORING: Hand auger then Solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: Standpipe installed to 9.0m; Screen 3.0m to 9.0m

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Australian Technology Park Management
PROJECT: Groundwater and Air Quality Assessment
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: DP104
PROJECT No: 71546
DATE: 09 Feb 10
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
	0.1	ASPHALT & ROADBASE		A	0.1					
	0.2	FILLING - brown coarse grained sand, gravel, cobble and concrete pieces filling		A	0.2					
	0.7	FILLING - coal pieces, coal waste, ash, slag and brick cobble filling								
	1.0	FILLING - coal waste and ash filling, moist		A	1.0					
		SILTY SAND - grey, medium grained silty sand with clay inclusions, moist								
	2.6	SILTY CLAY - brown silty clay, wet - lighter with depth		A	2.6					
	3.0	SILTY CLAY - light brown to yellow brown, silty clay, saturated		A	3.0					
	6.0	CLAY - hard clay, moist		A	6.0					
	9.0	Bore discontinued at 9.0m - target depth reached								

RIG: Bobcat Auger

DRILLER: Geoff Trippett

LOGGED: Kate Graham

CASING: Uncased

TYPE OF BORING: Hand auger then Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 3.0m

REMARKS: Standpipe installed to 9.0m; Screen 3.0m to 9.0m

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	gp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	▷	Water seep
		▼	Water level

CHECKED

Initials:

Date:



Douglas Partners
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BOREHOLE LOG

CLIENT: Australian Technology Park Management
PROJECT: Groundwater and Air Quality Assessment
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: DP105
PROJECT No: 71546
DATE: 12 Feb 10
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	0.2	FILLING		A	0.0				Concrete Well cap
	0.4	FILLING - brown grey mottled, medium to coarse grained sand filling. Some small clay inclusions, sandstone and rock fragments and coal pieces		A	0.2				700mm Bentonite
	0.5	SILTY SAND - dark brown, silty sand		A	0.4				300mm sand
	1.2	SAND - yellow brown orange, medium to coarse grained sand		A	0.5				
		SAND - yellow brown sand, saturated			1.2				
									Backfill
									Machine slotted PVC screen
									End cap
									Backfill
	7.0	SILTY CLAY - red dark brown, silty clay, wet, medium plasticity							
	9.0	Bore discontinued at 9.0m - target depth reached							

RIG: Bobcat Auger

DRILLER: Geoff Trippett

LOGGED: Kate Graham

CASING: Uncased

TYPE OF BORING: Hand auger then Solid flight auger

WATER OBSERVATIONS: Saturated at 1.2m

REMARKS: Standpipe installed to 4.0m; Screen 1.0mm to 4.0m
 Roadbox set below grass and covered with sand to reduce trip hazard in oval

SAMPLING & IN SITU TESTING LEGEND

A Auger sample	pp Pocket penetrometer (kPa)
D Disturbed sample	PID Photo ionisation detector
B Bulk sample	S Standard penetration test
U Tube sample (x mm dia.)	PL Point load strength Is(50) MPa
W Water sample	V Shear Vane (kPa)
C Core drilling	W Water soap
	W Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Australian Technology Park Management
PROJECT: Groundwater and Air Quality Assessment
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: DP106
PROJECT No: 71546
DATE: 12 Feb 10
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	0.2	FILLING - topsoil, grass at surface		A	0.0				Roadbox Well cap
		TOPSOIL		A	0.2				
		FILLING - brown, coarse grained sand, ash and ironstone filling, some rock and rootlets							Bentonite
	1.1	SAND - dark brown, medium to coarse grained, natural sand		A	1.1				
	1.5	SAND - dark brown, medium to coarse grained sand, damp		A	1.5				
					2.0				Sand
									Cave in sand
	3.0	SAND - yellow brown and brown sand, saturated		A	3.0				Machine slotted PVC screen
									End cap
	5.0	Bore discontinued at 5.0m - target depth reached							

RIG: Bobcat Auger

DRILLER: Geoff Trippett

LOGGED: Kate Graham

CASING: Uncased

TYPE OF BORING: Hand auger then Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 2.0m

REMARKS: Standpipe installed to 5.0m; Screen 2.0m to 5.0m

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cora drilling	W	Water seep
		W	Water level

CHECKED

Initials:

Date:



Douglas Partners
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BOREHOLE LOG

CLIENT: Australian Technology Park Management
PROJECT: Groundwater and Air Quality Assessment
LOCATION: Australian Technology Park, Eveleigh

SURFACE LEVEL: --
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: DP107
PROJECT No: 71546
DATE: 12&15 Feb 2010
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	0.25	ROADBASE - bitumen and concrete roadbase		A	0.25				Roadbox Well cap Grout/cement
	0.4	ROADBASE		A	0.5				
	0.6	FILLING - brown, silty sand filling		A	0.7				
	0.7	FILLING - large ballast and black silty sand filling		A	0.75				
	0.75	FILLING - large cobbles, hard to auger through (granite?)		A					
	0.85	FILLING - sandstone filling							
	1.5	SAND - yellow brown, medium grained sand		A	1.5				Backfill
		SANDY CLAY - yellow brown mottled orange, medium grained sandy clay, low plasticity							Bentonite
		- groundwater encountered at 3.0m		A	3.0				Sand
									Machine slotted PVC screen
									Backfill
	5.0	Bore discontinued at 5.0m - target depth reached							End cap

RIG: Bobcat Auger

DRILLER: Geoff Trippett

LOGGED: Kate Graham

CASING: Uncased

TYPE OF BORING: Hand auger then Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 3.0m

REMARKS: Standpipe installed t 5.0m; Screen 2.0m to 5.0m

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water seep
		▼	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/---

BORE No: E1
 PROJECT No: 45627.01
 DATE: 20 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	0.00	ASPHALT		A	0.0				
		FILLING - brown, silty gravelly sand filling			0.2				
-1	1.0	FILLING - red brown mottled grey, clay filling							
-2									
-3	2.9	FILLING - red clay filling							
	3.2	SILTY CLAY - black silty clay (moist)							
	3.4	SANDY CLAY - grey to orange, sandy clay, moist							
-4	4.0	Bore discontinued at 4.0m - target depth reached							
-5									
-6									
-7									
-8									
-9									

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	ts	Water seep
		g	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority	SURFACE LEVEL: --	BORE No: E2
PROJECT: Grid Sampling of Hazardous & Restricted Waste	EASTING:	PROJECT No: 45627.01
LOCATION: Lot 12, Australian Technology Park, Eveleigh	NORTHING:	DATE: 20 Jan 09
	DIP/AZIMUTH: 90°/--	SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.09	ASPHALT			0.05			
		FILLING - brown silty sand filling, trace fine to medium gravel		A				
	1.0				1.0			
	1.6	GRAVEL - medium to coarse gravel						
	1.8				1.8			
	2.0	FILLING - brown, silty clay filling, some medium gravel		A				
	2.2				2.0			
	2.2	SILTY CLAY - black silty clay (moist)						
	2.4				2.4			
	2.4	SAND - grey to brown sand (moist)						
	2.5				2.5			
	3.0				3.0			
	4.0	Bore discontinued at 4.0m - target depth reached						

RIG: Multidrill

DRILLER: Traccess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	▷	Water seep
		≡	Water level

CHECKED

Initials:

Date:


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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --

EASTING:

NORTHING:

DIP/AZIMUTH: 90°/--

BORE No: E3

PROJECT No: 45627.01

DATE: 20 Jan 09

SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
0.04		ASPHALT			0.1			
		FILLING - dark brown, silty sand filling, trace fine to medium gravel, trace rootlets		A	1.0			
		- hard layer of brown gravel		A	1.5			
				A	1.8			
				A	2.5			
		FILLING - red orange brown mottled grey, clay filling		A	3.0			
		- becoming sandy at 3.0m		A	3.5			
		CLAY - brown mottled grey clay		A	3.8			
		SILTY CLAY - black sandy silty clay (moist)		A	4.0			
		SILTY SAND - yellow brown, silty sand (moist)						
		Bore discontinued at 4.5m - target depth reached						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AMP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	W	Water seep
		W	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: E6
 PROJECT No: 45627.01
 DATE: 21 Jan 09
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.05	ASPHALT		A	0.1			
	FILLING - grey to dark brown, silty gravelly sandy clay filling, fine gravel, trace brick fragments		A	0.4			
0.5	FILLING - brown sandy clay filling		A	0.5			
1	- becoming moist at 0.8m			1.0			
1.2	CLAY - grey clay						
	- becoming grey mottled red brown at 1.3m						
3							
3.0	Bore discontinued at 3.0m - target depth reached						
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (1/50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	Δ	Water seep
		£	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: F2
 PROJECT No: 45627.01
 DATE: 20 Jan 09
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Well Construction Details
			Type	Depth	Results & Comments	
0.05	ASPHALT		A	0.05		
0.1	FILLING - dark brown to grey, clayey sand filling (roadbase)			0.2		
	FILLING - brown grey, clay filling, some fine to medium gravel		A			
2.0	FILLING - brown grey, silty clay filling			1.8		
3.2	SANDY CLAY - dark grey to brown, sandy clay					
4.0	Bore discontinued at 4.0m - target depth reached					
5.0						
6.0						
7.0						
8.0						
9.0						
10.0						

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cone drilling	W	Water snap
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: F3
 PROJECT No: 45627.01
 DATE: 20 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.03	ASPHALT						
		ROADBASE						
	0.6	FILLING - black, silty sand filling, trace ash and slag		A	0.6			
1	1.1	FILLING - red brown to grey, clay filling, some fine gravel		A	1.1			1
	1.6	FILLING - orange brown to brown, sand filling			1.6			
2								2
	2.5				2.5			
3								3
	3.6	CLAY - brown mottled grey clay		A	3.6			
4	4.0	SANDY CLAY - grey sandy clay (moist)			4.0			4
	4.5	Bore discontinued at 4.5m - target depth reached						
6								6
	6							6
7								7
	8							8
	9							9

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	GP	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (s(50) MPa)
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	Δ	Water seep
		W	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: F5
 PROJECT No: 45627.01
 DATE: 21 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	0.06	ASPHALT		A	0.1				
		FILLING - dark brown to black, silty gravelly sand filling, fine gravel		A	0.4				
	0.7	FILLING - dark brown, silty sandy gravel filling, wood fragments		A	0.7				
	0.9	FILLING - brown to grey, clay filling, some fine gravel (wet)		A	0.9				
	1.4	CLAY - grey mottled brown clay (wet)		A	1.5				
				A	2.0				
	3.0	Bore discontinued at 3.0m - target depth reached							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: Free groundwater observed at 0.7m during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
S	Bulk sample	S	Standard penetration test
U	Tube sample (ø mm dia.)	PL	Point load strength Is(50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	Δ	Water seep
		≡	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: F6
 PROJECT No: 45627.01
 DATE: 21 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
				Type	Depth	Sample	Results & Comments		
	0.05	ASPHALT		A	0.1				
	0.5	FILLING - black, silty sand filling, trace ash and slag, trace clay inclusions, fine gravel		A	0.4				
	0.7	FILLING - brown clay filling		A	0.5				
	1	CLAY - pale brown clay			0.7				
	2	- becoming grey clay at 1.8m		A	1.5				
	3	Bore discontinued at 3.0m - target depth reached			2.0				
	4								
	5								
	6								
	7								
	8								
	9								

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength 1st(60) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		F	Water level

CHECKED
Initials:
Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: G2
 PROJECT No: 45627.01
 DATE: 20 Jan 09
 SHEET 1 OF 1

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
0.05	ASPHALT			0.1			
0.1	FILLING - medium gravel filling (roadbase)						
	FILLING - brown, silty clay filling, some fine gravel						
1			A				
1.6				1.6			
2.0				2.0			
3.0				3.0			
4.5	CLAY - red brown clay (moist)						
5.0	Bore discontinued at 5.0m - target depth reached						
6							
7							
8							
9							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		W	Water level

CHECKED

Initials:

Date:



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BOREHOLE LOG

CLIENT: Redfern Waterloo Authority
 PROJECT: Grid Sampling of Hazardous & Restricted Waste
 LOCATION: Lot 12, Australian Technology Park, Eveleigh

SURFACE LEVEL: --
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/--

BORE No: G3
 PROJECT No: 45627.01
 DATE: 20 Jan 09
 SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
				Type	Depth	Sample	Results & Comments	
	0.05	ASPHALT			0.0			
		FILLING - black, silty sand filling, trace ash and slag		A				
	0.51	CONCRETE		A	0.51			
		FILLING - brown to grey, gravelly clay filling		A	0.6			
	1.0			A	1.0			
	2.0			A	2.0			
	3.0	GRAVELLY CLAY - brown gravelly clay		A	3.5			
				A	4.0			
	4.4	SILTY CLAY - black, silty clay (moist)		A	4.5			
	4.8	CLAY - red brown to grey clay						
	5.0	Bore discontinued at 5.0m - target depth reached						
	6.0							
	7.0							
	8.0							
	9.0							

RIG: Multidrill

DRILLER: Tracess

LOGGED: AHP

CASING: Uncased

TYPE OF BORING: Solid flight auger

WATER OBSERVATIONS: No free groundwater observed during drilling

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength Is(80) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	>	Water seep
		W	Water level

CHECKED

Initials:

Date:

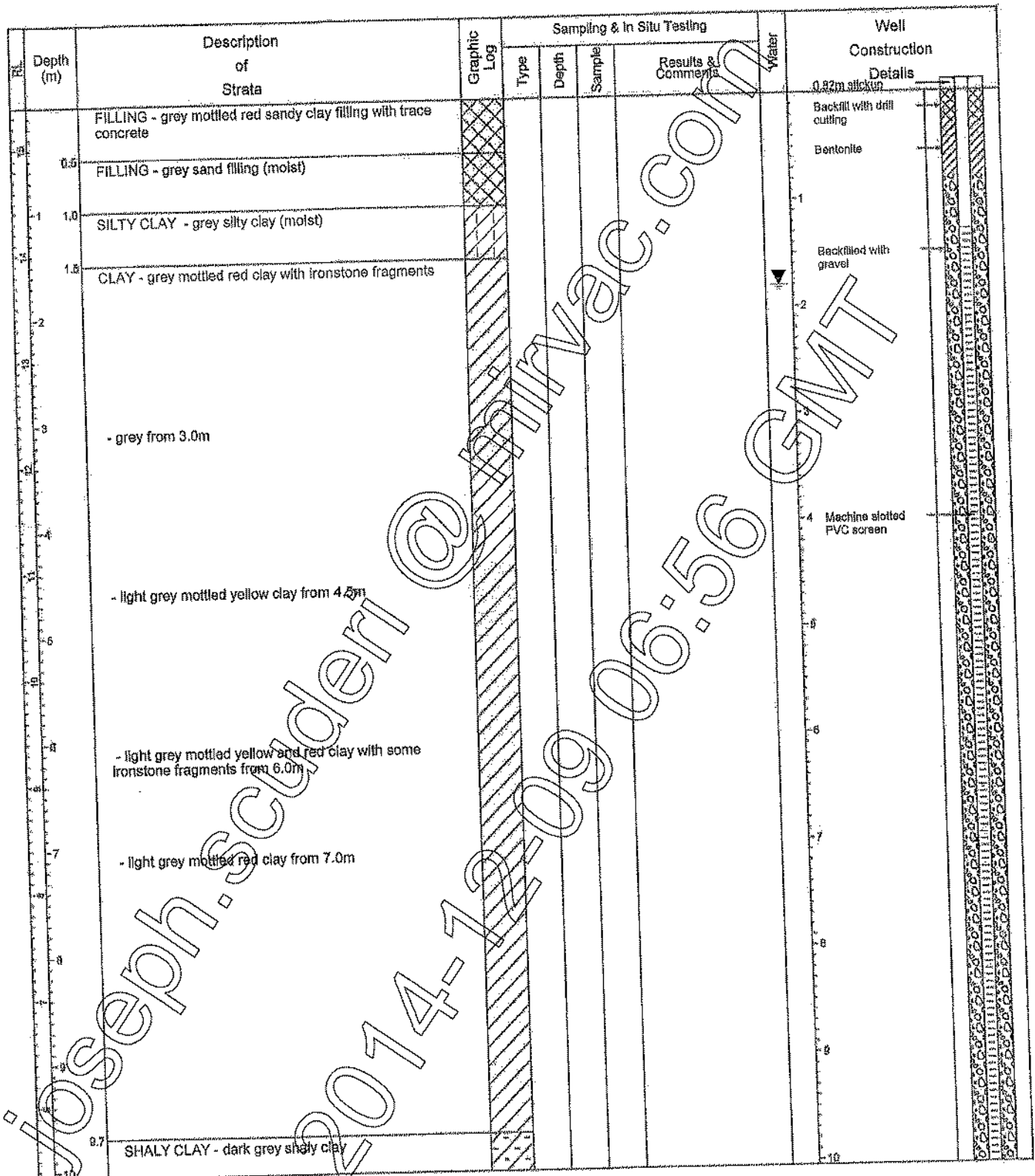


Douglas Partners
 Geotechnics • Environment • Groundwater

CLIENT: ATP Partnership Pty Ltd
 PROJECT: ATP-7, Area 2
 LOCATION: ATP Eveleigh

SURFACE LEVEL: 15.39 ^
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: P208A-A
 PROJECT No: 44050B
 DATE: 13 Mar 08
 SHEET 1 OF 2



RIG: P160

DRILLER: Macquarie Drillers

LOGGED: R Lobo

CASING: HW to 3.0m

TYPE OF BORING: Mud drilling

WATER OBSERVATIONS: Free groundwater observed at 1.8m

REMARKS: (Drilling on 13/03/08; Well installed on 14/03/08); ^Level surveyed by Nace

SAMPLING & IN SITU TESTING LEGEND	
A Auger sample	B2 Pocket penetrometer (kPa)
D Disturbed sample	PID Photo ionisation detector
B Bulk sample	S Standard penetration test
U Tube sample (x mm dia.)	PL Point load strength test (50) MPa
W Water sample	V Shear Vane (kPa)
C Core drilling	W Water seep
	W Water level

CHECKED
Initials: <i>RL</i>
Date: 4/4



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BOREHOLE LOG

CLIENT: ATP Partnership Pty Ltd
 PROJECT: ATP-7, Area 2
 LOCATION: ATP Eveleigh

SURFACE LEVEL: 15.39 ^
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: P208A-A
 PROJECT No: 44050B
 DATE: 13 Mar 08
 SHEET 2 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
10	SHALY CLAY - dark grey shaly clay (continued)						
11							
12							12 Bore filled with gravel
12.5	SHALE - dark grey shale						
13							
14							
15							15 Machine slotted PVC screen
16	SHALE - grey shale						
17							
18							
19							
20							20 Conical sand cap

Bore discontinued at 20.0m in shale - target depth

RIG: P160

DRILLER: Macquarie Drillers

LOGGED: R Lobo

CASING: HW to 3.0m

TYPE OF BORING: Mud drilling

WATER OBSERVATIONS: Free groundwater observed at 1.8m

REMARKS: (Drilling on 13/03/08; Well installed on 14/03/08); ^Level surveyed by Nace

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength test (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		W	Water level

CHECKEDInitials: *RL*

Date: 4/4



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BOREHOLE LOG

CLIENT: ATP Partnership Pty Ltd
 PROJECT: ATP-7, Area 2
 LOCATION: ATP Eveleigh

SURFACE LEVEL: 15.51 ^
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: P208A-B
 PROJECT No: 44050B
 DATE: 14 Mar 08
 SHEET 2 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing			Water	Well Construction Details
			Type	Depth	Sample	Results Comments	
10.0	CLAY - dark grey clay with some Ironstone (continued)						
11.0	SHALE - dark grey shale						
12.0							
13.0							
14.0	SHALE - medium strength, dark grey shale						
15.0							
16.0	- high strength shale at 16.0m						
17.0							
18.0	- with sandstone laminations at 17.5m						
19.0							
20.0							
20.0	Bore discontinued at 20.0m in shale - target depth						

RIG: P160

DRILLER: Macquarie Drillers

LOGGED: R Lobo

CASING: HW to 3.5m

TYPE OF BORING: Mud drilling

WATER OBSERVATIONS: Free groundwater observed at 1.8m

REMARKS: ^Level surveyed by Nace

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia.)	PL	Point load strength (50) MPa
W	Water sample	V	Shane Vane (kPa)
C	Core drilling	D	Water seep
		g	Water level

CHECKED	
Initials:	R
Date:	4/4



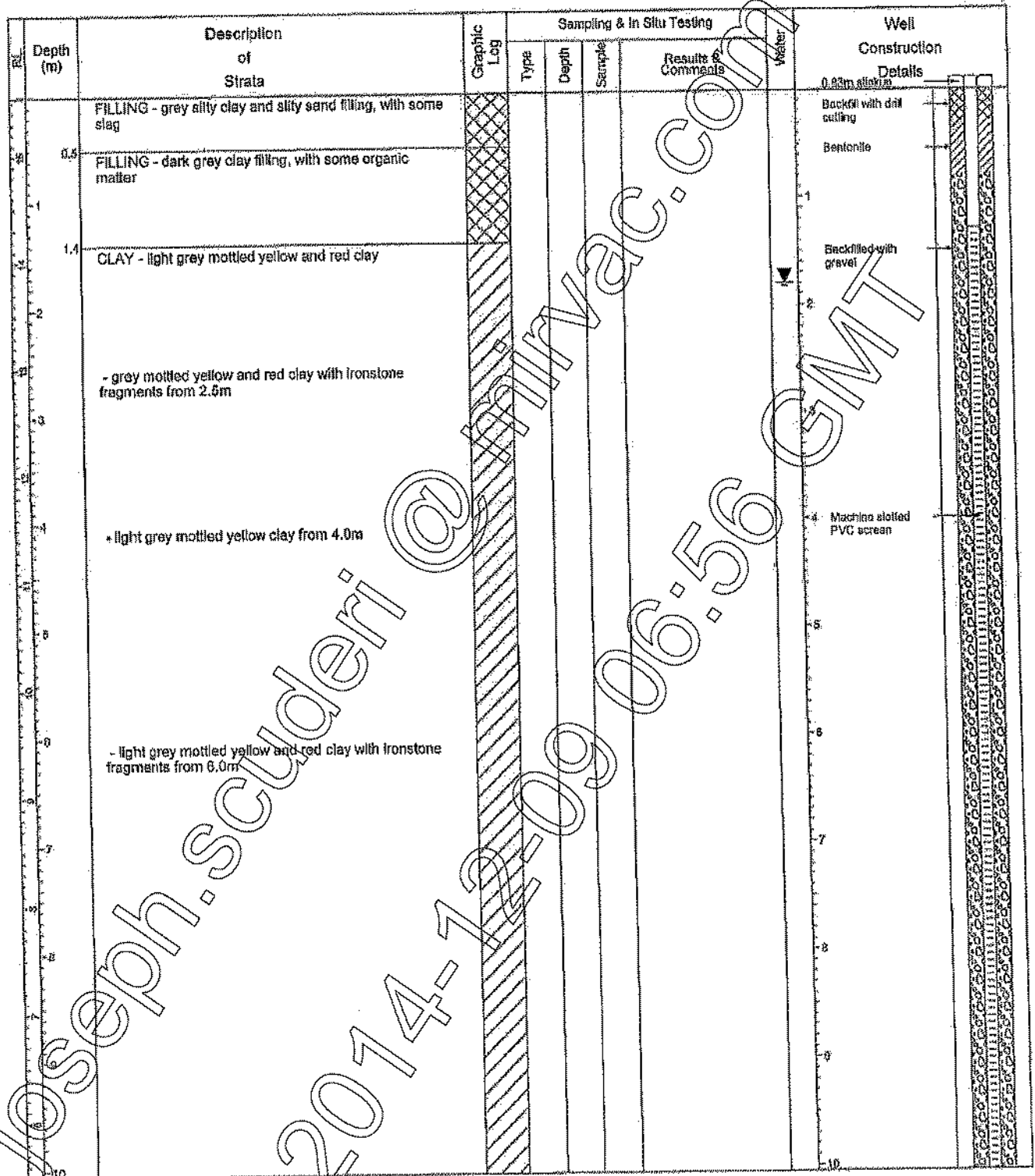
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BOREHOLE LOG

CLIENT: ATP Partnership Pty Ltd
PROJECT: ATP-7, Area 2
LOCATION: ATP Eveleigh

SURFACE LEVEL: 15.55 ^
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/--

BORE No: P208A-C
PROJECT No: 44050B
DATE: 17 Mar 08
SHEET 1 OF 2



RIG: P160

DRILLER: Macquarie Drillers

LOGGED: R Lobo

CASING: HW to 3.0m

TYPE OF BORING: Mud drilling

WATER OBSERVATIONS: Free groundwater observed at 1.8m

REMARKS: ^Level surveyed by Nace

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	PI	Photo interpretation of soil
B	Block sample	S	Standard penetration test
U	Tube sample (x mm dia)	PL	Point load strength (50) MPa
W	Water sample	V	Shear Vane (kPa)
C	Cone cutting	D	Water drop
			Water level

CHECKED	
Initials:	M
Date:	4/2/



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BOREHOLE LOG

CLIENT: ATP Partnership Pty Ltd
 PROJECT: ATP-7, Area 2
 LOCATION: ATP Eveleigh

SURFACE LEVEL: 15.55 ^
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/-

BORE No: P208A-C
 PROJECT No: 44050B
 DATE: 17 Mar 08
 SHEET 2 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
10.5	CLAY - light grey mottled yellow and red clay (continued)						
11							
12	- becoming more dark grey clay at 11.6m						
13							
13.0	SHALE - dark grey shale						
14							
15							
16							
17							
17.0	SHALE - grey shale						
18							
19							
20							
20.0							

Bore discontinued at 20.0m in shale - target depth

RIG: P160

DRILLER: Macquarie Drillers

LOGGED: R Lobo

CASING: HW to 3.0m

TYPE OF BORING: Mud drilling

WATER OBSERVATIONS: Free groundwater observed at 1.6m

REMARKS: ^Level surveyed by Nace

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	PP	Pocket penetrometer (kPa)
D	Disturbed sample	PID	Photo ionisation detector
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia)	PL	Point load strength (k(50) MPa)
W	Water sample	V	Saver Vane (kPa)
C	Core drilling	D	Water sample
			Water level

CHECKED	
Initials:	RE
Date:	4/4



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BOREHOLE LOG

CLIENT: ATP Partnership Pty Ltd
 PROJECT: ATP-7, Area 2
 LOCATION: ATP Eveleigh

SURFACE LEVEL: 15.89 ^
 EASTING:
 NORTHING:
 DIP/AZIMUTH: 90°/---

BORE No: P208A-D
 PROJECT No: 44050B
 DATE: 17 Mar 08
 SHEET 1 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details
			Type	Depth	Sample	Results & Comments		
0.0	FILLING - grey brown silty sand and grey silty clay and crushed sandstone filling, with some sandstone fragments, trace bricks and trace slag							0.65m thick
1.0	CLAY - grey mottled yellow clay							Barite
1.5	- grey mottled red and yellow clay from 1.5m							Backfilled with gravel
2.0								
3.0								
4.0								Machine slotted PVC screen
4.5	- light grey mottled yellow and red clay with ironstone fragments from 4.5m							
5.0								
6.0								
7.0								
8.0								
9.0								
10.0								
11.0								
12.0								

RIG: P160

DRILLER: Macquarie Drillers

LOGGED: R Lebo

CASING: HW to 3.0m

TYPE OF BORING: Mud drilling

WATER OBSERVATIONS: Free groundwater observed at 1.5m

REMARKS: (Drilling on 17/3/08 and well installed on 18/03/08); ^Level surveyed by Nace

SAMPLING & IN SITU TESTING LEGEND			
A Auger sample	PP Pocket penetrometer (kPa)		
D Disturbed sample	PID Photo identification		
B Bulk sample	S Standard penetration test		
U Tube sample (x min dia.)	PL Point load strength (50) kPa		
W Water sample	V Shear Vane (kPa)		
C Core slicing	D Water seep		
			W Water level

CHECKED	
Initials:	R
Date:	4/4



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BOREHOLE LOG

CLIENT: ATP Partnership Pty Ltd
PROJECT: ATP-7, Area 2
LOCATION: ATP Eveleigh

SURFACE LEVEL: 15.99 ^A
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: P208A-D
PROJECT No: 44050B
DATE: 17 Mar 08
SHEET 2 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
11	CLAY - grey mottled yellow clay (continued)						
12							12 Backfilled with gravel
13							
13.8	SHALE - dark grey shale						
14							
15							15 Machine slotted PVC screen
16							
17	SHALE - grey shale						
18							
19							
20							20 Confined and capped

Bore discontinued at 20.0m in shale - target depth

RIG: P160

DRILLER: Macquarie Drillers

LOGGED: R Lobo

CASING: HW to 3.0m

TYPE OF BORING: Mud drilling

WATER OBSERVATIONS: Free groundwater observed at 1.5m

REMARKS: (Drilling on 17/3/08 and well installed on 18/03/08); ^ALevel surveyed by Nace

SAMPLING & IN SITU TESTING LEGEND

A Auger sample	PP Pocket penetrometer (kPa)
D Disturbed sample	PD Photo dilatometer detector
S Split sample	S Standard penetration test
U Tube sample (x mm dia)	PL Point load strength (x(SO) MPa)
W Water sample	V Shear Vane (kPa)
C Core drilling	W Water seep & Water level

CHECKED

Initials: *RL*
Date: 4/4



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BOREHOLE LOG

CLIENT: ATP Partnership Pty Ltd
PROJECT: ATP-7, Area 2
LOCATION: ATP Eveleigh

SURFACE LEVEL: 16.10 ^
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/-

BORE No: P208A-E
PROJECT No: 44050B
DATE: 27 Mar 08
SHEET 1 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results Comments	
0.0	FILLING - gray silty sand, grey silty clay and crushed sandstone filling, with trace bricks and slag		A	0.0		tested	Backfill
0.5				0.5			Backfill
1.5	FILLING - dark grey silty clay and sand filling, odour (moist)		A	1.5		tested	
2.0	CLAY - dark grey clay with sulphidic odour*		A	2.0		tested	
3.0	SILTY CLAY - grey silty clay with sulphidic odour*		A	3.0		tested	Backfilled with gravel
4.0	SAND - light brown silty sand (saturated)		A	4.0			
4.5			A	4.5			
5.0	CLAY - grey mottled yellow clay			5.0			
6.0				6.0			
7.0				7.0			
8.0	beginning grey mottled red and yellow clay with ironstone fragment from 7.5m			8.0			
9.0				9.0			
10.0				10.0			Machine slotted PVC screen

RIG: Hydropower

DRILLER: Macquarie Drillers

LOGGED: R Lobo

CASING: 125mm PVC to 3.5m

TYPE OF BORING: Mud drilling

WATER OBSERVATIONS: Free groundwater observed at 1.8m bgl

REMARKS: *Replicate BD1/270308 and triplicate BD1A/270308 collected between 3.5 - 4.0m

*Level surveyed by Nace

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	PD	Peak penetrometer (kPa)
D	Disrupted sample	PL	Point load strength (kPa)
B	Bulk sample	S	Standard penetration test
U	Tube sample (x mm dia)	PL	Point load strength (kPa)
W	Water sample	V	Shear Vane (kPa)
C	Core drilling	D	Water seep
		W	Water level

CHECKED	
Initials:	R
Date:	4/4



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BOREHOLE LOG

CLIENT: ATP Partnership Pty Ltd
PROJECT: ATP-7, Area 2
LOCATION: ATP Eveleigh

SURFACE LEVEL: 16.10 ^A
EASTING:
NORTHING:
DIP/AZIMUTH: 90°/---

BORE No: P208A-E
PROJECT No: 44050B
DATE: 27 Mar 08
SHEET 2 OF 2

Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Well Construction Details
			Type	Depth	Sample	Results & Comments	
10.5	CLAY - grey mottled yellow clay (continued)						
11	- becoming light grey mottled red clay with ironstone fragments at 10.6m						
11.6	SHALE - dark gray shale						
12							12 Bore filled with gravel
13							
14							
15							15 Machine slotted PVC screen
16							
16.5	- high strength shale at 16.5m						
17							17 End cap
18							
19							
20							
20.0							

Bore discontinued at 20.0m shale - target depth

RIG: Hydropower

DRILLER: Macquarie Drillers

LOGGED: R Lobo

CASING: 125mm PVC to 3.5m

TYPE OF BORING: Mud drilling

WATER OBSERVATIONS: Free groundwater observed at 1.8m bgl

REMARKS: *Replicate BD1/270300 and triplicate BD1A/270308 collected between 3.5 - 4.0m
*Level surveyed by Naco

SAMPLING & IN SITU TESTING LEGEND

A Auger sample	PD Pocket penetrometer (kPa)
D Disturbed sample	PID Photo ionisation detector
B Bulk sample	S Standard penetration test
U Tube sample (x mm dia.)	PL Point load strength test (50) MPa
W Water sample	V Shear Vane (kPa)
C Core drilling	D Water seep
	W Water level

CHECKED

Initials: *RL*
Date: *9/4*



Douglas Partners
Geotechnics • Environment • Groundwater

Borehole Log



**environmental
strategies**

Environmental Strategies Pty Ltd
2/67 Wanganella Street
Balgowlah NSW 2093
Tel: + 61(2) 8021 9285

Hole ID: **BH N**
Project Number: **10050**
Hole Depth: **4.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Water Tower**
Location / Site: **Australian Technology Park, Eveleigh NSW**
Client: **Australian Technology Park**
Drilling Company: **Epoca Environmental**
Drill Method: **Direct Push**

Date Started: **9/08/2010**
Date Completed: **9/08/2010**
Ground Level: **-----**
Easting: **-----**
Northing: **-----**

Method	Water Level	Depth (m)	RL (m)	Graphic Log	USCS Symbol	Material Type	Material Description	Samples / Tests ID No.	Observations / Comments
Direct Push		0.5				FILL	FILL - Topsoil.		
		0.6					FILL - Sand, white, fine to medium grained.	BH N / 0.6-0.7m	
		0.8					FILL - Sand, brown / orange, fine to medium grained.	BH N / 0.8-0.9m	
		1.0					FILL - Sand, yellow, mottled dark brown.		
		1.5							
		2.0					FILL - Sand, grey and black mottled, medium to coarse grained.		
		2.5					FILL - Sand, dark yellow, mottled dark brown, fine to medium grained.		
		3.0							
		3.4					FILL - Sand, dark yellow, mottled brown, medium to coarse grained.		
		3.5					SAND - light yellow, black / brown mottled, fine to medium grained.	BH N / 3.4-3.5m	
		4.0					End of Hole at 4.00 m		

Additional Comments

ES LOG LT 10050 ATP.GPJ ES LOG.GDT 10/08/10 2:40:40 PM



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 9/08/2010
Date:

Borehole Log



**environmental
strategies**

Environmental Strategies Pty Ltd
2/67 Wanganella Street
Balgowlah NSW 2093
Tel: + 61(2) 8021 9285

Hole ID: **BH S**
Project Number: **10050**
Hole Depth: **4.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Water Tower**
Location / Site: **Australian Technology Park, Eveleigh NSW**
Client: **Australian Technology Park**
Drilling Company: **Epoca Environmental**
Drill Method: **Direct Push**

Date Started: **9/08/2010**
Date Completed: **9/08/2010**
Ground Level: **xxxxxxxxxx**
Easting: **xxxxxxxxxx**
Northing: **xxxxxxxxxx**

Method	Water Level	Depth (m)	RL (m)	Graphic Log	USCS Symbol	Material Type	Material Description	Samples / Tests		Observations / Comments
								ID No.	DUP TRIP	
Direct Push		0.5				FILL	FILL - Topsoil.			
						FILL	FILL - Topsoil, with compact grey clay throughout.			
						FILL	FILL - Sandy Clay, white & dark brown mottled, fine to medium grained.	BH S / 0.4-0.5m		
		1.0				FILL	FILL - Sand, dark brown, with compact dark yellow Weathered Shale.			
						FILL	FILL - Gravel, black, with compact dark yellow Weathered Shale.	BH S / 1.3-1.4m		
		1.5				FILL	FILL - Sand, white / orange, medium to coarse grained.			
						FILL	FILL - Sand, dark yellow, with black mottling, fine to medium grained.			
		2.0				FILL	FILL - Sand, dark yellow, with brown mottling, fine to medium grained.			
						FILL	FILL - Sand, yellow, with black mottled streaks, fine to medium grained.			
		2.5				FILL	FILL - Sand, yellow, with black mottled streaks, fine to medium grained.			
		3.0				SAND	SAND - light yellow, fine to medium grained.	BH S / 3.3-3.4m	Dup1	
		3.5				Natural				
		4.0					End of Hole at 4.00 m			

Additional Comments

REMAAD

Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 9/08/2010
Date:

Monitoring Well Log



Environmental Strategies
PROVIDING BENEFITS

Environmental Strategies Pty Ltd
Suite 15201, Locomotive Workshop
2 Locomotive Street
Eveleigh NSW 2012
Tel: +61 (0)2 9690 2555
www.environmentalstrategies.com.au

Hole ID: **ES1**
Project Number: **14020**
Hole Depth: **9.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **25/03/2014**
Date Completed: **25/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mgt)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Mixture	Moisture	ID No.	Observations / Comments	Well Details	Well Construction
		0.05					BITUMEN.	dry					
		0.55					FILL - Roadbase. Gravelly SAND, dark brown, compacted, medium to coarse grained.	dry	1.0	ES1_0.5			
		0.85					FILL - Crushed Concrete / Brick / Gravelly SAND, some Clay, medium dense.	dry	0.0	ES1_1.0			
		1.0					FILL - Silty CLAY, light brown.	dry					
		1.40					FILL - CLAY, mottled red / grey, slightly plastic, with ironstone gravel.		0.1	ES1_2.0			
		2.0					FILL - SAND, orange brown / pale yellow, medium to coarse grained.	slightly moist	0.0	ES1_2.5			
		2.5					FILL - Clayey SAND, orange / brown, medium to coarse grained, coarse gravels.	slightly moist	0.0	ES1_3.0			
		2.60											
		3.0					FILL - Clayey SAND, mottled brown / orange / grey, slightly plastic, medium to coarse grained.	slightly moist	0.0	ES1_4.0			
		3.40					Becoming moist to wet at 4.1m.	moist to wet		ES1_4.5			
		4.0					FILL - Sandy CLAY, mottled brown / orange / grey, plastic, with pockets of silty clay.	slightly moist	1.0	ES1_5.0			
		4.5											
		4.80											
		5.0											
		5.30											
		5.5					Silty CLAY - grey mottled pink, with ironstone gravel to 20mm.	sl.moist	0.0	ES1_5.5			
		5.70					Silty Sandy CLAY - pale yellow / orange / brown.	sl.moist	0.0	ES1_6.0			
		6.0					Extremely Weathered SHALE presents as CLAY - mottled red / pink / grey plastic, weak ironstone.	sl.moist					
		6.20											
		6.5											
		7.0							0.0	ES1_7.0			
		7.5					Becoming very stiff to hard at 7.9m.						
		8.0							0.0	ES1_8.0			
		8.5											
		8.90					End of Hole at 9.00 m		0.0	ES1_9.0			

Additional Comments

Strike Groundwater Level

Static Groundwater Level

ES LOG LT ATP EVELEIGH 14040.GPJ ES.GDT 14/04/14 6:45:27 AM



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 25/03/2014
Date:

Borehole Log



Environmental Strategies
PROVIDING BENEFITS

Environmental Strategies Pty Ltd
Suite 15201, Locomotive Workshop
2 Locomotive Street
Eveleigh NSW 2012
Tel: +61 (0)2 9690 2555
www.environmentalstrategies.com.au

Hole ID. **ES2**
Project Number: **14020**
Hole Depth: **9.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **24/03/2014**
Date Completed: **24/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mBGL)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Samples / Tests		Observations / Comments
									Flt. Depth	ID No.	
Solid Flight Auger		0.00					BITUMEN.				
		0.5					FILL - Roadbase. Gravelly SAND, dark brown, compacted, medium to coarse grained.	dry	0.1	ES2_0.5	
		1.0					FILL - Silty Sandy CLAY, dark brown, some orange sand, coarse gravel to 25mm.	dry	0.2	ES2_1.0	
		1.5							0.0	ES2_2.0	
		2.0									
		2.5					FILL - CLAY, light brown, orange sand, medium to coarse grained.	slightly moist	0.0	ES2_3.0	
		3.0							0.0	ES2_3.5	
		3.5				SP	SAND - pale yellow / grey, medium to coarse grained.	slightly moist	0.0	ES2_4.0	
		4.0					Colour change to yellow from 3.8m.				
		4.5				CL	CLAY - mottled red and grey, plastic, with ironstone gravel.	slightly moist	0.0	ES2_5.0	
		5.0							0.0	ES2_6.0	
		5.5					CLAY - mottled red and grey, stiff, with ironstone gravel and grey shale fragments.	slightly moist	0.0	ES2_7.0	
		6.0					Becoming very stiff to hard from 6.2m.		0.1	ES2_8.0	
		6.5							0.0	ES2_9.0	
		7.0									
		7.5									
		8.0									
		8.5									
		9.0					End of Hole at 9.00 m				

Additional Comments

▽ Strike Groundwater Level

▽ Static Groundwater Level



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 24/03/2014
Date:

Monitoring Well Log



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Hole ID: **ES3**
Project Number: **14020**
Hole Depth: **12.00 m**
Sheet: **1 of 2**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **24/03/2014**
Date Completed: **24/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (m)	RL (m AHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Samples / Tests		Observations / Comments	Well Details	Well Construction
									MP	ID No.			
HA		0.05					BITUMEN / ASPHALT.	dry	0.0				
		0.50					FILL - Roadbase. Gravelly SAND, dark brown, compacted, medium to coarse grained.	dry	0.0	ES3_0.5			
		0.90					FILL - FLY, grey, medium to coarse grained.	slightly moist	0.0	ES3_1.0			
		1.5					FILL - Clayey SAND, light brown, fine to medium grained.	slightly moist	0.1	ES3_2.0			
		1.80					CLAY - mottled red and grey, slightly plastic, with sub-angular gravels.	slightly moist	0.1	ES3_3.0			
		2.0					CLAY - predominantly grey with minor red, stiff, some ironstone present.	dry to slightly moist	0.0	ES3_4.0			
		2.5					Less weathered than above, becoming brown in colour from 4.0m.	dry to slightly moist	0.1	ES3_4.7			
		2.70					CLAY - grey, highly plastic, with minor sub-angular gravels.	moist	0.0	ES3_5.0			
		3.0					CLAY - red and grey mottled, plastic.	slightly moist	0.1	ES3_5.5			
		3.5					CLAY - light brown, highly plastic.	v.moist	0.3	ES3_5.7			
		4.0					CLAY - predominantly grey with red mottles, plastic.	v.moist	0.1	ES3_6.0			
		4.5					Extremely Weathered IRONSTONE presents as CLAY - predominantly red with minor grey, stiff, weak ironstone.	v.moist to wet	0.0	ES3_6.3			
		4.70					CLAY - mottled red and grey, stiff to hard.	dry	0.0	ES3_7.0			
		5.0								ES3_8.0			
		5.50					Weathered SHALE presents as CLAY - mottled red and grey, very stiff.	dry	0.0	ES3_9.0			
		5.70											
		6.00											
		6.30											
		6.50											
		6.70											
		7.00											
		7.5											
		8.0											
		8.50											
		8.70											
		9.0											
		9.5											
		10.0											

Additional Comments

▽ Strike Groundwater Level

▽ Static Groundwater Level



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 24/03/2014
Date:

ES LOG LT ATP EVELEIGH 14040.GPJ ES.GPJ 11/4/14 8:45:32 AM

Monitoring Well Log



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Hole ID: **ES3**
Project Number: **14020**
Hole Depth: **12.00 m**
Sheet: **2 of 2**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**

Location / Site: **Australian Technology Park**

Client: **Urban Growth**

Drilling Company: **Terratest Pty Ltd**

Drill Method: **Solid Flight Auger**

Date Started: **24/03/2014**

Date Completed: **24/03/2014**

Ground Level :

Top of Casing :

Easting:

Northing:

Method	Water Level	Depth (mbsgl)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Temp	ID No.	Observations / Comments	Well Details	Well Construction
Solid Flight Auger													
		10.5					Weathered SHALE presents as CLAY - mottled red and grey, very stiff. (continued)	dry	0.0	ES3_10.0			
		10.80											
		11.9					CLAY - dark grey, stiff, plastic, with minor ironstone.	moist	0.0	ES3_11.0			
		11.5											
		11.80											
		12.00					CLAY - dark grey, stiff, plastic	moist	0.0	ES3_12.0			
							End of Hole at 12.00 m						
		12.5											
		13.0											
		13.5											
		14.0											
		14.5											
		15.0											
		15.5											
		16.0											
		16.5											
		17.0											
		17.5											
		18.0											
		18.5											
		19.0											
		19.5											
		20.0											

Additional Comments

▽ Strike Groundwater Level

▽ Static Groundwater Level



Log Drawn By: **Laurie White**
Contact: **laurie.white@reumad.com.au**

Logged By: **Ryan Wells**
Checked By:

Date: **24/03/2014**
Date:

Borehole Log



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Hole ID: **ES4**
Project Number: **14020**
Hole Depth: **0.40 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **26/03/2014**
Date Completed: **26/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mbsl)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Samples / Tests		Observations / Comments
									Pip. Pen	ID No.	
SFA	8	0.04					BITUMEN / ASPHALT.				
		0.15				CONCRETE.					
		0.2				FILL - SAND, black, very fine grained, with sub-angular gravel, building rubble, metal bolts, brick fragments, basalt and steel.	slightly moist	75.6	ES4_036		
		0.40				End of Hole at 0.40 m Refusal on steel and ballast. Hole moved 4 times with same result.					
		0.6									
		0.8									
		1.0									
		1.2									
		1.4									
		1.6									
		1.8									
		2.0									
		2.2									
		2.4									
		2.6									
		2.8									
		3.0									

Additional Comments

▽ Strike Groundwater Level

▽ Static Groundwater Level



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 26/03/2014
Date:

ES LOG LT ATP EVELEIGH 14040.GPJ ES.GPJ 11/04/14 04:34 AM

Borehole Log



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Hole ID: **ES4A**
Project Number: **14020**
Hole Depth: **8.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **27/03/2014**
Date Completed: **27/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mBGL)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Samples / Tests			Observations / Comments
									File	ID No.	DUP TRIP	
Solid Flight Auger	0.55	0.5					BITUMEN / ASPHALT.	dry				
	1.0	1.0					FILL - Clayey SAND, black, with rubble bricks.		0.9	ES4A_0.5		
Solid Flight Auger	1.5	1.5							0.9	ES4A_1.0	Dup 10 Trip 10	
	1.75	1.75					CONCRETE.					
Solid Flight Auger	2.0	2.0					FILL - SAND, grey, fine to medium grained, with minor angular gravel.	slightly moist	0.4	ES4A_2.0		
	2.5	2.5										
Solid Flight Auger	3.0	3.0					FILL - SAND, white, fine to medium grained.	slightly moist	0.1	ES4A_3.0		
	3.5	3.5							0.1	ES4A_4.0		
Solid Flight Auger	4.5	4.5					CLAY - red and grey mottled, low plasticity, with minor ironstone.	moist	0.3	ES4A_5.0		
	5.0	5.0						wet	0.1	ES4A_6.0		
Solid Flight Auger	6.0	6.0					Becoming stiff and dry at 6.5m.	dry	0.2	ES4A_7.0		
	6.5	6.5							0.3	ES4A_8.0		
Solid Flight Auger	7.0	7.0					End of Hole at 8.00m					
	7.5	7.5										
Solid Flight Auger	8.0	8.0										
	8.5	8.5										
Solid Flight Auger	9.0	9.0										
	9.5	9.5										
Solid Flight Auger	10.0	10.0										

Additional Comments

Strike Groundwater Level

Static Groundwater Level



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 27/03/2014
Date:

Borehole Log



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Hole ID: **ES5**
Project Number: **14020**
Hole Depth: **9.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **26/03/2014**
Date Completed: **26/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mbgl)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Sample / Tests			Observations / Comments
									RIG (mm)	ID No.	DUP TRIP	
Solid Flight Auger		0.00				Fill	BITUMEN / ASPHALT. FILL - SAND , black, fine to medium grained, with brick, rubble and concrete fragments. CONCRETE.	dry	0.4	ES5_0.1		
		0.50			FILL - SAND , yellow, fine to medium grained, sorted, with minor sub-angular gravel.		dry	4.7	ES5_2.0			
Solid Flight Auger		1.0			CL	CLAY - red and gray mottled, very plastic.	wet	22.3	ES5_3.0		Strong hydrocarbon odour.	
		1.5										
		1.70										
		2.0										
		2.5										
		2.90										
	3.0				CLAY - mottled red and grey, with ironstone gravels.	dry		20.4	ES5_4.0	Dup4 Trip4		
	3.5											
	4.0											
	4.50											
	5.0											
	5.5											
	6.0				Very hard from 6.3m.			0.0	ES5_5.0		Minor hydrocarbon odour.	
	6.5											
	7.0											
	7.5											
	8.0											
	8.5											
	9.00							0.4	ES5_6.0			
	9.5							0.4			Minor hydrocarbon odour.	
	10.0							0.3	ES5_7.0			
								0.1	ES5_8.0			
								0.2	ES5_9.0			
							End of Hole at 9.00 m					

Additional Comments

Strike Groundwater Level

Static Groundwater Level

ES LOG LT ATP EVELEIGH 14040.GPJ ES.GPJ 11/04/14 8:45:37 AM



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 26/03/2014
Date:

Borehole Log



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Hole ID: **ES6**
Project Number: **14020**
Hole Depth: **9.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **25/03/2014**
Date Completed: **25/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mBGL)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Samples / Tests			Observations / Comments
									File	ID No.	DUP TRIP	
Solid Flight Auger	0.10					FILL	BITUMEN. FILL - Roadbase. Gravelly SAND, light brown, compacted, gravels to 25mm. Becoming dark brown with some clays.	dry	0.1	ES6_0.5		
	0.5									ES6_1.0	Dup Trip	
	1.0									ES6_1.5		
	1.40				CL		Silty CLAY - light brown, highly plastic.	moist	0.1	ES6_1.5		
	1.70						Extremely Weathered SHALE presents as CLAY - grey/red mottled, stiff, plastic, weak ironstone gravels to 40mm.	slightly moist	0.3	ES6_2.0		
	2.0						Extremely Weathered SHALE presents as CLAY - pale dark grey mottled, very stiff, plastic, weak ironstone gravels.	slightly moist		ES6_3.0		
	2.20								0.0	ES6_4.0		
	2.5								0.0	ES6_5.0		
	3.0						SHALE - light grey, weak.	slightly moist	0.0	ES6_6.0		
	3.5								0.0	ES6_7.0		
	4.0						Becoming dark grey at 6.5m.		0.0	ES6_8.0		
	4.50								0.0	ES6_9.0		
	5.0											
	5.5						Becoming hard at 8.4m.					
	6.0											
	6.5											
	7.0											
	7.5											
	8.0											
	8.5											
	9.0						End of Hole at 9.00 m					
	9.5											
	10.0											

Additional Comments



Strike Groundwater Level



Static Groundwater Level



Log Drawn By: **Laurie White**
Contact: laurie.white@reumad.com.au

Logged By: **Ryan Wells**
Checked By:

Date: **25/03/2014**
Date:

Borehole Log



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Hole ID: **ES7**
Project Number: **14020**
Hole Depth: **8.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **22/03/2014**
Date Completed: **22/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mbsl)	RL (mAHN)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Samples / Tests		Observations / Comments
									Pro	ID No.	
Solid Flight Auger		0.06				FILL	BITUMEN / ASPHALT.	dry	0.0	ES7_0.06	
		0.5				FILL	FILL - Roadbase / Crushed Sandstone presents as Clayey SAND, light brown, fine to medium grained, with crushed rubble.		0.0	ES7_1.0	
		1.0				FILL	FILL - ASH, black, with minor rubble.	dry	3.7	ES7_1.5	
		1.50				FILL	FILL - Clayey SAND, brown, with minor rubble.	dry	0.1	ES7_2.0	
		2.00									
		2.5									
		2.80				SAND	SAND - black, fine to medium grained.	sl.moist	0.1	ES7_3.0	
		3.0						wet			
		3.5									
		4.00				SAND	SAND - grey, fine to medium grained.	wet	0.3	ES7_4.0	
		4.5									
		5.0									
Natural		5.5									
		6.00				SAND	SAND - yellow, fine to medium grained.	wet	0.2	ES7_6.0	
		6.50									
		6.70				PEAT Layer.	PEAT Layer.	wet	0.4	ES7_6.5	
		7.0				CLAY	CLAY - grey, highly plastic.	slightly moist	0.2	ES7_7.0	
		7.5									
CL		7.80				CLAY	CLAY - mottled red and grey, silty with sub-angular ironstone gravels.	slightly moist	0.2	ES7_8.0	
		8.00					End of Hole at 8.00 m				
		8.5									
		9.0									
		9.5									
		10.0									

Additional Comments

Due to discovery of potential layer between 6.5 and 6.7m, the borehole was grouted with a cement and bentonite slurry to the top.

▽ Strike Groundwater Level

▼ Static Groundwater Level

REVIEW

Log Drawn By: Laurie White
Contact: laurie.white@roumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 22/03/2014
Date:

Borehole Log



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Hole ID: **ES8**
Project Number: **14020**
Hole Depth: **8.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **22/03/2014**
Date Completed: **22/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (m bgl)	RL (m AHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Sample Tests			Observations / Comments
									Flt rpm	ID No.	DUP TRIP	
Solid Flight Auger	0.00	0.00				FILL	BITUMEN / ASPHALT	dry	0.0	ES8_0.06		
	0.60	0.60				FILL	FILL - Roadbase / Crushed Sandstone presents as Clayey SAND light brown, fine to medium grained, with angular gravels.	dry				
	1.40	1.40				FILL	FILL - SAND, black, fine to medium grained, with angular to sub-angular gravels.	dry	0.2	ES8_1.0	Dup2 Trip2	
	2.00	2.00			CL	CLAY	CLAY - red and grey mottled, moderately plastic.	dry	0.0	ES8_2.0		
	2.50	2.50				SAND	SAND - yellow, fine to medium grained, well sorted.	slightly moist	0.0	ES8_3.0		
	3.00	3.00							0.0	ES8_4.0		
	3.50	3.50							0.0	ES8_5.0		
	4.00	4.00							0.0	ES8_6.0		
	4.50	4.50							0.0	ES8_7.0		
	5.00	5.00							0.0	ES8_8.0		
Solid Flight Auger	7.00	7.00			CL	PEAT Layer.	CLAY - grey, plastic.	wet				
	7.20	7.20			CL			slightly moist				
Solid Flight Auger	8.00	8.00					End of Hole at 8.00m					
	8.50	8.50										
	9.00	9.00										
	9.50	9.50										
	10.00	10.00										

Additional Comments

Due to discovery of potential layer between 7.0 and 7.2m, the borehole was grouted with a cement and bentonite slurry to the top.

▼ Strike Groundwater Level

▼ Static Groundwater Level



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 22/03/2014
Date:

Borehole Log



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Hole ID: **ES9**
Project Number: **14020**
Hole Depth: **8.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **26/03/2014**
Date Completed: **26/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mbsgl)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Samples / Tests		Observations / Comments
									Moisture	ID No.	
Solid Flight Auger		0.05				Fill	BITUMEN / ASPHALT.	dry			
		0.5					FILL - Roadbase / Crushed Sandstone presents as Clayey SAND, light brown, fine to medium grained, with angular gravels.	dry	0.1	ES9_0.5	
		1.00					FILL - Clayey SAND, black, fine to medium grained, with angular gravels.	dry	0.1	ES9_1.0	
		1.30			SP	Natural	SAND - grey, fine to medium grained.	slightly moist	0.0	ES9_1.5	
		1.5							0.0	ES9_2.0	
		2.0									
		2.60					SAND - yellow, fine to medium grained, well sorted.	wet	0.0	ES9_3.0	
		3.0							0.0	ES9_4.0	
		4.0									
		5.0							0.1	ES9_5.0	
		6.0							0.0	ES9_6.0	
		7.0							0.0	ES9_7.0	
		7.50							0.0	ES9_7.5	
Solid Flight Auger		7.80			CL	Natural	PEAT Layer.	wet	0.0	ES9_7.5	
		8.00					CLAY - grey, very plastic. End of Hole at 8.00m	slightly moist	0.0	ES9_8.0	

Additional Comments

Due to discovery of potential layer between 7.5 and 7.8m, the borehole was grouted with a cement and bentonite slurry to the top.

▽ Strike Groundwater Level

▼ Static Groundwater Level

ES LOG LT ATP EVELEIGH 14040.GPJ ES.GDT 11/4/14 8:45:42 AM



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 26/03/2014
Date:

Borehole-Log



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Hole ID: **ES10**
Project Number: **14020**
Hole Depth: **8.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **25/03/2014**
Date Completed: **25/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mbgl)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Samples / Tests		Observations / Comments	
									Chip Depth	ID No.		
Solid Flight Auger		0.00				Fill	BITUMEN / ASPHALT. FILL - Roadbase / Crushed Sandstone presents as Clayey SAND, brown, fine to medium grained, with angular gravels.	dry	0.0	ES10_0.1		
		0.5						0.0	ES10_1.0			
		1.0										
		1.5										
		2.0					FILL - Clayey SAND , black, fine to medium grained, with angular to sub-angular gravels, rubble inclusions, brick fragments noted.	dry	0.0	ES10_2.0		
		2.40				Natural	SAND - black , fine to medium grained, well sorted.	slightly moist	0.1	ES10_3.0		
		3.0						wet				
		3.5										
		4.0					Becoming light yellow to grey at 3.8m.		0.1	ES10_4.0		
		4.5										
5.0							0.1	ES10_5.0				
5.5												
6.0					Becoming yellow at 6.0m, with very minor black sand inclusions.		0.1	ES10_6.0				
6.5												
6.90					CL	PEAT Layer.	wet	0.0	ES10_7.0			
7.20				CLAY - grey , highly plastic.		slightly moist	0.0	ES10_7.5				
7.5						0.0	ES10_8.0					
						End of Hole at 8.00m						

Additional Comments

Due to discovery of potential layer between 6.9 and 7.2m, the borehole was grouted with a cement and bentonite slurry to the top.

▽ Strike Groundwater Level

▼ Static Groundwater Level



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 25/03/2014
Date:

ES LOG LT ATP EVELEIGH 14040.GPJ ES.GDT 1/14/14 8:45:43 AM

Borehole Log



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PROVIDING BENEFITS

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Suite 15201, Locomotive Workshop
2 Locomotive Street
Eveleigh NSW 2012
Tel: +61 (0)2 9690 2555
www.environmentalstrategies.com.au

Hole ID: **ES11**
Project Number: **14020**
Hole Depth: **8.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **25/03/2014**
Date Completed: **25/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (megl)	FL (mABD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Sample Tests			Observations / Comments
									FBG ppm	ID No.	DUP TRIP	
Solid Flight Auger							BITUMEN / ASPHALT.	dry				
							FILL - Roadbase / Crushed Sandstone presents as Clayey SAND brown, fine to medium grained, with angular gravels.		0.0	ES11_0.5		
									0.0	ES11_1.0		
							SAND - grey, fine to medium grained.	slightly moist	0.0	ES11_2.0	Dup5 Trip5	
							Becomes light yellow at 3.9m.		0.0	ES11_3.0		
									0.0	ES11_4.0		
									0.0	ES11_5.0		
									0.0	ES11_6.0	Dup6 Trip6	
									0.0	ES11_7.0		
							PEAT Layer.	wet	0.0	ES11_7.7		
Solid Flight Auger							CLAY - grey, highly plastic.	wet	0.0	ES11_8.0		
							End of Hole at 8.00 m					

Additional Comments

Due to discovery of potential layer between 7.7 and 8.0m, the borehole was grouted with a cement and bentonite slurry to the top.

▼ Strike Groundwater Level

▼ Static Groundwater Level

ES LOG LT ATP EVELEIGH 14040.GPJ ES.GPJ 11/4/14 8:45:45 AM



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 25/03/2014
Date:

Borehole Log



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Hole ID: **ES12**
Project Number: **14020**
Hole Depth: **9.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **22/03/2014**
Date Completed: **22/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mBGL)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Samples / Tests		Observations / Comments
								Moisture	ID No.	
Solid Flight Auger	0.10	0.5	0.90			FILL	BITUMEN / ASPHALT. FILL - Roadbase / Crushed Sandstone presents as SAND, light yellow, fine to medium grained, with angular gravel and quartz.	dry 0.1	ES12_0.1	
	1.0	1.5	1.80			FILL	FILL - SAND, dark brown, fine to medium grained, well sorted.	dry 0.2	ES12_1.0	
	2.0	2.5	2.70			FILL	FILL - SAND, black, fine to medium grained, well sorted.	dry 0.2	ES12_2.0	
	3.0	3.5				SAND	SAND - grey, fine to medium grained.	moist 0.1	ES12_3.0	
	4.0	4.5						wet 0.1	ES12_4.0	
	5.0	5.5						0.1	ES12_5.0	
	6.0	6.5				CLAY	CLAY - mottled red and grey, plastic	slightly moist 0.0	ES12_6.0	
	7.0	7.5					Becoming stiffer with depth	0.1	ES12_7.0	
	8.0	8.5						0.2	ES12_8.0	
	9.0	9.5				CLAY	CLAY - predominantly grey, minor orange, very stiff. End of Hole at 9.00m	slightly moist 0.1	ES12_9.0	

Additional Comments

▽ Strike Groundwater Level

▽ Static Groundwater Level



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 22/03/2014
Date:

ES LOG LT ATP EVELEIGH 14020.GPJ ES.GPJ 11/04/14 6:45:46 AM

Borehole Log



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Hole ID: **ES13**
Project Number: **14020**
Hole Depth: **9.00 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **22/03/2014**
Date Completed: **22/03/2014**
Ground Level:
Top of Casing:
Easting:
Northing:

Method	Water Level	Depth (mBGL)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Sample Tests			Observations / Comments
									RII m	ID No.	DUP TRIP	
HA Solid Flight Auger	0.16	0.80					BITUMEN / ASPHALT.	dry	0.1	ES13_0.2		
	1.00						FILL - SAND , brown, fine to medium grained, with sub-rounded gravels and rubble.	dry	0.0			
	1.50						FILL - Crushed SANDSTONE returns as SAND, brown, fine to medium grained, with angular gravels.	dry	0.2	ES13_1.0		
	2.00						FILL - Clayey SAND , brown, fine to medium grained, with sub-angular gravel.	moist				
	2.50						FILL - Sandy CLAY , brown, with rubble (angular gravels and brick fragments).	slightly moist	0.2	ES13_2.0		
	3.00						FILL - CLAY , plastic, with rubble and angular gravel.	wet	0.4	ES13_3.0		
	3.50											
	4.00						Sandy CLAY - brown, with minor sub-rounded gravels.	wet	0.2	ES13_4.0		
	4.50											
	5.00						Sandy CLAY - light brown to grey, plastic.	wet	0.0	ES13_5.0		
	5.50											
	6.00						CLAY - red and grey mottled, plastic, with some angular to sub angular red ironstone gravels.	slightly moist	0.0	ES13_6.0		
	6.50											
	7.00						CLAY - predominantly grey, minor light orange, stiff.	slightly moist	0.0	ES13_7.0		
	7.50											
	8.00						CLAY - grey, very stiff.	slightly moist	0.0	ES13_8.0		
	8.50											
	9.00						CLAY - grey, very stiff.	slightly moist	0.0	ES13_9.0		
	9.50						End of Hole at 9.00 m					
	10.00											

Additional Comments

▽ Strike Groundwater Level

▼ Static Groundwater Level

ES LOG LT ATP EVELEIGH 14020.GPJ ES.GPJ 11/04/14 8:45:47 AM



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 22/03/2014
Date:

Monitoring Well Log



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Hole ID: **ES14**
Project Number: **14020**
Hole Depth: **4.50 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **25/03/2014**
Date Completed: **25/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (m)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Sample Tests			Observations / Comments	Well Details	Well Construction
									PH	ID No.	DUP TRIP			
Solid Flight Auger	0.10	0.5				FILL	BITUMEN / ASPHALT. FILL - Roadbase. Gravelly SAND, light brown, compacted, with some clay.	dry						
	1.40	1.5				FILL	FILL - Blue Metal GRAVEL with SAND, brown, compacted, coarse, poorly sorted blue metal gravel.	slightly moist	0.0	ES14_1.0	Dup Trip			
	1.90	2.0				FILL	FILL - Clayey SAND, dark grey, with some pockets of brown coarse sand.	slightly moist to moist		ES14_1.5				
	2.70	2.5				FILL	FILL - Clayey SAND, dark grey, with some pockets of brown coarse sand.	slightly moist to moist		ES14_2.5				
	3.20	3.0			SP	Natural	Clayey SAND - grey, plastic, coarse grained.	slightly moist		ES14_3.0				
	4.50	4.0			SP	Natural	SAND - grey, medium to coarse grained.	moist		ES14_4.0				
							End of Hole at 4.50 m	sat'd						

Additional Comments



Strike Groundwater Level



Static Groundwater Level



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 25/03/2014
Date:

ES LOG LT ATP EVELEIGH 14040.GPJ ES.GPJ 11/03/14 8:45:49 AM

Monitoring Well Log



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Hole ID: **ES15**
Project Number: **14020**
Hole Depth: **4.50 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**
Location / Site: **Australian Technology Park**
Client: **Urban Growth**
Drilling Company: **Terratest Pty Ltd**
Drill Method: **Solid Flight Auger**

Date Started: **26/03/2014**
Date Completed: **26/03/2014**
Ground Level :
Top of Casing :
Easting:
Northing:

Method	Water Level	Depth (mbgl)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Sample Tests			Observations / Comments	Well Details	Well Construction
									Rip exam	ID No.	DUP TRIP			
Solid Flight Auger						Fill	BITUMEN / ASPHALT.	dry						
							FILL - Roadbase. Crushed Sandstone, light brown, compacted, with angular gravels.	dry						
							FILL - Clayey SAND, black, with minor sub-angular gravel.	slightly moist	0.0	ES15_1.5	Dup7 Trip7			
							FILL - Clayey SAND, black and brown mottled, with rubble and brick fragments.	wet	0.0	ES15_3.0				
							SAND - grey, fine to medium grained.	wet	0.0	ES15_4.5				
							End of Hole at 4.50 m							

Additional Comments

▽ Strike Groundwater Level

▽ Static Groundwater Level



Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: Ryan Wells
Checked By:

Date: 26/03/2014
Date:

ES LOG LT ATP EVELEIGH 14040.GPJ ES.GPJ 11/04/14 8:45:50 AM

Monitoring Well Log



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Hole ID: **ES16**
Project Number: **14020**
Hole Depth: **4.50 m**
Sheet: **1 of 1**

Project Name: **ATP - Lots 8, 9 and 12 Investigation**

Location / Site: **Australian Technology Park**

Client: **Urban Growth**

Drilling Company: **Terratest Pty Ltd**

Drill Method: **Solid Flight Auger**

Date Started: **26/03/2014**

Date Completed: **26/03/2014**

Ground Level :

Top of Casing :

Easting:

Northing:

Method	Water Level	Depth (mbgl)	RL (mAHD)	Graphic Log	USCS Symbol	Material Type	Material Description	Moisture	Sample Tests			Observations / Comments	Well Details	Well Construction
									Flg	ID No.	DUP TRIP			
Solid Flight Auger	0.05	0.5					BITUMEN / ASPHALT.	dry						
	1.00	1.5					FILL - Roadbase. Crushed Sandstone, light brown, compacted, with angular gravels.	dry	0.1	ES16_1.0	Dup & Trip			
	1.80	2.0					FILL - Clayey SAND, brown, with rubble.	slightly moist / wet	0.1	ES16_2.0				
	2.0	2.5					FILL - Clayey SAND, black, with minor angular gravels.							
	4.00	4.50					SAND - grey, fine to medium grained.	wet	0.3	ES16_4.5				
							End of Hole at 4.50 m							

Additional Comments

▽ Strike Groundwater Level

▼ Static Groundwater Level

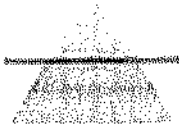
ES LOG LT ATP EVELEIGH 14020.GPJ ES.GPJ 14/04/14 8:45:52 AM



Log Drawn By: **Laurie White**
Contact: laurie.white@reumac.com.au

Logged By: **Ryan Wells**
Checked By:

Date: **26/03/2014**
Date:

**GETEX**

GETEX PTY LTD

Suite 2.02 Building 2,

Waterloo Business Park

35 Waterloo Road, Macquarie Park NSW 2113

Project No: 7358

Client: Australian Technology Park Sydney

Location: South of Bay 2, 3m South-West of upright convex mirror.

Project Manager: Gerard Freeman

Log of Borehole: BH14

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0	Minor Organic Ground Cover		
	Fine Sand/Loam (FILL)		FINE SILT/LOAM (FILL). DRY. MINOR ORGANICS.
0.25	Fine Sandy Clay (FILL)	7358-20341 SAMPLED AT 0.4-0.5 MBGS	FINE SANDY CLAY (FILL). DRY. MINOR GRAVEL AND COAL 7.5YR2.5H VERY DARK BROWN.
0.5	BOREHOLE TERMINATED AT 0.45 MBGS		
0.75			
1			
1.25			
1.5			
Drill Date: 9/04/13		Drill Method: Hand Auger	Sheet: 1 of 6

**GETEX**

GETEX PTY LTD

Suite 2.02 Building 2,
Waterloo Business Park

35 Waterloo Road, Macquarie Park NSW 2113

Project No: 7358

Client: Australian Technology Park Sydney

Location: South of Bay 3. 2m South of Locomotive Street

Project Manager: Gerard Freeman

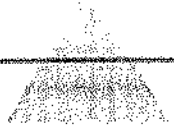
Log of Borehole: BH15

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0	Minor Organic Ground Cover		
	Fine Silt/Loam (FILL)		FINE SILT/LOAM (FILL). DRY. MINOR ORGANICS
0.25	Soft Sandy Clay (FILL)	7358-2/BH2 SAMPLED AT 0.3-0.35 MBGS	SOFT SANDY CLAY (FILL). DRY. 7.5YR2.5/2. VERY DARK BROWN
0.5	BOREHOLE TERMINATED AT 0.35 MBGS		
0.75			
1			
1.25			
1.5			

Drill Date: 9/04/13

Drill Method: Hand Auger

Sheet: 2 of 6

**GETEX**

GETEX PTY LTD

Suite 2.02 Building 2,

Waterloo Business Park

35 Waterloo Road, Macquarie Park NSW 2113

Log of Borehole: BH16

Project No: 7358

Client: Australian Technology Park Sydney

Location: Opposite South of Boiler adjacent Bay 4. 2m South of Locomotive Street.

Project Manager: Gerard Freeman

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0	Bare		
0.25	Sandy Clay (FILL)		SANDY CLAY (FILL). SOFT, MILDLY FINE. DRY, MINOR GRAVEL AND COAL PRESENT.
0.5	Medium Clay (FILL)	7358-2/BH3 SAMPLED AT 0.4-0.5 MBGS	MEDIUM CLAY (FILL). DRY. 7.5YR2.5/1 BLACK.
0.75		BOREHOLE TERMINATED AT 0.5 MBGS	
1			
1.25			
1.5			
Drill Date: 09/04/13		Drill Method: Hand Auger	Sheet: 3 of 6

**GETEX**

GETEX PTY LTD

Suite 2.02 Building 2,

Waterloo Business Park

35 Waterloo Road, Macquarie Park NSW 2113

Project No: 7358

Client: Australian Technology Park Sydney

Location: Opposite Bay 4 and 5. 10m West of Bay 4 Light Post

Project Manager: Gerard Freeman

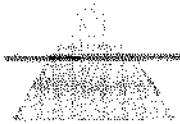
Log of Borehole: BH17

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0	Bare		
	Fine Sand/Loam (FILL)		FINE SAND/LOAM (FILL), DRY, ORGANIC MATTER
0.15	Soft Sandy Clay (FILL)	7358-2/BH4 SAMPLED AT 0.4-0.5 MBGS	SOFT SANDY CLAY (FILL), DRY, MINOR ORGANICS AND GRAVEL, 7.5YR2.5/1.BLACK
0.3			
0.45			
0.6			
		BOREHOLE TERMINATED AT 0.50 MBGS	

Drill Date: 09/04/13

Drill Method: Hand Auger

Sheet: 4 of 6

**GETEX**

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Suite 2.02 Building 2,

Waterloo Business Park

35 Waterloo Road, Macquarie Park NSW 2113

Log of Borehole: BH18

Project No: 7358

Client: Australian Technology Park Sydney

Location: Opposite Bay 6. 3m South-East of Bay 7 Light Post. Directly Opposite South of High Voltage Area Between Bay 6 and Bay 7.

Project Manager: Gerard Freeman

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0	Bare		
0.25	Soft Sandy Clay (FILL)		SOFT SANDY CLAY (FILL). DRY. MINOR GRAVEL.
0.5	Fine Sand (FILL)	7358-2/BH5 SAMPLED AT 0.4-0.6 MBGS	FINE SAND (FILL). DRY. VERY MINOR MOTTLED 7.5YR3/3 DARK BROWN.
0.75		BOREHOLE REFUSAL AT 0.6 MBGS	
1			
1.25			
1.5			
Drill Date: 9/04/13		Drill Method: Hand Auger	Sheet: 5 of 6

**GETEX**

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35 Waterloo Road, Macquarie Park NSW 2113

Project No: 7358

Client: Australian Technology Park Sydney

Location: 1.5m South-East of Light Post. Opposite Bay 8.

Project Manager: Gerard Freeman

Log of Borehole: BH19

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0	Organic Ground Cover		
0.05	Fine Silt/Loam (FILL)		FINE SILT/LOAM (FILL). NO GRAVEL DRY
0.1			
0.2	Soft Sandy Clay (FILL)	7358-2/BH6 SAMPLED AT 0.4-0.45 MBGS.	SOFT SANDY CLAY (FILL). MINOR GRAVEL. INCREASING GRAVEL WITH DEPTH. DRY. 10YR2/2. VERY DARK BROWN.
0.3			
0.4			
0.5			
		BOREHOLE TERMINATED AT 0.45 MBGS	

Drill Date: 9/04/13

Drill Method: Hand Auger

Sheet: 6 of 6

**GETEX**

GETEX PTY LTD
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Waterloo Business Park
35 Waterloo Road, Macquarie Park NSW 2113

Log of Borehole: S1**Project No:** 7358**Client:** Australian Technology Park**Location:** Adjacent Locomotive Street, Centrally located south of Bay 1**Project Manager:** Justin Thompson-Laing

SUBSURFACE PROFILE			SAMPLE	COMMENTS
Depth (m)	Water Level Symbol	Description	Number	
0		Ground Surface		
		Asphalt Cover		
		Road Base		
		Very dark greenish grey gravel		
0.25		Fill		
		Dark grayish brown fine sand	Sample 7358/S9 - 0.3m	
		End of Borehole Depth		
0.5				
0.75				
1				
Drill Date: 08/03/13			Drill Method: Hand Auger	Sheet: 1 of 1

35 Waterloo Road, Macquarie Park NSW 2113

Log of Borehole: S2

Project No: 7358

Client: Australian Technology Park

Location: Adjacent Locomotive Street, 8m west of Boiler Area's S.E. cnr

Project Manager: Justin Thompson-Laing

SUBSURFACE PROFILE			SAMPLE	COMMENTS
Depth (m)	Water Level	Description	Number	
0		Ground Surface		
		Asphalt Cover		
		Road Base		
		Very dark greenish grey gravel	Sample 7358/S2 - 0.2m	
0.25		End of Borehole Depth		
0.5				
0.75				
1				
1.25				
1.5				
1.75				
2				
2.25				
2.5				
2.75				
3				
3.25				
3.5				
3.75				
4				
4.25				
4.5				
4.75				
5				
5.25				
5.5				
5.75				
6				
6.25				
6.5				
6.75				
7				
7.25				
7.5				
7.75				
8				
8.25				
8.5				
8.75				
9				
9.25				
9.5				
9.75				
10				

Drill Date: 08/03/13

Drill Method: Hand Auger

Sheet: 1 of 1

**GETEX**

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Suite 2.02 Building 2,
Waterloo Business Park
35 Waterloo Road, Macquarie Park NSW 2113

Log of Borehole: S3

Project No: 7358

Client: Australian Technology Park

Location: Adjacent Locomotive Street, 4.5m west of Bay 4's east wall

Project Manager: Justin Thompson-Laing

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0.0	Ground Surface		
	Asphalt Cover		
	Road Base		
	Very dark greenish grey gravel		
0.25	Fill		
	Dark grayish brown fine sand	Sample 7358/S3 - 0.3m	
	End of Borehole Depth		
0.5			
0.75			
1			
Drill Date: 08/03/13		Drill Method: Hand Auger	Sheet: 1 of 1

**GETEX**

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35 Waterloo Road, Macquarie Park NSW 2113

Project No: 7358**Client: Australian Technology Park****Location: Adjacent Locomotive Street, 1m east of Substation 3512****Project Manager: Justin Thompson-Laing****Log of Borehole: S4**

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0	Ground Surface		
	Asphalt Cover		
	Road Base	Sample 7358/S4 - 0.1m	
	Very dark greenish grey gravel		
0.25	End of Borehole Depth		
0.5			
0.75			
1			
Drill Date: 08/03/13		Drill Method: Hand Auger	Sheet: 1 of 1

GETEX PTY LTD
Suite 2.02 Building 2,
Waterloo Business Park
o Road, Macquarie Park NSW 2113

Project Manager: Justin Thompson-Laing

SUBSURFACE PROFILE			SAMPLE	COMMENTS
Depth (m)	Water Level Symbol	Description	Number	
0		Ground Surface		
		Asphalt Cover		
		Road Base		
		Very dark greenish grey gravel		
		Fill		
0.25		Dark grayish brown fine sand	Sample 7358/S5 - 0.2m	
		End of Borehole Depth		
0.5				
0.75				
1				

Drill Date: 08/03/13

Drill Method: Hand Auger

Sheet: 1 of 1

**GETEX**

GETEX PTY LTD
Suite 2.02 Building 2,
Waterloo Business Park
35 Waterloo Road, Macquarie Park NSW 2113

Project No: 7358

Client: Australian Technology Park

Location: Adjacent Locomotive Street, 2m west of Bay 8

Project Manager: Justin Thompson-Laing

Log of Borehole: S6

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0	Ground Surface		
	Asphalt Cover		
	Road Base		
	Very dark greenish grey gravel	Sample 7358/S6 - 0.2m	
0.25	End of Borehole Depth		
0.5			
0.75			
1			
Drill Date: 08/03/13		Drill Method: Hand Auger	Sheet: 1 of 1

**GETEX**

GETEX PTY LTD
Suite 2.02 Building 2,
Waterloo Business Park
35 Waterloo Road, Macquarie Park NSW 2113

Project No: 7358

Client: Australian Technology Park

Location: Adjacent Locomotive Street, 1m from west wall of Security Office

Project Manager: Justin Thompson-Laing

Log of Borehole: S7

SUBSURFACE PROFILE			SAMPLE	COMMENTS
Depth (m)	Water Level Symbol	Description	Number	
0		Ground Surface		
	▨	Asphalt Cover		
	▨	Road Base		
	▨	Very dark greenish grey gravel	Sample 7358/S7 - 0.1m	
		End of Borehole Depth		
0.25				
0.5				
0.75				
1				
Drill Date: 08/03/13			Drill Method: Hand Auger	Sheet: 1 of 1

**GETEX**

GETEX PTY LTD
Suite 2.02 Building 2,
Waterloo Business Park
35 Waterloo Road, Macquarie Park NSW 2113

Log of Borehole: S8

Project No: 7358

Client: Australian Technology Park

Location: Adjacent Locomotive Street, 1m west of Bay 11/12 common wall

Project Manager: Justin Thompson-Laing

SUBSURFACE PROFILE			SAMPLE	COMMENTS
Depth (m)	Water Level Symbol	Description	Number	
0		Ground Surface		
		Asphalt Cover		
		Road Base Very dark greenish grey gravel - Course		
0.25		Road Base Very dark greenish grey gravel - Fine	Sample 7358/S8 - 0.25m	
		End of Borehole Depth		
0.5				
0.75				
1				
Drill Date: 8/03/13			Drill Method: Hand Auger	Sheet: 1 of 1

35 Waterloo Road, Macquarie Park NSW 2113

Project Manager: Justin Thompson-Laing

SUBSURFACE PROFILE			SAMPLE	COMMENTS
Depth (m)	Description		Number	
0	Ground Surface			
	Topsoll Brown sandy loam			
	Fill Black gravel			
0.25				
			Sample 7358/S1 - 0.4m	
0.5	End of Borehole Depth			
0.75				
1				

Drill Date: 08/03/13
Drill Method: Hand Auger
Sheet: 1 of 1

**GETEX**

GETEX PTY LTD

Suite 2.02 Building 2,

Waterloo Business Park

35 Waterloo Road, Macquarie Park NSW 2113

Log of Borehole: S10**Project No:** 7358**Client:** Australian Technology Park**Location:** Adjacent Central Avenue, approx. 23m west of Mitchell Way**Project Manager:** Justin Thompson-Laing

SUBSURFACE PROFILE			SAMPLE	COMMENTS
Depth (m)	Water Level Symbol	Description	Number	
0		Ground Surface		
		Topsoil		
		Brown sandy loam		
		Fill		
		Black gravel		
0.25		Sample 7358/S10 - 0.3m		
		End of Borehole Depth		
0.5				
0.75				
1				
Drill Date: 08/03/13			Drill Method: Hand Auger	Sheet: 1 of 1

**GETEX**

GETEX PTY LTD
Suite 2.02 Building 2,
Waterloo Business Park
35 Waterloo Road, Macquarie Park NSW 2113

Log of Borehole: S12

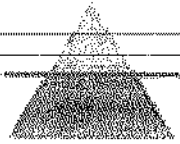
Project No: 7358

Client: Australian Technology Park

Location: Locomotive Street Carpark adjacent 3m from north boundary
& 7m from west boundary.

Project Manager: Justin Thompson-Laing

SUBSURFACE PROFILE			SAMPLE	COMMENTS
Depth (m)	Water Level Symbol	Description	Number	
0		Ground Surface		
		Asphalt Cover		
		Road Base		
		Very dark greenish grey gravel		
		Concrete		
0.25		Fill		
		Black sandy loam with slag		
0.5		End of Borehole Depth	Sample 7358/S12 - 0.5m	
0.75				
1				
Drill Date: 08/03/13			Drill Method: Hand Auger	Sheet: 1 of 1

**GETEX**GETEX PTY LTD
Suite 2.02 Building 2,
Waterloo Business Park

5 Waterloo Road, Macquarie Park NSW 2113

Log of Borehole: S13

Project No: 7358

Client: Australian Technology Park

Location: 3m south from Locomotive Street, 2m from Bay 4 Pedestrian
Crossing

Project Manager: Justin Thompson-Laing

SUBSURFACE PROFILE		SAMPLE	COMMENTS
Depth (m)	Description	Number	
0	Ground Surface		
0.25	Fill Mottled light greenish grey clay with rock fragments, slag and vegetation debris		
0.5	End of Borehole Depth	Sample 7358/S13 - 0.5m	
0.75			
1			
Drill Date: 8/03/13		Drill Method: Hand Auger	Sheet: 1 of 1



HLA-Envirosciences Pty Limited
55-65 Grandview Street
Pymble NSW 2073
Telephone: (02) 9988 4422
Fax: (02) 9988 4441

MONITORING WELL LOG BH23/MW01

PROJECT NUMBER J1546

PROJECT NAME Australian Technology Park

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Grass Surface

DATE 09/01/2001

SURFACE ELEVATION

WELL HEAD/TOC

BLANK Class 18, 50mm uPVC

SCREEN Machine Slotted, Class 18, 50mm uPVC

GRAVEL PACK 2mm graded sand

SANITARY SEAL/BENTONITE Hydrated Bentonite Seal

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
5			BH23 0.0-0.5 DUP18				SANDY SILT (ML): dark brown, soft, moist, fine to medium grained sand, some fine to medium sized gravel, some wood fragments.		Concrete
							GRAVELLY SILTY SAND (SM): black, loose, moist, fine to coarse grained sand, fine to medium sized gravel (ASH).	0.60	
5	3	X	BH23 1.0-1.45	*	1		SAND (SW): brown and dark brown, dense, moist, fine to medium grained sand, some sandstone gravel (fill).	1.00	Hydrated Bentonite Seal
	2	X					GRAVELLY SILTY SAND (SM): black, loose, moist, fine to coarse grained sand, fine to medium sized gravel, some clay (ASH).	1.10	Class 18, 50mm uPVC
6	1	X	BH23 2.0-2.45		2				
	2	X							
5	2	X	BH23 3.0-3.45		3		- some fine grained sand lenses in ash fill. - some coal like fragments, shiny black furnace waste, friable.	3.00	
	4	X							
5	4	X	BH23 4.0-4.45		4				2mm Graded Sand
	3	X							
							CLAY (CH): grey, firm, wet, slight hydrocarbon odour in water, occasional red mottling, (native).	4.50	Machine Slotted, Class 18, 50mm uPVC
									uPVC End Cap
5	4	X	BH23 6.0-6.45	*	6				
	4	X							
	5	X							
							Borehole terminated in clay. Groundwater encountered at 4.5m. Total Depth: 6.45 m	6.45	

BOREHOLE LOG BH41

DATE 04/01/2001

SURFACE ELEVATION

COMMENTS Grass Surface

GENERAL LOG J1545.GPJ HLA SYD.GDT 02/02/91

HLA-Envirosciences Pty Limited 55-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441						BOREHOLE LOG BH61	
PROJECT NUMBER <u>J1546</u>						DATE <u>09/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>						SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>							
DRILLING METHOD <u>Solid-Stem Auger</u>							
SAMPLING METHOD <u>Gary Mulhearn</u>							
LOGGED BY <u>Gary Mulhearn</u>							
STABILISED WATER LEVEL _____							
GROUND WATER ELEVATION _____							
COMMENTS <u>Bitumen Surface</u>							

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4			BH61 0.0-0.5				ASPHALTIC CONCRETE.	0.03
			BH61 0.6-0.8	*			SILTY SAND (SM): dark brown, loose, moist, fine to coarse grained sand, some fine to coarse sized gravel (coarse gravel is ballast). -with organic material (wood fragments, decomposing plant material) from 0.5m.	0.80
5	2 1 4	X	BH61 1.0-1.45		1		SANDY CLAY (CL): brown, orange and red mottled, soft, moist, fine grained sand.	
4			BH61 1.7-1.8				Borehole terminated on concrete. Groundwater not encountered. Total Depth: 1.80 m	1.80

 HLA-Envirosciences Pty Limited 55-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441						BOREHOLE LOG BH50	
PROJECT NUMBER <u>J1546</u>						DATE <u>08/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>						SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>							
DRILLING METHOD <u>Solid-Stem Auger</u>							
SAMPLING METHOD <u>Grab/SPT</u>							
LOGGED BY <u>Gary Muheam</u>							
STABILISED WATER LEVEL _____							
GROUND WATER ELEVATION _____							
COMMENTS <u>Bitumen Surface</u>							

PID (pdm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0			BH50 0.0-0.4	*			ASPHALTIC CONCRETE SANDY SILT (ML): brown, soft, moist, fine to coarse grained sand, some fine to medium sized gravel	0.03
							Auger refusal on concrete. Groundwater not encountered. Total Depth: 0.40 m	0.40

HLA-Envirosciences Pty Limited 55-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441						BOREHOLE LOG BH51		
PROJECT NUMBER <u>J1546</u>						DATE <u>12/01/2001</u>		
PROJECT NAME <u>Australian Technology Park</u>						SURFACE ELEVATION _____		
LOCATION <u>Redfern</u>								
DRILLING METHOD <u>Solid-Stem Auger</u>								
SAMPLING METHOD <u>Grab/SPT</u>								
LOGGED BY <u>Gary Mulhearn</u>								
STABILISED WATER LEVEL _____								
GROUND WATER ELEVATION _____								
COMMENTS <u>Bitumen Surface</u>								
PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5			BH51 0.0-0.5 DUP31	*			ASPHALTIC CONCRETE	0.03
				*			GRAVELLY SAND (SP): brown, dense, moist, fine to medium grained sand, fine to coarse gravel, (coarse gravel is ballast).	
4			BH51 0.8-1.0		1		SAND (SW): dark brown, dense, moist, some fine to coarse sized gravel, some ash.	0.70
							SANDY CLAY (CL): brown, soft, moist, fine to coarse grained sand, some fine to medium sized gravel.	0.80
							SILTY SAND (SM): dark grey-brown, loose, moist, fine to coarse grained sand, some ash.	1.20
4			BH51 1.8-2.0	*				
5	2		BH51 3.0-3.25	*	3		CLAY (CH): grey and red mottled, firm, moist, trace orange mottling, some pea sized fine to medium grained sand pockets, (native).	2.90
	2							
	3							
							-some weathered shale from 3.8m.	
							-wet from 4.0m.	
1			BH51 4.0-4.5		4			
	2							
							Borehole terminated in clay. Groundwater encountered at 4.0m.	4.45
							Total Depth: 4.45 m	



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BOREHOLE LOG BH52

PROJECT NUMBER J1546
PROJECT NAME Australian Technology Park
LOCATION Redfern
DRILLING METHOD Solid-Stem Auger
SAMPLING METHOD Grab/SPT
LOGGED BY Gary Mulhearn
STABILISED WATER LEVEL
GROUND WATER ELEVATION
COMMENTS Bitumen Surface

DATE 05/01/2001
SURFACE ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
6			BH52 0.0-0.3	*			ASPHALTIC CONCRETE GRAVELLY SILTY SAND (SW): brown, dense, moist, fine to coarse grained sand, fine to medium sized gravel. CONCRETE CLAY (CH): brown, soft, moist, some fine to medium gravel. SAND (SP): light brown sand, loose, moist, fine grained, (native).	0.03 0.15 0.20 0.40
5	1 1 2	X X X	BH52 1.0-1.45		1		CLAY (CH): grey, soft, moist, trace red and orange mottles, shale-like character.	1.00
5	2 1 1	X X X	BH52 2.0-2.45		2			
6	2 2 3	X X X	BH52 2.5-3.0		3		Borehole terminated in clay. Groundwater not encountered. Total Depth: 3.00 m	3.00

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BOREHOLE LOG BH53

PROJECT NUMBER J1546

DATE 05/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5			BH53 0.0-0.5 DUP09	*			ASPHALTIC CONCRETE GRAVELLY SILTY SAND (SW): brown, dense, moist, fine to coarse grained sand, fine to medium sized gravel.	0.03
8	2 2 2	X	BH53 1.0-1.45	*	1		SILTY GRAVEL (GM): dense, moist, medium to coarse gravel (ballast). CLAY (CH): grey, soft, moist, trace red and orange mottles, shale like character, (native).	0.70 0.80
5	2 3 2	X	BH53 2.0-2.45		2			
5	2 2 3	X	BH53 3.0-3.45		3			
							Borehole terminated in clay. Groundwater not encountered. Total Depth: 3.45 m	3.45

GENERAL LOG J1546.GPJ HLA SYD.GDT 05/02/01



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Fax: (02) 9988 4441

BOREHOLE LOG BH54

PROJECT NUMBER J1546

DATE 08/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0			BH54 0.0-0.3	*			ASPHALTIC CONCRETE SANDY SILT (ML): light brown, soft, moist, fine to medium grained sand, some fine to medium sized gravel. SANDY SILT (ML): brown, soft, moist, fine to coarse grained sand, some fine to medium sized gravel. Auger refusal on concrete. Groundwater not encountered. Total Depth: 0.30 m	0.03 0.10 0.30



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Telephone: (02) 9988 4422
Fax: (02) 9988 4441

BOREHOLE LOG BH56

PROJECT NUMBER J1546

DATE 08/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
7			BH56 0.0-0.4 DUP10				ASPHALTIC CONCRETE	0.03
							SILTY SAND (SM): dark brown, loose, moist, fine to coarse grained sand, some fine sized gravel.	0.40
							CLAY (CL): light brown, orange and dark brown, soft, moist, some fine to medium grained sand, some fine sized gravel.	0.90
6			BH56 0.8-0.9	*			Auger refusal on concrete. Groundwater not encountered. Total Depth: 0.90 m	

HLA-Envirosciences Pty Limited 55-56 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441						BOREHOLE LOG BH59	
PROJECT NUMBER <u>J1546</u>						DATE <u>10/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>						SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>							
DRILLING METHOD <u>Solid-Stem Auger</u>							
SAMPLING METHOD <u>Grab/SPT</u>							
LOGGED BY <u>Gary Mulhearn</u>							
STABILISED WATER LEVEL _____							
GROUND WATER ELEVATION _____							
COMMENTS <u>Bitumen Surface</u>							

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5			BH59 0.15-0.5				ASPHALTIC CONCRETE CONCRETE SAND (SW): grey, brown, loose, moist, fine to medium grained, some fine sized gravel.	0.03 0.15
4	4	X	BH59 1.0-1.45	*	1		SAND (SW): black, orange and white, loose, moist, medium to coarse grained, sand is furnace waste and coal like material, some fine gravel.	1.20
	4	X						
	3	X					SAND (SP): light brown and grey, loose, moist, fine grained, (native).	1.50
5	2	X	BH59 2.0-2.45	*	2			
	2	X						
	1	X					SAND (SP): light brown, loose, moist, fine grained.	2.40
5	3	X	BH59 3.0-3.45		3			
	3	X						
	4	X						
							Borehole terminated in sand. Groundwater not encountered. Total Depth: 3.45 m	3.45

GENERAL LOG J1546 GP1 HLA SYDNEY 100201



HLA-Envirosciences Pty Limited
55-55 Grandview Street
Pymble NSW 2073
Telephone: (02) 9988 4422
Fax: (02) 9988 4441

BOREHOLE LOG BH60

PROJECT NUMBER J1546

DATE 10/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5			BH60 0.17-0.5 DUP21	*			ASPHALTIC CONCRETE. CONCRETE. SILTY SAND (SM): dark brown, loose, moist, fine grained sand.	0.03 0.17
							CLAYEY SAND (SC): orange and red mottled, dense, moist.	0.60
5	2				1			
5	3	X	BH60 1.2-1.3				SAND (SM): dark brown, dense, moist, fine to coarse grained, some fine to medium sized gravel (sand and gravel is furnace waste).	1.20
	5						SAND (SF): light brown, loose, moist, fine grained, (native).	1.30
5	2	X						
	4		BH60 2.0-2.45					
	4							
							Borehole terminated in sand. Groundwater not encountered. Total Depth: 2.45 m	2.45

HLA-Envirosciences Pty Limited 55-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		MONITORING WELL LOG BH62/MW03	
PROJECT NUMBER <u>J1546</u>		DATE <u>09/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>		WELL HEAD/TOC _____	
DRILLING METHOD <u>Solid-Stem Auger</u>		BLANK <u>Class 18, 50mm uPVC</u>	
SAMPLING METHOD <u>Grab/SPT</u>		SCREEN <u>Machine Slotted, Class 18, 50mm uPVC</u>	
LOGGED BY <u>Gary Muheam</u>		GRAVEL PACK <u>2mm graded sand</u>	
STABILISED WATER LEVEL _____		SANITARY SEAL/BENTONITE <u>Hydrated Bentonite Seal</u>	
GROUND WATER ELEVATION _____			
COMMENTS <u>Bitumen Surface</u>			

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
3			BH62 0.0-0.5	*			ASPHALTIC CONCRETE. GRAVELLY SILTY SAND (SW): brown, dense, moist, fine to coarse grained sand, fine to medium sized gravel. CONCRETE. SILTY SAND (SW): loose, moist, fine to coarse grained sand, some fine sized gravel. SAND (SP): dark grey/brown, loose, moist, fine grained, trace clay. CLAY (OH): brown, soft, moist, grey and red mottling (fill).	0.02 0.20 0.25 0.60 0.80	Concrete Hydrated Bentonite Seal Class 18, 50mm uPVC
4	3 3 4	X	BH62 1.0-1.45		1		CRUSHED SANDSTONE: orange, medium to coarse grained sand, some sandstone gravel, some coal-like black material at 1.2m. CLAY (CH): brown, soft, moist, grey and red mottling (fill). CLAY (OH): grey, soft, wet, high plasticity (native).	1.10 1.30 1.60	Machine Slotted, Class 18, 50mm uPVC 2mm graded sand
4	1 0 0	X	BH62 2.0-2.45	*	2				
4	3 4 8	X	BH62 3.0-3.45		3		CLAY (CH): light gray, red and orange mottled clay, firm, moist, high plasticity.	3.30	
					4		Borehole terminated in clay. Groundwater encountered at 2.0m. Total Depth: 4.00 m	4.00	uPVC End Cap

HLA-Envirosciences Pty Limited
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BOREHOLE LOG BH49

PROJECT NUMBER J1546

PROJECT NAME Australian Technology Park

DATE 05/01/2001

LOCATION Redfern

SURFACE ELEVATION

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5			BH49 0.0-0.5	*			ASPHALTIC CONCRETE GRAVELLY SILTY SAND (SP): brown, dense, moist, fine to coarse grained sand, fine to medium sized gravel.	0.03
							SAND (SP): light brown, dense, moist, fine grained, (native).	0.50
5	2 2 2	X	BH49 1.0-1.4		1			
							CLAY (CH): grey, soft, moist, trace red and orange mottles, showing shale like character.	1.45
5	1 2 2	X	BH49 2.0-2.45	*	2			
5	2 2 2	X	BH49 3.0-3.3					
							Borehole terminated in clay. Groundwater not encountered. Total Depth: 3.30 m	3.30



HLA-Envirosciences Pty Limited
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BOREHOLE LOG BH63

PROJECT NUMBER J1546

DATE 12/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5			BH63 0.0-0.5				ASPHALTIC CONCRETE SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	0.03
							GRAVELLY SAND (SW): brown, dense, moist, fine to medium grained sand, fine to medium sized gravel - some ballast.	0.80
							SAND (SP): yellow, loose, moist, fine grained (native).	0.90
5	2 5 4	X X X	BH63 1.0-1.45 DUP30		1			
5	3 4 6	X X X	BH63 2.0-2.45		2			
							Borehole terminated in sand. Groundwater not encountered. Total Depth: 2.45 m	2.45

GENERAL LOG J1546.GPJ HLA_SVD.GDT 02/02/01



HLA-Envirosciences Pty Limited
55-65 Grandview Street
Pymble NSW 2073
Telephone: (02) 9988 4422
Fax: (02) 9988 4441

BOREHOLE LOG BH64

PROJECT NUMBER J1546

DATE 04/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

DRILLING METHOD Solid Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4			BH64 0-0.5				ASPHALTIC CONCRETE	0.03
							SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized gravel (crushed sandstone).	
							SILTY GRAVEL (GM): brown, dense, moist, medium to coarse sized gravel.	0.50
							SAND (SP): brown, dense, fine grained, (native).	0.60
5	7 10 9	X	BH64 1.0-1.45		1			
					2		-wet from 2.2m.	
5	2 6 12	X	BH64 3.0-3.45		3			
							Borehole terminated at 3.45m. Total Depth: 3.45 m	3.45

GENERAL LOG J1546.GPJ HLA_SVD.GDT 02/02/01



HLA-Envirosciences Pty Limited
55-65 Grandview Street
Pymble NSW 2073
Telephone: (02) 9988 4422
Fax: (02) 9988 4441

BOREHOLE LOG BH65

PROJECT NUMBER J1546

DATE 04/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4			BH65 0-0.2	*			ASPHALTIC CONCRETE	0.03
							SAND (SW): light brown, loose, moist, fine to medium grained, some fine to coarse sized sandstone gravel (crushed sandstone).	0.40
							GRAVEL (GW): grey, ballast, medium to coarse sized,	0.50
							SAND (SP): light brown, loose, moist, fine grained, (native).	
4			BH65 1.0-1.5 DUP06	*	1		darken from 1.5m and wet.	
4			BH65 2.0-2.2	*			Borehole terminated in sand. Groundwater encountered at 1.5m. Total Depth: 2.20 m	2.20

 HLA-Envirosciences Pty Limited 55-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH66	
PROJECT NUMBER <u>J1545</u>		DATE <u>09/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>			
DRILLING METHOD <u>Solid-Stem Auger</u>			
SAMPLING METHOD <u>Grab/SPT</u>			
LOGGED BY <u>Gary Mulhearn</u>			
STABILISED WATER LEVEL _____			
GROUND WATER ELEVATION _____			
COMMENTS <u>Bitumen Surface</u>			

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
2			BH66 0.0-0.5 DUP16				ASPHALTIC CONCRETE. SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	0.03
							Auger refusal on very hard light brown material. Groundwater not encountered. Total Depth: 0.60 m	0.60



HLA-Environmental Sciences Pty Limited
55-55 Grandview Street
Pymble NSW 2073
Telephone: (02) 9988 4422
Fax: (02) 9988 4441

BOREHOLE LOG BH67

PROJECT NUMBER J1546

DATE 12/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION _____

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL _____

GROUND WATER ELEVATION _____

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4			BH67 0.0-0.5	*			ASPHALTIC CONCRETE. SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	0.03
							GRAVELLY SAND (SW): brown, dense, moist, fine to medium grained sand, medium to coarse gravel (ballast).	0.60
4	8 8 12	X	BH67 1.0-1.45		1		SAND (SP): grey, loose, moist, fine grained, some silt. -a piece of ballast in the tip of the SPT sampler at 1.0-1.45m may explain the relatively high SPT counts.	0.90
4	3 3 2	X	BH67 2.2-2.45		2		SAND (SP): light grey, loose, wet, fine grained, (native). Borehole terminated in sand. Groundwater encountered at 2.2m. Total Depth: 2.45 m	2.20 2.45

PID (ppm)		BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4				BH68 0.0-0.5 DUP29				ASPHALTIC CONCRETE SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	0.03
4				BH68 0.6-0.7	*			GRAVELLY SAND (SW): dark brown, dense, moist, fine to medium grained sand, medium to coarse gravel (ballast). Auger refusal on ballast. Groundwater not encountered. Total Depth: 0.70 m	0.60 0.70

GENERAL LOG J1546.CPJ HLA STD.GDT 12/02/01

PID (ppm)		BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
HLA-EnviroSciences Pty Limited 55-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441								
PROJECT NUMBER J1545					DATE 08/01/2001			
PROJECT NAME Australian Technology Park					SURFACE ELEVATION			
LOCATION Redfern								
DRILLING METHOD Solid-Stem Auger								
SAMPLING METHOD Grab/SPT								
LOGGED BY Gary Mulhearn								
STABILISED WATER LEVEL								
GROUND WATER ELEVATION								
COMMENTS Bitumen Surface								
BOREHOLE LOG BH70								
5								
BH70 0.0-0.5 *								
ASPHALTIC CONCRETE								
SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).								
0.03								
7								
BH70 1.0-1.2 1								
SANDY GRAVEL (GW): dense, moist, medium to coarse gravel								
0.80								
SAND (SP): light brown, some dark brown portions, fine grained, (native).								
1.20								
3								
BH70 2.0-2.45 * 2								
-wet from 2.1m.								
2.45								
Borehole terminated in sand. Groundwater encountered at 2.1m. Total Depth: 2.45 m								

PID (ppm)		BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BSL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
HLA-EnviroSciences Pty Limited 55-55 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441									
PROJECT NUMBER J1546									
PROJECT NAME Australian Technology Park									
LOCATION Redfern									
DRILLING METHOD Solid-Stem Auger									
SAMPLING METHOD Grab/SPT									
LOGGED BY Gary Mulhearn									
STABILISED WATER LEVEL									
GROUND WATER ELEVATION									
COMMENTS Bitumen Surface									
BOREHOLE LOG BH71									
DATE 12/01/2001									
SURFACE ELEVATION									
4				BH71 0.0-0.5				ASPHALTIC CONCRETE	0.03
								SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	
5				BH71 0.8-1.0	*	1		SAND (SW): dark brown, dense, moist, fine to coarse grained, some medium to coarse gravel (ballast), trace clay.	0.70
								SAND (SP): dark grey, loose, moist, fine grained, some silt (native).	1.20
5	3	X		BH71 2.1-2.45		2		SAND (SP): light gray, loose, wet, fine grained.	2.10
	3								
	4								
4	3	X		BH71 3.0-3.4		3			
	5								
	4								
Borehole terminated in sand. Groundwater encountered at 2.1m. Total Depth: 3.45 m									3.45

 HLA-Envirosciences Pty Limited 55-56 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH72	
PROJECT NUMBER <u>J1546</u>		DATE <u>08/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>			
DRILLING METHOD <u>Solid-Stem Auger</u>			
SAMPLING METHOD <u>Grab/SPT</u>			
LOGGED BY <u>Gary Mulhearn</u>			
STABILISED WATER LEVEL _____			
GROUND WATER ELEVATION _____			
COMMENTS <u>Bitumen Surface</u>			

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
			BH72 0.0-0.5				ASPHALTIC CONCRETE SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	0.03
							Borehole terminated on ballast. Groundwater not encountered. Total Depth: 0.70m	0.70

 HLA-Envirosciences Pty Limited 55-55 Grandview Street Pyrmble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH73	
PROJECT NUMBER <u>J1546</u>		DATE <u>10/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>			
DRILLING METHOD <u>Solid-Stem Auger</u>			
SAMPLING METHOD <u>Grab/SPT</u>			
LOGGED BY <u>Gary Mulhearn</u>			
STABILISED WATER LEVEL _____			
GROUND WATER ELEVATION _____			
COMMENTS <u>Bitumen Surface</u>			

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
			BH73 0.0-0.5	*			ASPHALTIC CONCRETE. SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone). -brown and with increasing gravel content from 0.6m. -with ballast from 1.0m.	0.03
	2	X	BH73 1.4-1.55	*			SAND (SP): brown and grey, loose, moist, fine grained, trace silt, some dark brown portions, (native).	1.30
	4	X						
	4	X						
	1	X	BH73 2.0-2.45					
	1	X						
	1	X						
							Borehole terminated in sand. Groundwater not encountered. Total Depth: 2.45 m	2.45

PID (ppm)		BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4				BH74 0.1-0.3				ASPHALTIC CONCRETE	0.03
								SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	
4				BH74 0.9-1.0	*	1		CLAY (CH): gray-brown, hard, moist, some fine to coarse sand, some fine to medium gravel (fill).	0.80
								GRAVEL (GW): grey, dry, dense, medium to coarse sized gravel (ballast).	1.00
								Borehole terminated on ballast. Groundwater not encountered. Total Depth: 1.20 m	1.20

GENERAL LOG: J1546.GPJ HLA SYDNEY CENTRAL

 HLA-Envirosciences Pty Limited 55-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH76	
PROJECT NUMBER <u>J1546</u>		DATE <u>09/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>			
DRILLING METHOD <u>Solid-Stem Auger</u>			
SAMPLING METHOD <u>Grab/SPT</u>			
LOGGED BY <u>Gary Mulhearn</u>			
STABILISED WATER LEVEL _____			
GROUND WATER ELEVATION _____			
COMMENTS <u>Blumen Surface</u>			

PID (pdm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
2			BH76 0.0-0.5	*			ASPHALTIC CONCRETE	0.03
							SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	
							SANDY GRAVEL (GW): dense, moist, medium to coarse gravel (ballast)	0.50
2			BH76 0.8-1.0		1		SILTY SAND (SM): dark brown, loose, moist, fine to medium grained sand, some fine to medium sized gravel (native).	0.80
							SAND (SP): light brown, loose, moist, fine grained	1.20
3	2 6 6	X	BH76 2.0-2.45	*	2		-wet from approximately 2.0m.	
3	6 6 10	X	BH76 3.0-3.45		3			
							Borehole terminated in sand. Groundwater encountered at 2.0m. Total Depth: 3.45 m	3.45

 HLA-Envirosciences Pty Limited 55-55 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH77	
PROJECT NUMBER <u>J1546</u>		DATE <u>12/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>			
DRILLING METHOD <u>Solid-Stem Auger</u>			
SAMPLING METHOD <u>Grab/SPT</u>			
LOGGED BY <u>Gary Mulhearn</u>			
STABILISED WATER LEVEL _____			
GROUND WATER ELEVATION _____			
COMMENTS <u>Bitumen Surface</u>			

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4			BH77 0.0-0.5 DUP28				ASPHALTIC CONCRETE SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	0.03
							Auger refusal on powdery red material (possibly ironstone). Groundwater not encountered. Total Depth: 0.70 m	0.70

 HLA-Envirosciences Pty Limited 55-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441						BOREHOLE LOG BH78	
PROJECT NUMBER <u>J1546</u>				DATE <u>08/01/2001</u>			
PROJECT NAME <u>Australian Technology Park</u>				SURFACE ELEVATION _____			
LOCATION <u>Redfern</u>							
DRILLING METHOD <u>Solid-Stem Auger</u>							
SAMPLING METHOD <u>Grab/SPT</u>							
LOGGED BY <u>Gary Mulhearn</u>							
STABILISED WATER LEVEL _____							
GROUND WATER ELEVATION _____							
COMMENTS <u>Bitumen Surface</u>							

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
			BH78 0.0-0.5 DUP15	*			ASPHALTIC CONCRETE.	0.03
				*			SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	0.70
							Borehole terminated on ballast. Groundwater not encountered. Total Depth: 0.70 m	

PID (ppm)		BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4				BH79 0.0-0.5				ASPHALTIC CONCRETE SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel, trace silt (crushed sandstone).	0.03
						1		GRAVELLY SAND (SW): grey, dense, moist, fine to coarse grained sand, fine to medium sized gravel.	1.00
								GRAVEL (GW): dense, moist, medium to coarse sized.	1.40
								Borehole terminated on ballast. Groundwater not encountered. Total Depth: 1.50 m	1.50

GENERAL LOG J1546.GPJ HLA SYD.GPJ 02/02/01

 HLA-Enviroclences Pty Limited 55-55 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH80	
PROJECT NUMBER <u>J1546</u>		DATE <u>10/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>			
DRILLING METHOD <u>Solid-Stem Auger</u>			
SAMPLING METHOD <u>Grab/SPT</u>			
LOGGED BY <u>Gary Mulhearn</u>			
STABILISED WATER LEVEL _____			
GROUND WATER ELEVATION _____			
COMMENTS <u>Bitumen Surface</u>			

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BSL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4			BH80 0.0-0.5				ASPHALTIC CONCRETE. SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	0.03
					1		-more dense and with some ballast from 1.0m.	
5	2	X	BH80 2.0-2.45	*	2		GRAVEL (GW): dense, dry, medium to coarse sized.	2.50
	3							
	3							
					3		SAND (SP): dark grey/brown, moist, fine grained, trace silt, (native).	2.80
4	1	X	BH80 3.0-3.45	*				
	1							
	5						SAND (SP): light grey, dense, wet, fine grained.	3.30
							Borehole terminated in sand. Groundwater encountered at 2.6m. Total Depth: 3.45 m	3.45

GENERAL LOG J1546.GPJ HLA SYDNEY 02/02/01

PID (ppm)		BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
HLA-Envirosciences Pty Limited 55-55 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441									
PROJECT NUMBER J1545									
PROJECT NAME Australian Technology Park									
LOCATION Redfern									
DRILLING METHOD Solid-Stem Auger									
SAMPLING METHOD Grab/SPT									
LOGGED BY Gary Mulhearn									
STABILISED WATER LEVEL									
GROUND WATER ELEVATION									
COMMENTS Bitumen Surface									
BOREHOLE LOG BH81									
DATE 10/01/2001									
SURFACE ELEVATION									
ASPHALTIC CONCRETE									
SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).									
SILTY SAND (SM): dark grey, dense, moist, some fine to coarse sized gravel, occasional piece of metal ~5cm dia., some ballast.									
SAND (SP): dark grey, dense, moist, fine grained, some silt, trace fine gravel (native).									
SAND (SP): light brown, dense, wet, fine grained.									
Borehole terminated in sand. Groundwater encountered at 2.5m. Total Depth: 3.45 m									

 HLA-Envirosclences Pty Limited 56-66 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH82	
PROJECT NUMBER <u>J1546</u> PROJECT NAME <u>Australian Technology Park</u> LOCATION <u>Redfern</u> DRILLING METHOD <u>Solid-Stem Auger</u> SAMPLING METHOD <u>Grab/SPT</u> LOGGED BY <u>Gary Mulhearn</u> STABILISED WATER LEVEL _____ GROUND WATER ELEVATION _____ COMMENTS <u>Blumen Surface</u>		DATE <u>10/01/2001</u> SURFACE ELEVATION _____	

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5			BH82 0.0-0.5				ASPHALTIC CONCRETE	0.03
							SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	
							SANDY GRAVEL (GW): dark brown, dense, moist, medium to coarse gravel (ballast).	0.60
					1		ROCK: red, hard rock like material - cuttings are red and powdery with fine grained sand, possibly ironstone. Borehole terminated on hard rock. Groundwater not encountered. Total Depth: 1.00 m.	0.95 1.00

PID (ppm)		BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5				BH86 0.0-0.5				ASPHALTIC CONCRETE SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).	0.03
Borehole terminated on ballast. Groundwater not encountered. Total Depth: 0.60 m									0.60

GENERAL LOG: J1546.GPJ HLA SYDNEY 02/02/01

 HLA-Envirosciences Pty Limited 55-55 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH87	
PROJECT NUMBER <u>J1546</u>		DATE <u>10/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>			
DRILLING METHOD <u>Solid-Stem Auger</u>			
SAMPLING METHOD <u>Grab/SPT</u>			
LOGGED BY <u>Gary Mulhearn</u>			
STABILISED WATER LEVEL _____			
GROUND WATER ELEVATION _____			
COMMENTS <u>Blumen Surface</u>			

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5			BH87 0.0-0.5				ASPHALTIC CONCRETE	0.03
5			BH87 0.8-1.0	*	1		SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel, trace clay (crushed sandstone).	1.50
							SANDY GRAVEL (GW): brown, medium to coarse sized gravel (ballast).	1.50
							CLAY (CH): brown, soft, moist, some orange/light brown mottling, some fine to medium grained sand (fill).	1.90
4	2 1 2		BH87 2.0-2.45	*	2		SAND (SP): brown, loose, moist, fine grained, some slit, (native).	
							-wet from 2.5m.	
5	6 8 9		BH87 3.0-3.45		3		SAND (SP): light brown, dense, wet, fine grained sand.	3.20
							Borehole terminated in sand. Groundwater encountered at 2.5m. Total Depth: 3.45 m	3.45

GENERAL LOG: J1546.GPJ HLA STD.GPJ 02/02/01

PID (ppm)		BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
HLA-Envirosciences Pty Limited 65-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441									
PROJECT NUMBER J1546							DATE 10/01/2001		
PROJECT NAME Australian Technology Park							SURFACE ELEVATION		
LOCATION Redfern									
DRILLING METHOD Solid-Stem Auger									
SAMPLING METHOD Grab/SPT									
LOGGED BY Gary Mulhearn									
STABILISED WATER LEVEL									
GROUND WATER ELEVATION									
COMMENTS Bitumen Surface									
BOREHOLE LOG BH88									
ASPHALTIC CONCRETE SILTY CLAY (CL-ML): brown, soft, moist, some fine to coarse grained sand, some light brown mottles.									
SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel (crushed sandstone).									
GRAVELLY SAND (SW): dark brown, dense, moist, fine to coarse grained sand, fine to coarse sized gravel.									
SILTY SAND (SM): dark brown, dense, moist, fine grained sand, some clay lenses (native).									
SAND (SP): grey-brown, dense, moist, some brown silty lenses. -wet from 2.5m.									
Borehole terminated in sand. Groundwater encountered at 2.6m. Total Depth: 3.45 m									

 HLA-EnviroSciences Pty Limited 55-55 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH89	
PROJECT NUMBER <u>J1546</u>		DATE <u>10/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Redfern</u>			
DRILLING METHOD <u>Solid-Stem Auger</u>			
SAMPLING METHOD <u>Grab/SPT</u>			
LOGGED BY <u>Gary Mulhearn</u>			
STABILISED WATER LEVEL _____			
GROUND WATER ELEVATION _____			
COMMENTS <u>Bitumen Surface</u>			

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4			BH89 0.0-0.5				ASPHALTIC CONCRETE. SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel, trace silt (crushed sandstone).	0.03
4			BH89 0.8-1.0		1			
4			BH89 1.8-2.0	*	2		SANDY GRAVEL (GW): dark brown, dense, moist, medium to coarse sized gravel (ballast), fine to coarse grained sand, some silt. Auger refusal on ballast. Groundwater not encountered. Total Depth: 2.00 m	1.80 2.00

 HLA-Envirosciences Pty Limited 55-55 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH90	
PROJECT NUMBER <u>J1546</u>		DATE <u>10/01/2001</u>	
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____	
LOCATION <u>Radfern</u>			
DRILLING METHOD <u>Solid-Stem Auger</u>			
SAMPLING METHOD <u>Grab/SPT</u>			
LOGGED BY <u>Garv Mulhearn</u>			
STABILISED WATER LEVEL _____			
GROUND WATER ELEVATION _____			
COMMENTS <u>Bitumen Surface</u>			

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
5			BH90 0.0-0.5				ASPHALTIC CONCRETE. SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel, trace silt; (crushed sandstone).	0.03
4			BH90 0.8-1.0		1			
5			BH90 1.8-2.0	*	2		GRAVELLY SAND (SW): brown and light grey, dense, moist, fine to medium grained sand, fine to coarse sized gravel; gravel is sandstone and ballast. SAND (SP): light brown, loose, moist, fine grained (native).	1.80 2.00
							-wet from approximately 2.5m. -sulfurous odour in wet sand.	
4	2 2 12		BH90 3.0-3.45	*	3		SILTY SAND (SM): dark brown, very dense, moist, slightly cemented.	3.30
							SAND (SP): brown, dense, wet, fine grained, some silt.	3.50
5	6 13 15		BH90 4.3-4.5		4		SAND (SP): light brown, dense, wet, fine grained.	4.30
							Borehole terminated in sand. Groundwater encountered at 2.5m. Total Depth: 4.50 m	4.50

GENERAL LOG J1546.GPJ HLA SYD GOT 02/02/01

PID (ppm)		BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
HLA-Envirosiences Pty Limited 55-55 Grandview Street Pymble NSW 2073 Telephone: (02) 9888 4422 Fax: (02) 9888 4441									
BOREHOLE LOG BH91									
PROJECT NUMBER <u>J1545</u>					DATE <u>03/01/2001</u>				
PROJECT NAME <u>Australian Technology Park</u>					SURFACE ELEVATION _____				
LOCATION <u>Redfern</u>									
DRILLING METHOD <u>Direct-Push</u>									
SAMPLING METHOD <u>Direct-Push</u>									
LOGGED BY <u>Gary Mulhearn</u>									
STABILISED WATER LEVEL _____									
GROUND WATER ELEVATION _____									
COMMENTS <u>Bitumen Surface</u>									
4				BH91 0.1-0.3				ASPHALTIC CONCRETE. SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel, trace silt (crushed sandstone).	0.03
4				BH91 0.8-0.9		1		GRAVEL (GW): black, dense, moist, bituminous. GRAVEL (GW): gray, medium to coarse sized, (ballast) Refusal on ballast. Groundwater not encountered. Total Depth: 1.20 m	1.00 1.05 1.20



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BOREHOLE LOG BH93

PROJECT NUMBER J1546

DATE 09/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
3			BH93 0.0-0.5	*			ASPHALTIC CONCRETE SILTY SAND (SM): orange-brown, loose, moist, fine to medium grained sand, some fine to medium sized gravel (fill).	0.03
								0.60
4	3 2 4	X X X	BH93 1.0-1.4	*	1		SAND (SP): dark grey-brown, loose, moist, fine grained, occasional fine to medium gravel, trace silt (native).	
								1.40
4	6 10 8	X X X	BH93 2.0-2.2		2		SAND (SP): light yellow-orange, loose, moist, fine grained.	
								2.20
							Borehole terminated in sand. Groundwater not encountered. Total Depth: 2.20 m	

		HLA-Envirosciences Pty Limited 55-65 Grandview Street Pymble NSW 2073 Telephone: (02) 9988 4422 Fax: (02) 9988 4441		BOREHOLE LOG BH96	
PROJECT NUMBER <u>J1546</u>		DATE <u>09/01/2001</u>			
PROJECT NAME <u>Australian Technology Park</u>		SURFACE ELEVATION _____			
LOCATION <u>Redfern</u>					
DRILLING METHOD <u>Solid-Stem Auger</u>					
SAMPLING METHOD <u>Grab/SPT</u>					
LOGGED BY <u>Gary Mulhearn</u>					
STABILISED WATER LEVEL _____					
GROUND WATER ELEVATION _____					
COMMENTS <u>Bitumen Surface</u>					

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4			BH96 0.0-0.5 DUP20 DUP26	* * *			ASPHALTIC CONCRETE SILTY SAND (SM): dark brown, loose, moist, fine grained sand, some fine to medium gravel in top 0.2m.	0.03
							SAND (SP): light brown, loose, moist, fine grained, trace silt.	0.60
5	6 0 0	X	BH96 1.0-1.4		1		Void. Potential concrete pipe. -SPT hammer struck 6 times to 1.1m, then broke through into a void to 1.7m.	1.10
5			BH96 1.6-1.8				Refusal at 1.8m on concrete, possibly the base of a concrete pipe. Groundwater not encountered. Total Depth: 1.80 m	1.80



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BOREHOLE LOG BH97

PROJECT NUMBER J1546

DATE 04/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

DRILLING METHOD Solid-Stem Auger

SAMPLING METHOD Grab/SPT

LOGGED BY Gary Mulhearn

STABILISED WATER LEVEL

GROUND WATER ELEVATION

COMMENTS Gravelly Sand Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4			BH97 0-0.2	*			ASPHALTIC CONCRETE	0.03
							GRAVELLY SAND (GM): light brown, dense, moist, fine to medium grained sand, fine to medium sized gravel.	0.20
							SILTY GRAVEL (GM): dense, dry to moist, medium to coarse sized gravel (ballast).	0.40
							SAND (SP): light brown, loose, moist, fine grained, (native).	
4			BH97 1.6-1.8				Borehole terminated in sand. Groundwater not encountered. Total Depth: 1.80 m	1.80



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MONITORING WELL LOG BH99/MW04

PROJECT NUMBER J1546

DATE 09/01/2001

PROJECT NAME Australian Technology Park

SURFACE ELEVATION

LOCATION Redfern

WELL HEAD/TOC

DRILLING METHOD Solid-Stem Auger

BLANK Class 18, 50mm uPVC

SAMPLING METHOD Grab/SPT

SCREEN Machine Slotted, Class 18, 50mm uPVC

LOGGED BY Gary Mulhearn

GRAVEL PACK 2mm graded sand

STABILISED WATER LEVEL

SANITARY SEAL/BENTONITE Hydrated Bentonite Seal

GROUND WATER ELEVATION

COMMENTS Bitumen Surface

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
3			BH99, 0.0-0.5 DUP17				ASPHALTIC CONCRETE	0.03	Concrete
							SAND (SW): light brown, loose, moist, fine to medium grained, some fine to medium sized sandstone gravel, trace silt (crushed sandstone).		Hydrated Bentonite Seal
4			BH99, 0.8-1.0	*	1		-some white and brown crushed sandstone, some fine to medium gravel (blue metal) from 0.7m.		Class 18, 50mm uPVC
							SILTY SAND (SM): dark brown, very soft, moist, fine grained sand, some organic material (peaty, native).	1.40	
							Wet from 1.6m.	1.80	
4	2	X	BH99, 2.0-2.45	*	2		SAND (SP): light grey, dense, wet, fine grained, sulfurous odour.		2mm graded sand
	1								Machine Slotted, Class 18, 50mm uPVC
	3								
5	4	X	BH99, 3.0-3.45	*	3				
	6								
	8								
					4		Borehole terminated in sand. Groundwater encountered at 1.6m. Total Depth: 4.00 m	4.00	uPVC End Cap

DRILL LOG

HOLE No. ER AH 1 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hand Auger Date 27/5/93 Logged By AL Page 1 of 1			
SPT	Depth (m)	Description	PID Readings
	0	Surface	
	0.25	SAND with metal (lead ?) slaking brown SAND, medium grained	14.0ppm
	0.5	clay FILL	1.2ppm
	0.75	clay FILL with some gravel, gritty texture, wet EOH at 0.8m. Hard layer, auger refusal	0.8ppm
	1.0		
	1.25		
	1.5		
	1.75		
	2.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER AH 2 Eveleigh Railyards Redfern See Plan Hand Auger 27/5/93 AL 1 of 1	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
	0.25	leaf litter and root material; dark brown sandy SOIL, some concrete and sandstone pieces	0.0ppm
	0.5	sand FILL; dark brown SAND (as above)	0.0ppm
	0.75		
	1.0	layer of black granular material sand FILL with some clay EOH at 1.0m	0.0ppm
	1.25		
	1.5		
	1.75		
	2.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER AH 3 Eveleigh Railyards Redfern See Plan Hand Auger 27/5/93 AL 1 of 1	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		vegetable matter, brown TOPSOIL, yellow/brown SAND	0.0ppm
	0.25	yellow fine grained SANDS	
	0.5		0.0ppm
	0.75		
	1.0	EOH at 1.0m	0.0ppm
	1.25		
	1.5		
	1.75		
	2.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER AH 4 Eveleigh Railyards Redfern See Plan Hand Auger 27/5/93 AL 1 of 1	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		brown sandy TOPSOIL	0.0ppm
	0.25	sandy SOIL	
	0.5	ash material ash and sand FILL	0.0ppm
	0.75		
	1.0	ASH and fine grey SOIL EQH at 1.0m	0.0ppm
	1.25		
	1.5		
	1.75		
	2.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER AH 5 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hand Auger Date 27/5/93 Logged By AL Page 1 of 1		
SPT Depth (m) 	Description vegetable matter brown loamy SOIL with sandstone pieces hard cokey/ash material grey fine grained SAND and coke material light grey fine grained SAND EOH at 1.0m	PID Readings 0.0ppm 0.0ppm 0.0ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER AH 6 Eveleigh Railyards Redfern See Plan Hand Auger 27/5/93 AL 1 of 1	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
	0.25	brown/grey loamy SOIL	0.0ppm
	0.5		0.0ppm
	0.75	light grey SANDS	
	1.0	EOH at 1.0m	0.0ppm
	1.25		
	1.5		
	1.75		
	2.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER AH8 Eveleigh Railyards Redfern See Plan Hand Auger 23/7/93 AL 1 of 1	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
	0.25	brown grey mottled and fine sandy soil, non odorous	0.0ppm
	0.5	as above, non odorous	0.0ppm
	0.75	as above, but with more clay content	
	1.0	grey fine grained SAND, small piece of rusty metal non odorous	0.0ppm
	1.25	EOH at 0.9m. Hard obstruction, auger refusal	
	1.5		
	1.75		
	2.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER AH9 Eveleigh Railyards Redfern See Plan Hand Auger 23/7/93 AL 1 of 1	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
	0.25	brown and grey fine sandy soil with patches white sandy clay, glass, rubble, non odorous	0.0ppm
	0.5	brown and grey fine sandy soil with clay patches, some rubble (terracotta pieces/ground brick), non odorous	0.0ppm
	0.5	EOH at 0.5m. Hard obstruction, auger refusal	
	0.75		
	1.0		
	1.25		
	1.5		
	1.75		
	2.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER AH10 Eveleigh Railyards Redfern See Plan Hand Auger 23/7/93 AL 1 of 1	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		concrete and sandstone pieces	
	0.25	light grey fine grained SANDS, non odorous	0.0ppm
		light grey fine grained SANDS	
	0.5	light grey fine grained SANDS, non odorous	0.0ppm
	0.75		
	1.0	light grey SANDS non odorous brown SANDS	0.0ppm
		EOH at 1.1m	
	1.25		
	1.5		
	1.75		
	2.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER AH11 Eveleigh Railyards Redfern See Plan Hand Auger 27/7/93 AL 1 of 1	
SPT	Depth (m)	Description	PID Readings
	0 Surface	brown and grey friable sandy soil, non odorous (called Dumping Area soil)	0.0ppm
	0.25		
	0.5	brown and grey friable sandy soil, some clay lumps non odorous	6.1ppm
	0.75		
	1.0	light grey sandy soil non odorous EOH at 1.0m	6.2ppm
	1.25		
	1.5		
	1.75		
	2.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER AH12 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hand Auger Date 23/7/93 Logged By AL Page 1 of 1		
SPT Depth (m) 	Description vegetation; grass and root material grey fine sandy soil, non odorous grey fine sandy soil alternating brown/grey fine sandy soil, non odorous brown fine sandy soil yellow fine sandy soil, non odorous EOH at 1.0m	PID Readings 0.0ppm 0.0ppm 0.5ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED

DRILL LOG

HOLE No.	ER BH1
Project	Eveleigh Railyards
Project Location	Redfern
Position	See Plan
Method of Drilling	Hollow Flight Auger
Date	19/4/93
Logged By	AL
Page	1 of 1

RL 15.71

SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt roadbase and sand	0.0ppm
10,10,19 N=29	1.0	FILL with sandstone pieces, gravel, sand with minor clay fraction	0.0ppm
3,3,3 N=6	2.0	dark grey clayey sand with gravel grey sandy CLAY	0.0ppm
4,6,9 N=15	3.0	grey sandy CLAY, water table at 3m, very wet, minor shale band - very thin	0.0ppm
4,2,2 N=4	4.0		
	5.0	yellowy brown SAND with thin layers of grey clayey SAND, possibly organic layer	0.0ppm
2,3,7 N=10	6.0	grey smooth CLAY, plastic, some black mottling white CLAY, firm, yellow and orange mottling, ironstone nodules EOH	0.0ppm
	7.0		
	8.0		

JOB No. JET0224

JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH2 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 19/4/93 AL 1 of 2		RL 16.45
SPT	Depth (m)	Description	PID Readings	
0	Surface	sandstone, bitumen, sand		
10,20,20 N=40	1.0	yellow SAND with sandstone pieces throughout	0.0ppm	
		clayey sand FILL with sand, clay and sandstone pieces, non odorous	0.0ppm	
6,7,8 N=15	2.0	FILL with sandstone pieces, gravel, charcoal/coal in sandy soil substrate, plus minor clay. Faint chemical odour	0.0ppm	
		water table at 2.45m		
1,2,4 N=6	3.0	grey CLAY with brown mottling; plastic, moist and root material, non odorous	0.0ppm	
		grey CLAY		
10,17,13 N=30	5.0	grey SAND, wet, non odorous	0.0ppm	
		grey sandy CLAY, mottled brown/red/yellow; CLAY with ironstone nodules, non odorous	0.0ppm	
		red brown CLAY becoming firmer with depth		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. ER BH2 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 19/4/93 Logged By AL Page 2 of 2			
SPT	Depth (m)	Description	PID Readings
red/brown CLAY, firmer with depth EOH at 9.7m. Auger refusal Note: Piezometer Installed			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH4 Eveleigh Rallyards Redfern See Plan Hollow Flight Auger 20/4/93 AL 1 of 1	
		RL 16.38	
SPT	Depth (m)	Description	PID Readings
	0 Surface	ripped sandstone FILL with some gravel pieces, non odorous	0.0ppm
6,12,10 N=22	1.0	clay and sandstone FILL with ironstone nodules, gravel, wood, non odorous	0.0ppm
		yellow orange clayey SAND with sandstone pieces	
3,3,4 N=7	2.0	sandy clay FILL with sandstone pieces, ironstone nodules, non odorous	0.0ppm
		dark sandy clay FILL	
		dark brown/grey clay FILL with bricks, metal	
		some sand/silt content	
2,2,2 N=4	3.0	grey CLAY with red/brown mottling, moist, plastic, small ironstone nodules, firmer with depth, non odorous	0.0ppm
	4.0	red/brown CLAY	
5,8,5 N=13	5.0	red/brown CLAY band of IRONSTONE	
		light grey CLAY, very stiff, non odorous. EOH	0.0ppm
	6.0		
	7.0		
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH12 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 21/4/93 AL 1 of 1	RL 16-24
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		ripped sandstone FILL and sand, moist, non odorous	0.0ppm
14,15,7 N=22	1.0	sandy clay FILL with sandstone, concrete, ash material, brick pieces, friable, non odorous	0.0ppm
1,2,2 N=4	2.0	silty to sandy clay FILL with thin layers of dark grey/black sand with shale pieces throughout, very moist, non odorous possible water table?	0.0ppm
	3.0	SAND	
3,3,7 N=10	4.0	grey/brown fine grained SANDS, darker towards bottom of sample, uniform texture, wet, non odorous	1.0ppm
4,6,9 N=15	5.0	grey brown fine grained SANDS, with uniform texture and black flecks of shale? throughout, wet, non odorous	6.0ppm
3,1,1 N=2	6.0	SANDS, no sample retrieved, unable to be retained in SPT	
	7.0	CLAY	
6,9,18 N=27	8.0	Insitu grey/red mottled silty CLAY, very stiff, Ironstone prevalent, non odorous. EOH	0.3ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER BH13 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 22/4/93 Logged By AL Page 1 of 1		RL 16.50	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		ripped sandstone FILL and sand, non odorous	0.0ppm
>25		clay FILL with sandstone, sand and gravel, non odorous	0.0ppm
	1.0		
		brown sand FILL with gravel, concrete pieces	
2,2,2 N=4	2.0	dark brown/grey sand FILL with pockets of clay, dark bands of organic? material, charcoal/blue metal evident, slightly damp, non odorous	0.7ppm
		water table at 2.2m	
	3.0		
3,6,8 N=14		grey fine grained SAND with minor silt and flecks of black shale/charcoal, wet, non odorous	2.9ppm
	4.0		
		grey/yellow SAND (top of sample)	
		grey fine sandy/silty CLAY, very soft, pliable, non odorous (no blows on SPT required for penetration)	9.7ppm
	5.0		
		firm grey/red mottled CLAY with Ironstone, non odorous	8.0ppm
2,6,13 N=19	6.0		
		EOH	
	7.0		
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH14 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 22/4/93 AL 1 of 1		RL 17.05
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		asphalt		
		yellow SAND		
		black fine SANDS, railway ballast, non odorous	17.0ppm	
	1.0			
1,2,2 N=4	2.0	grey/brown SANDS grey fine grained SANDS with pockets of brown/yellow mottling, black organic? material, blue metal, minor clay, moist, non odorous	10.0ppm	
		water table		
5,7,15 N=22	3.0	grey fine grained clayey SAND, increasing clay content with depth, non odorous band of dark grey/brown SAND	2.0ppm	
	4.0			
4,12,18 N=30	5.0	light grey fine grained SAND, no clay traces, black flecks of shale? throughout, non odorous	15.0ppm	
	6.0			
4,9,13 N=22	7.0	very firm/stiff grey CLAY, non odorous	4.0ppm	
	8.0			
		Note: Auger cutting bit completely damaged requiring replacement.		
		EOH. Auger refusal on bedrock		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No.	ER BH15
Project	Eveleigh Railyards
Project Location	Redfern
Position	See Plan
Method of Drilling	Hollow Flight Auger
Date	23/4/93
Logged By	AL
Page	1 of 1

RL 16.21

SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		ripped sandstone FILL and fine sand, with pockets of clay scattered throughout, damp, non odorous	0.0ppm
20	1.0	sandstone FILL with brown/orange mottled clay, blue metal, brick and sand (black), non odorous (SPT refusal)	0.0ppm
4,4,3 N=7	2.0	grey fine grained SANDS with brick pieces, moist, non odorous pocket of white fine SAND. Water table	0.0ppm
		grey SANDS becoming lighter in colour with depth	
3,5,14 N=19	3.0	light grey SANDS, wet, non odorous	0.0ppm
	4.0		
6,1,1 N=2	5.0	yellow/white SAND, wet, non odorous increasing silt content with depth orange SAND	0.0ppm
	6.0		
6,12,18 N=30	6.0	insitu grey CLAY, non odorous	0.0ppm
		as above, with red mottling, ironstone, firmer with depth. EOH	
	7.0		
	8.0		

JOB No. JET0224

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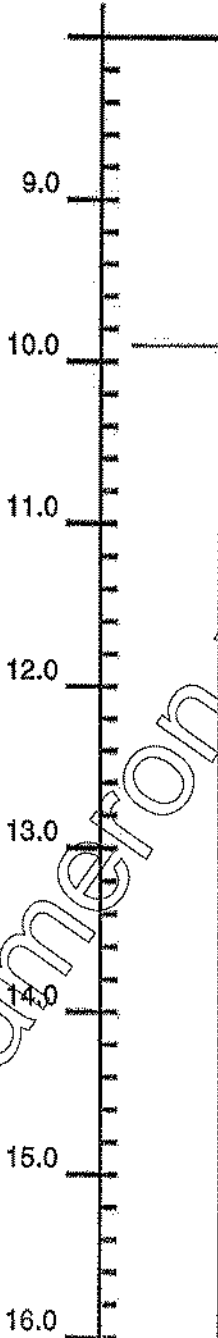
DRILL LOG

HOLE No. ER BH16 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 23/4/93 Logged By AL Page 1 of 1		RL 15.73	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		ripped sandstone FILL with sand and brick pieces, non odorous	0.0ppm
5,7,9 N=16	1.0	white fine SAND, with sandstone, minor clay, non odorous	0.0ppm
		dark brown, hard SAND (compacted)	
2,2,2 N=4	2.0	layered dark brown and grey fine grained SANDS	0.0ppm
		moist, non odorous	
		water table	
		SANDS	
4,8,10 N=18	3.0	grey fine grained SANDS, wet, non odorous	0.0ppm
	4.0	light grey fine grained SANDS with flecks/small pieces of shale throughout	
6,8,16 N=24	5.0	no sample retrieved, SANDS	
2,3,5 N=8	6.0	soft grey CLAY, plastic, patches of black organic? material	0.0ppm
		grey/white and red mottled CLAY, firm with Ironstone. EOH	
	7.0		
	8.0		
Note: Plezometer Installed			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH18 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 27/4/93 AL 1 of 2	RL 15.41
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		ripped sandstone FILL with yellow sand, minor clay, dry, non odorous	0.0ppm
7,7,7 N=14	1.0	sand, ash, clay, charcoal mixed FILL, dry, non odorous	0.0ppm
		grey SAND	
2,2,3 N=5	2.0	grey fine grained SAND	
		water table	
		dark grey/brown fine SANDS with minor silt content, wet, non odorous	0.0ppm
		grey SANDS	
	3.0	no sample retrieved, SANDS	
	4.0		
3,13,23 N=36	5.0	grey fine grained SANDS, with scattered shale fragments	
		non odorous	0.0ppm
		white SANDS	
	6.0	no sample retrieved, SANDS	
	7.0	dark grey CLAY, plastic with bands of black 'grainy' material	
0,0,3 N=3		grading to	
		firmer, light grey CLAY, non odorous	0.0ppm
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER BH18 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 27/4/93 Logged By AL Page 2 of 2			
SPT	Depth (m)	Description	PID Readings
 EOH. Auger refusal on bedrock			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER BH19 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 27/4/93 Logged By AL Page 1 of 1		RL 15.31	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		ripped sandstone and yellow sand FILL, dry, non odorous	0.0ppm
>25		clayey sand and sandstone FILL, moist, non odorous	0.0ppm
	1.0		
		dark grey SANDS and clay	
		water table	
2,3,3 N=6	2.0	dark grey SANDS with pockets of black mottling (charcoal/organic matter?), moist, non odorous	0.0ppm
		grey/dark grey fine grained SANDS	
	3.0	band of coarse sand and shale fragments	
3,9,17 N=26		light grey/brown fine SANDS, wet, non odorous	0.0ppm
	4.0		
		yellow fine SANDS, wet, non odorous	0.0ppm
27,33	5.0		
		white SANDS with shale fragments, non odorous	0.0ppm
18,23,8 N=31	6.0		
	7.0		
0,0,1 N=1	8.0	black CLAY with organic (root and wood) material non odorous	} 0.0ppm
		grey CLAY, plastic, firming with depth. EOH at 7.9m	
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH20 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 27/4/93 AL 1 of 1	RL 16.07
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		ripped sandstone and sand FILL, dry, non odorous	0.0ppm
8,11,11 N=22	1.0	grey fine grained sand FILL, with blue metal, small pieces of concrete and brick, minor clay, dry, non odorous	0.0ppm
3,4,4 N=8	2.0	grey fine grained SANDS, moist, non odorous	0.0ppm
	2.07	water table at 2.07m	
2,4,3 N=7	3.0	grey fine grained SANDS, wet, non odorous becoming whiter	0.0ppm
	4.0		
12,33	5.0	no sample retrieved, SANDS ? (SPT refusal)	
	6.0		
17,32	7.0	light grey fine grained SAND, scattered shale fragments, non odorous (SPT refusal)	0.0ppm
	8.0		
2,3,5 N=8		grey/red mottled CLAY, firmer with depth, some ironstone, non odorous	0.0ppm
Note: Plezometer Installed			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH21 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 28/4/93 AL 1 of 1	RL 16.72
SPT	Depth (m)	Description	PID Readings
	0 Surface	ripped sandstone and yellow sand FILL, dry, non odorous	0.0ppm
4,7,8 N=15	1.0	yellow fine sand FILL, dry, non odorous ash material and some blue metal yellow fine sand FILL	1.6ppm
4,6,6 N=12	2.0	yellow fine SANDS, minor ash/dark colouration, damp, non odorous	1.4ppm
	2.5	water table not detectable by dip gauge	
3,5,7 N=12	3.0	yellow fine SANDS, minor patches of brown discolouration, wet, non odorous	3.0ppm
5,5,8 N=13	5.0	as above, becoming brown in colour, non odorous	0.0ppm
1,1,2 N=3	6.0	dark grey CLAY, very plastic, non odorous	0.0ppm
	6.5	light grey CLAY with red mottling, slightly firmer EOH at 6.5m	
	7.0		
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH21 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 28/4/93 AL 1 of 1	RL 16.72
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		ripped sandstone and yellow sand FILL, dry, non odorous	0.0ppm
4,7,8 N=15	1.0	yellow fine sand FILL, dry, non odorous ash material and some blue metal yellow fine sand FILL	1.6ppm
4,6,6 N=12	2.0	yellow fine SANDS, minor ash/dark colouration, damp, non odorous	1.4ppm
	~ 2.7 ~	water table not detectable by dip gauge	
3,5,7 N=12	3.0	yellow fine SANDS, minor patches of brown discolouration, wet, non odorous	3.0ppm
5,5,8 N=13	5.0	as above, becoming brown in colour, non odorous	0.0ppm
1,1,2 N=3	6.0	dark grey CLAY, very plastic, non odorous	0.0ppm
		light grey CLAY with red mottling, slightly firmer EOH at 6.5m	
	7.0		
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH22 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 28/4/93 AL 1 of 2	RL 16.77
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		ripped sandstone and sand FILL with concrete pieces, very dry, non odorous	0.0ppm
20	1.0	sandstone, sand, clay, blue metal, coal, ash material mixed FILL, dry, non odorous (SPT refusal)	0.0ppm
4,4,4 N=8	2.0	black fine grained sand FILL, ash present, pockets of red/orange powder substance scattered throughout, also some white flecks throughout, moist, non odorous	0.0ppm
	2.6	water table at 2.6m	
1,1,5 N=6	3.0	layer of dark grey SAND with blue metal, wet, non odorous	} 0.0ppm
		layers of brown, grey and yellow (with shale fragments), SAND	
		layer of brown SAND	
3,7,7 N=14	4.0	yellow fine SAND with scattered shale fragments, non odorous	0.0ppm
5,9,13 N=22	5.0	no sample retrieved, SANDS	
	6.0		
	7.0	grey CLAY, plastic, non odorous (no blows on SPT required for penetration)	} 0.0ppm
		CLAY, as above with red mottling at base of sample	
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER BH22 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 28/4/93 Logged By AL Page 2 of 2			
SPT	Depth (m)	Description	PID Readings
CLAYS EOH. Refusal at 9.7m			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH23 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 28/4/93 AL 1 of 1	
		RL 16-02	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		ripped sandstone and sand FILL, damp, non odorous	0.0ppm
11,13,13 N=26	1.0	sand, sandstone, clay, shale, blue metal, wood, glass, ash material, mixed FILL, non odorous	10.0ppm
4,4,5 N=9	2.0	grey SAND, minor clay, scattered (few) blue metal, moist, non odorous water table at 2.0m	2.0ppm
2,2,4 N=6	3.0	layers of grey and brown fine grained SANDS, wet, slight odour (chemical/organic?)	2.5ppm
5,14,20 N=34	5.0	light grey fine grained SANDS with some brown mottling, scattered shale pieces, non odorous	2.5ppm
12,14,21 N=35	6.0	light grey fine grained SANDS, as above	2.0ppm
	7.0		
	8.0	black highly plastic CLAY with vegetable matter and gritty material, grading to grey CLAYS, slightly firmer, non odorous. EOH (no blows on SPT required for penetration)	0.0ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No.	ER BH24
Project	Eveleigh Railyards
Project Location	Redfern
Position	See Plan
Method of Drilling	Hollow Flight Auger
Date	28/4/93
Logged By	AL
Page	1 of 2

RL 15.64

SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		ripped sandstone and sand FILL, moist, non odorous	0.0ppm
5,10,4 N=14	1.0	clay, sandstone, sand mixed FILL, moist, non odorous	0.0ppm
4,5,4 N=9	2.0	clay, sandstone, black sand, ash material, blue metal etc mixed FILL, moist, non odorous	0.0ppm
1,2,4 N=6	3.0	grey fine grained SANDS, wet, non odorous	0.0ppm
		layer of CLAY	
5,12,22 N=34	5.0	light grey fine grained SANDS, non odorous	0.0ppm
5,12,16 N=28	6.0	as above, non odorous	0.0ppm
	7.0		
	8.0		

JOB No. JET0224

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DRILL LOG

HOLE No. ER BH24 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 28/4/93 Logged By AL Page 2 of 2			
SPT	Depth (m)	Description	PID Readings
Insitu grey/red mottled CLAYS, very stiff/firm EOH at 9.5m Note: Plug from auger lost down hole.			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH25 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 29/4/93 AL 1 of 1	RL 16-00
SPT	Depth (m)	Description	PID Readings
	0	Surface	
6,8,12 N=20	0.5	asphalt	0.0ppm
	1.0	ripped sandstone and sand FILL with minor clay content, some glass fragments, moist, non odorous	0.0ppm
6,6,7 N=13	1.5	clayey sand FILL with sandstone, moist, non odorous	0.0ppm
	2.0	grey fine grained SAND with sandstone pieces	0.0ppm
	2.1	sandy clay FILL with blue metal pieces, very moist, non odorous (very little sample retrieved)	0.0ppm
	2.1	water table at 2.1m	
	2.5	dark grey/black sandy FILL, minor clay content	
3,6,7 N=13	3.0	dark brown/grey fine grained SAND, minor patches of light grey mottling, wet, non odorous	0.0ppm
	4.0		
10,14,20 N=34	5.0	light grey fine grained SANDS, non odorous	0.0ppm
	6.0		
2,7,13 N=20	6.5	yellow fine grained SANDS, non odorous (no sample retrieved)	0.0ppm
	7.0		
1,2,3 N=5	7.5	grey CLAY, plastic, firming with depth, non odorous	0.0ppm
	8.0	EOH	
Note: Piezometer installed			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER BH26 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 29/4/83 Logged By AL Page 1 of 1		RL 16.49	
SPT	Depth (m)	Description	PID Readings
	0 Surface	ripped sandstone & yellow fine grained sand FILL, non odorous	0.0ppm
2	1.0	yellow clayey sand and sandstone FILL, non odorous (SPT refusal on sandstone pieces)	0.0ppm
3,3,3 N=6	2.0	black soil/sand FILL with glass, blue metal, root material, non odorous	
		FILL with clay, sand, black ash, slag, blue metal, terracotta, and sandstone, moist, slight burnt coal odour	4.5ppm
0,1,4 N=5	3.0	black SAND, some coal/charcoal pieces, wet, non odorous (frothy texture at 3.0 to 3.1m)	2.0ppm
		yellow SAND with brown streaks	
3,6,7 N=13	5.0	yellow/white fine grained SANDS, non odorous	0.0ppm
8,12,18 N=30	6.0	no sample retrieved, SANDS	
2,2,3 N=5	8.0	grey CLAY with brown mottling, non odorous	
		as above, with red mottling and minor ironstone. EOH	0.0ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER-BH32 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 4/5/93 Logged By AL Page 1 of 2		RL 21.471	
SPT 2,2,1 N=3 1,1,1 N=2 1,2,1 N=3 1,2,2 N=4 3,4,4 N=8 6,8,13 N=21	Depth (m) 0 Surface 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0	Description black ashy/soil FILL, moist, non odorous grey clay FILL, weathered shale moist, non odorous yellow/brown fine grained SAND yellow/brown fine grained SAND mixed clay FILL, moist, non odorous yellow fine grained SAND, non odorous CLAY, extremely weathered shale yellow fine grained SAND bands of white, yellow, light brown (with dark brown mottling) and dark brown fine grained SANDS, moist, non odorous yellow fine grained SANDS with minor grey/brown mottling non odorous as above, non odorous	PID Readings 0.9ppm 1.2ppm 0.6ppm 0.5ppm 0.0ppm 0.0ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. EP BH32 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 4/5/93 Logged By AL Page 2 of 2		
SPT Depth (m) 	Description SANDS grey CLAY with medium plasticity, firming with depth, orange mottling and Ironstone Increasing with depth, non odorous EOH at 9.1m	PID Readings 0.0ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER-BH33 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 4/5/93 AL 1 of 2		RL 21.39
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		ashy FILL with some clay & wood (sleeper), moist, non odorous	0.0ppm	
3,4,4 N=8	1.0	bands of grey/yellow fine grained SANDS, some brown mottling, some minor clay pockets, non odorous	0.0ppm	
2,2,2 N=4	2.0	yellow fine grained SANDS, non odorous clay and extremely weathered shale FILL yellow fine grained SANDS	0.0ppm	
1,1,2 N=3	3.0	yellow fine grained SANDS sandy clay FILL, non odorous grey fine grained SANDS	0.0ppm	
1,2,2 N=4	5.0	grey, white, red, orange clay FILL with weathered shale pieces, non odorous grey SAND	0.0ppm	
1,3,4 N=7	6.0	grey/pink mottled clay FILL with some weathered shale and band of brown fine grained SAND, moist, non odorous grey fine grained SAND	0.0ppm	
10,34	8.0	black fine grained SANDS, wet, non odorous grey fine grained SANDS, (SPT refusal)	0.0ppm	
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER-BH33 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 4/5/93 AL 2 of 2	
SPT	Depth (m)	Description	PID Readings
		SANDS Insitu grey CLAY, highly plastic at top of sample, firming with depth, root material evident, uniform colour, non odorous (no blows on SPT required for penetration). EOH at 9.5m	(1.1ppm)
		Note: This PID reading measured from the bag sample at end of day.	
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY. LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER-BH34 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 5/5/93 AL 1 of 1		RL 21-17
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		railway sleeper		
		ash FILL with black soil and rock granules, possible slight oily odour	(1.9ppm)	
2,2,3 N=5	1.0	ash FILL, pieces of sandstone evident, non odorous	(1.2ppm)	
2,4,5 N=9	2.0	ash/slag FILL with nodules of iron-rich sandstone? or type of slag material (red/orange colour), very hard with sand texture, wet, non odorous	(14.5ppm)	
1,2,2 N=4	3.0	ash and slag FILL, moist/wet, non odorous	(2.6ppm)	
		grey/pink clay FILL, extremely weathered shale		
1,2,1 N=3	5.0	pink/grey clay FILL, predominantly shale, hard, extremely weathered, slightly loose texture (not firm or compact), moist, slight hydrocarbon odour (similar to petrol)	(3.0ppm)	
1,2,2 N=4	6.0	clay FILL, as above, slightly firmer; brown soil with vegetable matter, grey, pink/orange CLAY with friable texture, firming with depth (possibly insitu), non odorous. EOH at 6.5m	(31.3ppm)	
	7.0			
	8.0			
Note: These PID readings were measured from the bag sample at the end of day.				
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH35 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 5/5/93 AL 1 of 2		RL 20.20
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		ash and slag FILL, dry, non odorous	0.0ppm	
3,3,3 N=6	1.0	ash and slag FILL, some minor brown sand, dry, non odorous	0.0ppm	
2,2,2 N=4	2.0	ash and slag FILL, dry, non odorous	0.0ppm	
1,2,2 N=4	3.0	ash and slag FILL, moist, non odorous	0.0ppm	
	4.0	clay FILL		
1,2,1 N=3	5.0	clay FILL ashy FILL with tar odour clay FILL	2.1ppm	
1,1,2 N=3	6.0	clay FILL with shale pieces and ash material, not consolidated, firmer with depth, wet, non odorous	0.5ppm	
3,4,7 N=11	7.0			
	8.0	firm grey/red mottled CLAY, Ironstone prevalent, non odorous	0.9ppm	
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page	ER BH36 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 4/5/93 AL 1 of 1	RL 20-12	
SPT	Depth (m)	Description	PID Readings
3,4,3 N=7	0 Surface 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0	asphalt roadbase (blue metal) in brown sandy soil black ashy soil FILL, dry, non odorous black ashy soil FILL, some clay content, dry, non odorous	(0.3ppm) (6.5ppm)
3,3,2 N=5	2.0	black ashy soil FILL with large pieces of slag material, pieces of blue metal, dry, non odorous	(4.5ppm)
0,1,1 N=2	3.0	ash and slag FILL, large piece of pitch?, moist, non odorous	(2.8ppm)
3,3,3 N=6	5.0	ashy FILL with brick pieces, wet, non odorous	(2.4ppm)
2,2,3 N=5	6.0	Insitu CLAY, friable at 6.0m becoming firmer/stiffer with depth, ironstone abundant, moist, non odorous EOH at 6.6m	(1.4ppm)
Note: These PID readings were measured from the bag sample at the end of day.			
JOB No. JET0224	JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. ER BH42 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 10/5/93 Logged By AL Page 1 of 1		RL 20-06	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
10,5,3 N=8	0.4	gravel/blue metal/ballast FILL, moist, diesel odour water table at 0.4m	7.0ppm
	1.0	firm, brown clay FILL with ironstone, gravel granules, moist, slight diesel odour (discolouration of clay possibly due to diesel)	8.0ppm
1,2,3 N=5	2.0	firm (possibly insitu), pink/grey CLAY with red mottling, ironstone, slight diesel odour	0.0ppm
4,6,9 N=15	3.5	firm grey CLAY with ironstone bands, red mottling, slight diesel odour (possibly from groundwater in SPT tube) EOH at 3.5m	0.0ppm
	4.0		
	5.0		
	6.0		
	7.0		
	8.0		
Note: Piezometer installed.			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No.	ER BH45
Project	Eveleigh Railyards
Project Location	Redfern
Position	See Plan
Method of Drilling	Hollow Flight Auger
Date	10/5/93
Logged By	AL
Page	1 of 1

RL 21-60

SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt roadbase in grey fine sandy soil FILL, mild odour	9.0ppm
2,3,3 N=6	1.0	yellow, medium grained SAND, some pockets of clay fill, non odorous	0.3ppm
1,1,1 N=2	2.0	grey/yellow fine grained SANDS with some clay patches, non odorous	2.0ppm
1,2,2 N=4	3.0	grey/white fine grained SANDS, non odorous	0.0ppm
2,1,3 N=4	5.0	brown fine grained SANDS, non odorous	0.7ppm
10,5,3 N=8	6.0	yellow SANDS, moist/wet	
	6.5	firm, grey/red mottled CLAY with ironstone, non odorous	0.0ppm
	6.5	EOH at 6.5m	
	7.0		
	8.0		

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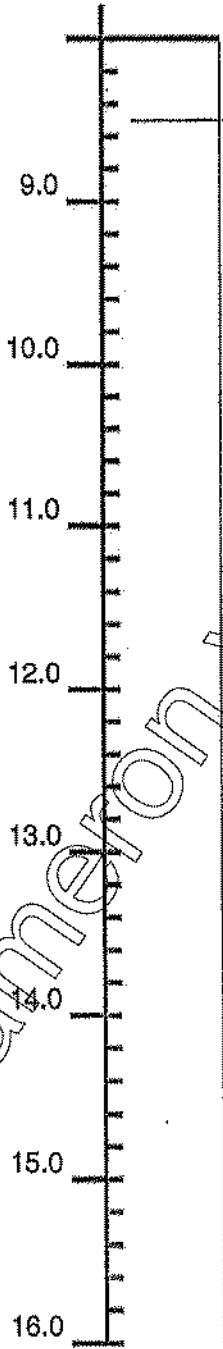
DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH46 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 7/5/93 AL 1 of 1		RL 21.59
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		asphalt roadbase		
		black ashy, gravelly FILL with clay patches, moist, slight odour	(0.3ppm)	
2,1,2 N=3	1.0	grey, red, orange, yellow clay FILL with sandstone, shale and some sand, moist, slight odour	(0.9ppm)	
0,1,1 N=2	2.0	as above, mixed clay FILL with wood fragments, moist, slight odour	(0.0ppm)	
0,0,2 N=2	3.0	grey/green, soft sandy clay FILL, moist, slight odour	(10.0ppm)	
		firm CLAY, no sand, ironstone present		
	4.0	in situ CLAY/weathered SHALE		
5,7,12 N=19	5.0	friable grey CLAY, becoming weathered SHALE, ironstone abundant, slight odour EOH at 5.0m	(0.6ppm)	
Note: These PID readings were measured from the bag sample at the end of day.				
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH47 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 7/5/93 AL 1 of 2	RL 21.58
SPT	Depth (m)	Description	PID Readings
	0	Surface	
2,4,5 N=9	1.0	asphalt concrete slab black ashy/gravel FILL, slight odour	(2.0ppm)
1,1,2 N=3	2.0	ash and slag FILL (foundry slag - looks metalliferous) slight oily odour	(0.0ppm)
4,4,4 N=8	3.0	sandy FILL and mixed clay FILL, moist, slight odour	(4.6ppm)
3,3,3 N=6	4.0	no sample retrieved, probably sand	
3,4,7 N=11	5.0	water table at 4.3m yellow fine grained SAND, some patches of clay, wet, non odorous	(0.0ppm)
	6.0	grey clayey SAND, moist, oily texture, slight oily odour dark grey/black clayey SAND, some root material	(0.0ppm)
2,4,5 N=9	7.0		
	8.0	Insitu grey/red mottled CLAY with Ironstone, firming with depth, non odorous	(0.0ppm)
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DRILL LOG

HOLE No. ER BH47 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 7/5/93 Logged By AL Page 2 of 2	
SPT Depth (m) 	Description PID Readings EOH at 8.6m. Auger refusal on bedrock Note: These PID readings were measured from the bag sample at the end of day.
JOB No. JET0224	JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH48 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 7/5/93 AL 1 of 1	RL 21.64
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		roadbase and ash FILL with some concrete and yellow sand, slight oily odour	(1.5ppm)
4,4,6 N=10	1.0	ash FILL and mixed clay FILL, non odorous yellow fine grained SAND	(1.5ppm)
1,1,2 N=3	2.0	mixed clay FILL with lenses of sand, non odorous yellow fine grained SAND	(2.7ppm)
		CLAY	
		SAND	
2,2,2 N=4	3.0	loose yellow fine grained SAND, becoming hard yellow SAND with brown mottling (looks like foundry sand), non odorous	(2.1ppm)
		CLAY	
0,1,1 N=2	5.0	yellow and brown SANDS, wet (with water or diesel?), strong hydrocarbon odour (diesel). Water table at 4.6m	(12.6ppm)
		CLAY	
0,0,2 N=2	6.0	soft, grey sandy CLAY, slightly firmer with depth, wet, weak/mild hydrocarbon odour	(15.2ppm)
		Note: These PID readings were measured from the bag sample at the end of day.	
3,5,6 N=11	8.0	insitu firm grey/red mottled CLAY with ironstone, slight hydrocarbon odour (probably due to groundwater washdown)	(14.0ppm)
		EOH at 8.0m	
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH49 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 11/5/93 AL 1 of 1	
		RL 21.72	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		concrete/roadbase, dry, non odorous	0.0ppm
3,5,5 N=10	1.0	roadbase and ash, some metallic slag?, slight burnt odour, bands of black and white fine grained SANDS	0.0ppm
3,3,3 N=6	2.0	brown fine grained SANDS with pockets of hard dark brown sand and yellow sand, non odorous	0.0ppm
2,2,2 N=4	3.0	loose grey fine grained SANDS, slightly damp, non odorous, brown/dark brown mottled SANDS, compacted	0.0ppm
	4.0	water table at 3.88m	
2,3,5 N=8	5.0	grey SANDS, wet, non odorous red/orange clayey SAND	0.0PPM
4,5,10 N=15	6.0	grey/orange mottled CLAY, ironstone prevalent, non odorous	0.0ppm
		EOH at 6.5m	
	7.0		
	8.0		
Note: Piezometer Installed			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER BH50 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 11/5/93 Logged By AL Page 1 of 1		RL 21-50	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
1,2,1 N=3	1.0	white and grey sand, dry, non odorous dark grey gravelly soil/sand ashy/gravelly soil grey fine grained SAND, slight chemical odour, clayey SAND with Ironstone and shale pieces, moist	2.0ppm 6.8ppm
1,1,1 N=2	2.0	mixed clay FILL, shale at base of sample, slight odour	15.0ppm
2,2,1 N=3	3.0	mixed clay FILL with some sand and shale, moist, non odorous	0.0ppm
	4.0	water table at 3.78m	
2,2,2 N=4	5.0	mixed clay FILL, wet, non odorous, (looks insitu, but is too friable and unconsolidated)	0.0ppm
2,2,2 N=6	6.0	CLAY, no sample retrieved, non odorous	0.0ppm
	6.5	EOH at 6.5m	
	7.0		
	8.0		
Note: Piezometer installed			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH52 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 12/5/93 AL 1 of 1		RL 21.42
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
	0.5	gravel/roadbase, damp, non-odorous	0.0ppm	
1,2,2 N=4	1.0	gravel/ash FILL with some clay, damp, non odorous	0.0ppm	
	2.0	ash (looks metallic) in fine black sandy soil, non odorous	0.0ppm	
2,1,2 N=3	3.0	mixed clay FILL with clay and shale, some gravel, friable/unconsolidated, moist, non odorous	0.0ppm	
2,2,3 N=5	5.0	as above, mixed clay FILL, but slightly firmer olive green/brown silty clay soil, friable, with root material, non odorous	0.0ppm	
12, 17, >25 N=42	6.0	friable CLAY with shale and ironstone in distinct layers, (probably in situ), non odorous ECHO at 6.5m	0.0ppm	
	7.0			
	8.0			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH53 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 13/5/93 AL 1 of 1		RL 21.29
SPT	Depth (m)	Description	PID Readings	
	0 Surface	black gravelly ashy soil, non odorous	1.0ppm	
2,2,3 N=5	1.0	mixed FILL with gravel, ash, sandy clay and clay FILL and metallic slag, non odorous	0.0ppm	
1,3,1 N=4	2.0	ash and slag FILL, green colouration (possibly copper sulphate), non odorous	0.0ppm	
1,2,2 N=4	3.0	ash FILL, damp/moist, non odorous orange and white clay FILL with charcoal and some ironstone	0.0ppm	
1,2,2 N=4	4.0			
1,2,2 N=4	5.0	mixed clay FILL, some bands of sand at 4.75m, wet, strong chemical odour	25.0ppm	
2,3 N=5	6.0	friable loamy clay soil with vegetable matter, green/brown CLAY, plastic, firming with depth, ironstone nodules, wet, mild odour	4.0ppm	
12,17,19 N=36	7.0			
	8.0	yellow/red mottled grey CLAY, firm with ironstone, approaching extremely weathered SHALE, non odorous EOH at 8.0m	0.0ppm	
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. ER BH55 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 17/5/93 Logged By AL Page 1 of 1		RL 17.69	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		dark brown loamy soil with root material, dry, non odorous	2.4ppm
1,3,3 N=6	1.0	ash/gravel FILL, dry, non odorous grey/yellow mottled fine grained SANDS	0.0ppm
1,0,1 N=1	2.0	as above, non odorous	0.0ppm
1,3,6 N=9	3.0	sandy CLAY becoming firm white CLAY, moist, non odorous no sample retrieved	0.0ppm
1,6,9 N=15	5.0	firm white/grey CLAY grading to extremely weathered SHALE, wet, non odorous EOH at 5.0m	0.0ppm
	6.0		
	7.0		
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH56 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 13/5/93 AL 1 of 1		RL 17.70
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		concrete		
1,1,2 N=3	0.5	dark brown fine loamy soil, non odorous	15.0ppm	
	1.0	fine loamy soil with ash and slag material, non odorous	8.0ppm	
3,5,3 N=8	2.0	mixed FILL with dark brown soil, patches of yellow and brown sand, some glass and ash, non odorous. Water table at 1.6m	0.0ppm	
2,5,6 N=11	3.0	black fine grained SANDS with minor clay, some gravel, wet, slight oily odour	7.8ppm	
6,>25	4.0	black medium grained SANDS, no clay, non odorous (SPT refusal. Auger refusal at 4.7m)	8.0ppm	
	5.0	Note: Auger cutting bit damaged, had to be replaced.		
	6.0			
	7.0	Note: Piezometer installed		
	8.0			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH57 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 13/5/93 AL 1 of 1		APPROX. RL 17.66
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		concrete		
		black loamy soil, non odorous	0.0ppm	
1,2,1 N=3	1.0	orange sandy CLAY, non odorous	0.0ppm	
2,2,1 N=3	2.0	mixed FILL with white sandstone, ash, non odorous yellow/grey fine grained SANDS	0.0ppm	
2,3,3 N=6	3.0	gray/white fine grained SANDS, damp, non odorous	0.0ppm	
2,1,3 N=4	4.0	firm to stiff orange/grey mottled CLAY, non odorous	0.0ppm	
	5.0			
	6.0			
	7.0	ECH at 6.8m. Auger refusal		
	8.0			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH66 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 19/5/93 AL 1 of 2		RL 21.01
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
2,2,2 N=4	1.0	ash FILL, non odorous	0.0ppm	
2,2,4 N=6	2.0	ash FILL, non odorous	0.0ppm	
1,2,1 N=3	3.0	ash FILL, non odorous	0.0ppm	
1,2,1 N=3	4.0	layer of brown and yellow fine grained SANDS, moist, non odorous	0.0ppm	
1,1,2 N=3	5.0	ash FILL		
	6.0	yellow fine grained SAND, moist, non odorous	0.0ppm	
	7.0	brown fine grained SAND with patches of compressed dark brown sand	0.0ppm	
3,3,5 N=8	8.0	yellow fine grained SAND, moist, non odorous	0.0ppm	
	7.2	water table at 7.2m		
5,12,18 N=30	8.0	yellow fine grained SANDS, wet, non odorous	0.0ppm	
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER-BH66 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 19/5/93 AL 2 of 2	
SPT	Depth (m)	Description	PID Readings
3,7,17 N=24	9.0	no sample retrieved, SANDS	
3,3,3 N=6	10.0	Insitu grey/red mottled CLAY with Ironstone, non odorous	0.0ppm
	11.0		
	12.0		
	13.0		
	14.0		
	15.0		
	16.0		
Note: Piezometer installed			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH51 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 12/5/93 AL 1 of 1	RL 21.32
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		gravelly/ashy soil, damp, non odorous	0.0ppm
2,2,3 N=5	1.0	mixed FILL with gravel, ash, charcoal, slag, soil and clay, slight burnt odour	0.0ppm
2,4,6 N=10	2.0	mixed FILL with gravel, sandstone and brick pieces, wet, non odorous	0.0ppm
2,3,2 N=5	3.0	mixed clay FILL with clay and shale, ironstone, some gravel, very friable, not consolidated, wet, non odorous	0.0ppm
2,2,2 N=4	4.0		
	5.0	loose/unconsolidated clay FILL, no sample retrieved	
10,5,3 N=8	6.0	clay FILL with shale and sandstone pieces, slight odour, dark grey/light grey striated silty clay soil FILL, compressed	0.0ppm
2,2,4 N=6	7.0		
	8.0	grey yellow/brown mottled CLAY, plastic becoming firmer with depth, minor ironstone nodules, consolidated, non odorous EOH at 8.0m	0.0ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER BH54 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 17/5/93 Logged By AL Page 1 of 1		RL 17.23	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		layers of loose brown/grey soil, black and white sand ballast and sandstone, dry, non odorous	0.0ppm
>25	1.0	black soil and ballast, non odorous (SPT refusal)	0.0ppm
2,3,2 N=5	2.0	grey fine grained SANDS with minor patches of yellow and brown mottled SANDS, non odorous	0.0ppm
5,6,9 N=15	3.0	grey fine grained SANDS with minor patches of clay, yellow fine grained SANDS with orange mottling, wet, non odorous	0.0ppm
1,2,3 N=5	4.0	insitu grey/orange mottled CLAY, firm, non odorous	0.0ppm
	5.0	EOH at 5.0m	
	6.0		
	7.0		
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH60 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 17/5/93 AL 1 of 2	RL 21.41
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		concrete	
		soil/gravel/clay FILL, non odorous	0.0ppm
3,2,4 N=6	1.0	as above, mixed FILL with pebbles, non odorous	0.0ppm
0,1,1 N=2	2.0	SAND CLAY, moist, non odorous SAND	0.0ppm
1,1,1 N=2	3.0	sand and clay FILL, moist, non odorous	0.5ppm
3,5,6 N=11	5.0	mixed FILL with sand, clay and sandstone pieces, moist, non odorous	1.2ppm
1,2,3 N=5	6.0	SAND to clayey SAND, water table at 6.1m sandy CLAY, diesel odours	35.0ppm
	7.0		
	8.0	no sample retrieved, probably sands	
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH60 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 17/5/93 AL 2 of 2	
SPT	Depth (m)	Description	PID Readings
2,4,6 N=10		Insitu orange/red and grey mottled CLAY, firming with depth, slight diesel odour at top of sample, non odorous at base EOH at 9.5m	2.5ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH61 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 18/5/93 AL 1 of 1	RL 23.91
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt roadbase and mixed FILL with slag, metal and glass	
		grey to yellow fine sandy soil, dry, non odorous	5.0ppm
2,1,2 N=3	1.0	grey to yellow fine sandy soil with minor clay patches and metal fragments, dry, non odorous	0.0ppm
2,2,2 N=4	2.0	grey fine sandy soil with gravel, brick fragments, dry, non odorous	0.0ppm
2,4,4 N=8	3.0	yellow fine grained SANDS, dry, non odorous	0.0ppm
4,6,6 N=12	4.0		
	5.0	as above, moist, non odorous	0.0ppm
5,9,11 N=20	6.0	band of shale fragments orange clayey fine grained SAND, moist, non odorous	0.0ppm
	7.0	water table at 6.7m	
5,6,9 N=15	8.0	firm insitu CLAY with Ironstone, non odorous	0.0ppm
		EOH at 8.0m	
Note: Piezometer Installed			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page	ER BH62 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 17/5/93 AL 1 of 1
SPT Depth (m)	Description PID Readings
	0 Surface asphalt 1.1, 1.1, 1.1 N=2 dark grey SAND with some gravel, non odorous 2.0ppm 1.0 as above, dark grey SAND 1.5ppm 2.4, 5 N=9 grey SANDS, non odorous } brown and dark brown mottled SANDS 1.4ppm 2.0 2.3, 4 N=7 yellow fine grained SANDS with some brown mottling, } dry, non odorous 0.0ppm 3.0 3.4, 6 N=10 yellow fine grained SANDS, } slightly damp, non odorous 0.0ppm orange clayey fine grained SANDS } 4.0 4.7, 9 N=16 insitu grey/red mottled CLAY, firm with ironstone, } non odorous 0.0ppm EOH at 6.5m } 5.0 6.0 7.0 8.0
JOB No. JET0224	JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED

RL 25.14

DRILL LOG

HOLE No. ER BH63 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 18/5/93 Logged By AL Page 1 of 1		RL 21.64	
SPT 1,1,>25 N=>26 2,3,8 N=11 3,3,6 N=9 4.0 5.0 6.0 7.0 8.0	Depth (m) 0 Surface 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0	Description concrete grey fine grained SAND, non odorous as above, with some charcoal, non odorous layer of pebbles, rock pieces (SPT refusal) concrete material (SPT refusal) sandy CLAY grey/red/yellow mottled CLAY, becoming firmer with depth, moist, non odorous band of ironstone at 2.4m stiff grey/white CLAY with minor red mottling, non odorous ECH at 3.5m	PID Readings 0.0ppm 0.0ppm 0.0ppm 0.0ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

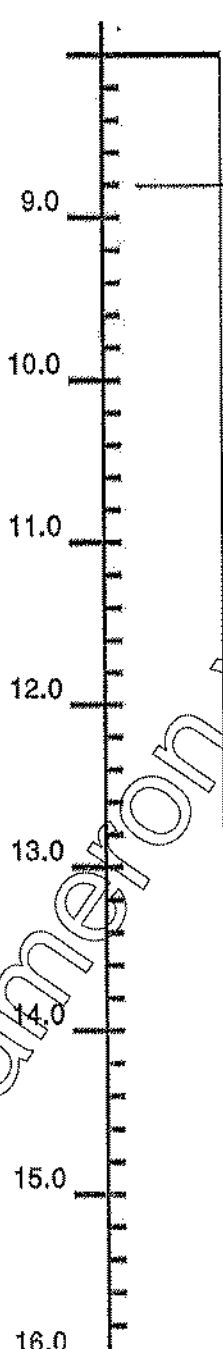
DRILL LOG

HOLE No. ER BH64 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 18/5/93 Logged By AL Page 1 of 1		RL 21.66	
SPT	Depth (m)	Description	PID Readings
	0 Surface	black soil with roadbase, non odorous	0.0ppm
2,3,3 N=6	1.0	mixed clay FILL with ash and slag, moist, non odorous grey SAND	0.0ppm
2,3,4 N=7	2.0	grey fine grained SANDS, moist, non odorous	0.0ppm
4,4,7 N=11	3.0	Insitu grey CLAY with red mottling and ironstone, non odorous ECH at 3.5m	
	4.0		
	5.0		
	6.0		
	7.0		
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH65 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 18/5/93 AL 1 of 2		RL 28.45
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		concrete		
		layers of roadbase, dark brown soil and yellow sand, moist, slight chemical odour	0.0ppm	
2,2,8 N=10	1.0	dark soil and sandstone rubble, moist, slight odour	0.0ppm	
0,1,1 N=2	2.0	dark grey fine grained SAND with brick rubble, glass and metal fragments, non odorous	0.0ppm	
2,2,4 N=6	3.0	yellow fine grained SANDS with scattered shale fragments, moist, slight odour	0.0ppm	
2,3,4 N=7	4.0	yellow fine grained SANDS, non odorous	0.0ppm	
5,4,4 N=8	5.0	yellow sandy CLAY, non odorous orange grey mottled CLAY with some ironstone	0.0ppm	
	6.0			
	7.0			
	8.0			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. ER BH65 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 18/5/93 Logged By AL Page 2 of 2			
SPT	Depth (m)	Description	PID Readings
 EOH at 8.8m. Auger refusal			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. ER BH69 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 20/7/93 Logged By AL Page 1 of 1		RL 19.57	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		brown sandy soil, brick and rubble, ballast	
	1.0	brown sandy soil, minor clay patches, hydrocarbon odour	10ppm
		grading to yellow/brown SAND with clay, hydrocarbon odour	50ppm
	2.0	sandstone rubble, hydrocarbon odour persisting	
		grey fine grained SAND	
2,2,2 N=4	3.0	white fine grained SAND, non odorous	
		dark brown fine grained SAND	3.3ppm
	4.0		
5,7,8 N=15	5.0	yellow fine grained SANDS, non odorous	0.0ppm
		EOH at 4.95m	
	6.0		
	7.0		
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH70 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 20/7/93 AL 1 of 1		RL 18.4
SPT	Depth (m)	Description	PID Readings	
	0	Surface asphalt concrete		
	1.0	brown/grey fine grained SANDS, non odorous		
	2.0			
	3.0	dark grey fine grained SANDS, non odorous		
2,3,4 N=7	3.5	dark brown SAND, non odorous grey SAND, dark brown SAND	7.5ppm	
	4.0			
5,9,11 N=20	5.0	dark grey SANDS with minor gravel/rubble pieces, wet, non odorous	0.0ppm	
	6.0			
1,2,3 N=5	6.5	grey CLAY, plastic but firming with depth, some orange mottling, non odorous EOH at 6.5m	0.0ppm	
	7.0			
	8.0			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH71 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 20/7/93 AL 1 of 1	
		RL 21.54	
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
		black cokey soil with gravel, moist, non odorous	0.0ppm
3,4,7 N=11	1.0	black ashy soil, moist, non odorous yellow SAND brown SAND	0.0ppm
0,1,1 N=2	2.0	light brown fine grained SANDS, moist, non odorous	0.0ppm
1,1,2 N=3	3.0	light brown/yellow fine grained SANDS, moist, non odorous	0.0ppm
2,3,3 N=6	5.0	brown/grey fine silty SANDS, wet, non odorous	0.0ppm
2,2,2 N=4	6.0	in-situ CLAY, non odorous	0.0ppm
		EOH at 6.5m	
	7.0		
	8.0		
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

RL 21.54

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH72 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 20/7/93 AL 1 of 1	RL 21.62
SPT	Depth (m)	Description	PID Readings
	0	Surface	
		asphalt	
	1.0	black sandy soil with rubble, brick pieces non odorous	0.0ppm
	2.0	clay FILL non odorous	0.0ppm
4,3,2 N=5	3.0	clay FILL with shale pieces moist, non odorous	0.0ppm
2,2,2 N=4	4.0	clay FILL non odorous	0.0ppm
	5.0	yellow fine grained SAND sandy CLAY	0.0ppm
2,3,4 N=7	6.0	clay FILL, non odorous brown SAND yellow SAND	0.0ppm
4,7,4 N=11	7.0		
	8.0	light grey fine grained SAND non odorous EOH at 8.0m	0.0ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH73 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 21/7/93 AL 1 of 1		RL 21.71
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		asphalt		
		black sandy soil with ballast and rubble		
		non odorous	0.0ppm	
	1.0			
		clay FILL, non odorous	0.0ppm	
	2.0			
		sandy clay FILL, non odorous	0.0ppm	
	3.0			
3,1,2 N=3		yellow/orange SAND	3.0ppm	
		brown fine grained SAND, moist, non odorous		
		firm grey/pink CLAY		
	4.0			
2,2,2 N=4		clay FILL	0.0ppm	
		yellow/brown fine grained SAND, moist, non odorous		
		clay FILL		
	5.0			
		dark brown/grey clayey SANDS, wet, non odorous	0.0ppm	
1,1,1 N=2		EOH at 6.5m		
	6.0			
	7.0			
	8.0			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. ER BH74 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 21/7/93 Logged By AL Page 1 of 1		RL 21.26	
SPT 1,1,1 N=2 1,1,1 N=2 2,2,3 N=5 2,5,7 N=12 3,5,11 N=16	Depth (m) 0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0	Description concrete ashy gravelly grey soil, non odorous grey/brown soil grey/brown soil and concrete/ballast/rubble, non odorous firm grey/orange clay FILL, non odorous yellow/brown fine grained SANDS yellow fine grained SANDS grey fine grained SANDS, moist, non odorous yellow/orange fine grained SANDS, moist, non odorous yellow fine grained SANDS, wet, non odorous In-situ CLAY, non odorous EOH at 8.0m	PID Readings 0.0ppm 0.0ppm 0.0ppm 0.0ppm 0.0ppm 0.0ppm 4.3ppm 0.0ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

DRILL LOG

HOLE No. Project Project Location Position Method of Drilling Date Logged By Page		ER BH77 Eveleigh Railyards Redfern See Plan Hollow Flight Auger 22/7/93 AL 1 of 2		RL 21.53
SPT	Depth (m)	Description	PID Readings	
	0	Surface		
		black soil with some rubble, brick, gravel, non odorous	0.0ppm	
		brown sandy soil with minor clay patches, non odorous	0.0ppm	
	1.0			
	2.0	non odorous	0.0ppm	
		clay FILL, non odorous	0.0ppm	
	3.0			
3,5,6 N=11		brown fine grained SANDS		
		grey SANDS, moist, non odorous	3.7ppm	
		white fine grained SANDS		
	4.0			
1,2,4 N=6		white fine grained SANDS		
		brown fine SANDS, moist, non odorous	1.3ppm	
	5.0			
	6.0			
4,5,6 N=11		yellow fine grained SANDS, moist, non odorous	2.0ppm	
	7.0			
4,6,12 N=18		yellow fine grained SANDS, wet, very faint hydrocarbon odour	5.0ppm	
	8.0			
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED		

DRILL LOG

HOLE No. ER BH77 Project Eveleigh Railyards Project Location Redfern Position See Plan Method of Drilling Hollow Flight Auger Date 22/7/93 Logged By AL Page 2 of 2			
SPT 4,7,10 N=17	Depth (m) 	Description grey with red/orange mottling in-situ CLAY with ironstone, non odorous EOH at 9.5m Note: This PID reading maybe due to flow down of groundwater.	PID Readings 0.3ppm
JOB No. JET0224		JOHNSTONE ENVIRONMENTAL TECHNOLOGY PTY LIMITED	

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLIC WORKS

Job Name: ATP EVELEIGH

Job Number: EA 8005

Bore hole location: MW1

Bore hole depth: 12.0 M

Drill rig: BCD 450

Date hole commenced:

18/8/94

R.L. casing: 19.02

Drilling fluid:

R.L. surface:

Logged by: JTL / MG

Date hole completed:

18/8/94

Datum: AHD

Checked by:

Drilling Method	Water Encount	S.W.L	R.L. Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	local	odour		
					ROADSURFACE - ASPHALT	J		MW1/0.5M		
					FILL - LIGHT BROWN FINE GRAINED SILTY/SANDY LOAM. (L, M)	J		MW1/1.0M		
			1.0		FILL - DARK BROWN/BLACK SANDY ASH, SOME SLAG. (L, M)					
			2.0		FILL - WHITE/ORANGE MOTTLED CLAY. (D, M)					
			3.0		FILL - SANDY ASH, DARK BROWN/BLACK, SOME SLAG. (L, M)					
			4.0		FILL - DARK BROWN/BLACK SILTY/SANDY ASH. (L, M)					
			4.0		FILL - GREY/BROWN SAND, FINE. (L, M)					
			5.0		FILL - WHITE SAND, SMALL CLAY CONTENT. (D, M)	J		MW1/5.2M		
			5.0		FILL - MOTTLED GREY/ORANGE/BROWN CLAY, HIGH SAND CONTENT, GLASS FRAGMENTS. (MD, M)					
			5.0		CLAY - GREY, SILTY. (MD, W)					
			6.0		CLAY - GREY, FINEGRAINED, SLIGHT ORANGE MOTTLING AT 5.5M, CONTAINS ORGANIC MATERIAL, NATURAL MATERIAL. (ST, M)					
			7.0		CLAY - RED/GREY MOTTLED CLAY, SMALL INCLUSIONS OF HIGHLY WEATHERED IRONSTONE. (Vst, M)					

Water Information

Sample Type

Odour Scale

Material Legend



Seepage

J - Jar

0 - None



- Sand

Standing Water
Level (S.W.L.)

V - Vial

1 - Slight



- Bentonite

JV - Jar & Vial

2 - Medium



- Concrete

B - Bulk

3 - Strong



- GRAVEL

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLIC WORKS

Job Name: ATP EVELEIGH

Job Number: EA 8005

Bore hole location: MW 1 (CONT'D)

Bore hole depth: 12.0

Drill rig: BCD 450

Date hole commenced:

R.L. casing: 19.02

Drilling fluid:

18/8/94

R.L. surface:

Logged by: JTL/MG

Date hole completed:

Datum: AHD

Checked by:

18/8/94

Drilling Method	Water Encountered	S.W.L.	R.L. Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	locat	odour		
			8.0		CLAY - MOTTLED RED/GRAY ORANGE, IRONSTONE NODULES PRESENT (St, S)					
			9.0		GRAVEL - IRONSTONE BANDING.					
			10.0		CLAY - MOTTLED LIGHT RED/ ORANGE/GRAY, RESIDUAL SOILS. (St, M)					
			11.0							
			12.0		BOREHOLE TERMINATED AT 12.0M					
			13.0							

Water Information

Sample Type

Odour Scale

Material Legend



Seepage

J - Jar

0 - None



- Sand

V - Vial

1 - Slight



- Bentonite



Standing Water

JV - Jar & Vial

2 - Medium



- Concrete

Level (S.W.L.)

B - Bulk

3 - Strong



- GRAVEL

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLIC WORKS

Job Name: ATP EVELEIGH

Job Number: EA 8005

Bore hole location: MW2

Bore hole depth: 9.0M

Drill rig: BCD 450

R.L. casing: 18.12

Drilling fluid:

Date hole commenced: 18/8/94

R.L. surface:

Logged by: J.L./M.G.

Datum: AHD

Checked by:

Date hole completed: 18/8/94

Drilling Method	Water Encoun	S.W.L.	R.L. Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	locat	odour		
					TOPSOIL - DARK BROWN, SANDY (M,L)	J	X	MW2/0.5M		
					FILL - BLACK/GREY, WHITE FLAKES, ASH. (M,L)	J	X	MW2/1.0M		
			1.0		FILL - DARK BROWN SANDY/SILTY LOAM, SOME SLAG AND ASH MATERIAL. (M,L)	J	X			
			2.0							
			3.0		FILL - YELLOW/TAN SAND, MEDIUM GRAINED. (M,L)					
			4.0		CLAY - MOTTLED RED/LIGHT BROWN/GREY, FINE GRAINED, SOME WEATHERED IRONSTONE. (M, St)	J	X	MW2/4.0M		
			5.0		- BECOMING WET.					
			6.0							
			7.0		CLAY - GREY, FINE GRAINED, NATURAL MATERIAL. (M, Vst).					

Water Information

Sample Type

Odour Scale

Material Legend



Seepage

J - Jar

0 - None



- Sand

Standing Water
Level (S.W.L.)

V - Vial

1 - Slight



- Bentonite

JV - Jar & Vial

2 - Medium



- Concrete

B - Bulk

3 - Strong



- GRAVEL

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLIC WORKS

Job Name: ATP EVELEIGH

Job Number: EA 8005

Bore hole location: MW2

Bore hole depth: 9.0M

Drill rig: BCD 450

R.L. casing: 18.12

Drilling fluid:

Logged by: JL/MG

Checked by:

Date hole commenced: 18/8/94

R.L. surface:

Datum: AHD

Date hole completed: 18/8/94

Drilling Method	Water Encount	S.W.L.	R.L. Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	locat	odour		
			8.0		CLAY - GREY/BROWN/ ORANGE/ RED MOTTERED RESIDUAL SOILS, (Vst, S)					
			9.0		BOREHOLE TERMINATED AT 9.0M.					
			10.0							

Water Information

Sample Type

Odour Scale

Material Legend



Seepage



Standing Water Level (S.W.L.)

J - Jar

V - Vial

JV - Jar & Vial

B - Bulk

0 - None

1 - Slight

2 - Medium

3 - Strong



- Sand

- Bentonite

- Concrete

- GRAVEL

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLIC WORKS

Job Name: ATP EVELEIGH

Job Number: EA8005

Bore hole location: MW3

Bore hole depth: 10.0M

Drill rig: BGS 450

R.L casing: 21.64

Drilling fluid:

Date hole commenced: 18/8/94

R.L surface:

Logged by J / MG

Datum: AHD

Checked by:

Date hole completed: 18/8/94

Drilling Method	Water Encoun	S.W.L	R.L Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	local	odour		
					ASPHALT	J		MW3/0.5M		
					FILL - BLACK/GREY ASH, SOME SLAG MATERIAL (L,M)	J		MW3/1.0M		
			1.0		FILL - MOTTLED, TAN/DARK BROWN BLACK/RED (TRACE), SANDY CLAY. (D,M)					
					FILL - MOTTLED YELLOW/TAN SAND, SMALL CLAY CONTENT. (L,M)					
			2.0		SAND - LIGHT BROWN/GREY, MEDIUM GRAINED, SMALL CLAY CONTENT. (L,M)					
			3.0							
			4.0		SAND - YELLOW/ORANGE, MEDIUM GRAINED, CLAY LENSES. (L,M)					
					SAND - LIGHT BROWN, MEDIUM GRAINED (M,L)					
			5.0		SAND - LIGHT BROWN/GREY, MEDIUM GRAINED, MEDIUM CLAY CONTENT, SLIGHT HYDROCARBON ODOUR. (M,L)	J		MW3/5.4M		
					SAND - LIGHT GREY/BLACK, MEDIUM CLAY CONTENT, STRONG HYDROCARBON ODOUR. (L,W)	J		MW3/6.0M		
			6.0							
					SAND - DARK GREY, FINE GRAINED, MEDIUM CLAY CONTENT, HYDROCARBON ODOUR. (L,W)					
					SAND - LIGHT GREY, FINE GRAINED, MEDIUM CLAY CONTENT (S,L) SLIGHT HYDROCARBON ODOUR.	J		MW3/6.9M		
			7.0							

Water Information

Sample Type

Odour Scale

Material Legend



Seepage

J - Jar

0 - None



- Sand

V - Vial

1 - Slight



- Bentonite



Standing Water Level (S.W.L.)

JV - Jar & Vial

2 - Medium



- Concrete

B - Bulk

3 - Strong



- GRAVEL

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLIC WORKS

Job Name: ATP EVELEIGH

Job Number: EA 8005

Bore hole location: MW3

Bore hole depth: 10.0 m

Drill rig: BCD 450

R.L. casing: 21.64

Drilling fluid:

Date hole commenced: 18/8/94

R.L. surface:

Logged by: J.L./M.G.

Datum: AHD

Checked by:

Date hole completed: 18/8/94

Drilling Method	Water Encoun	S.W.L.	R.L. Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	locat	odour		
			8.0		CLAY - RED/ORANGE, MEDIUM SAND CONTENT, SLIGHT HYDROCARBON ODOUR. (S.L.)	J				
			9.0		CLAY - RED/ORANGE SANDY CLAY, SLIGHT HYDROCARBON ODOUR. (S.L.)					
			10.0		BOREHOLE TERMINATED AT 10.0m					
			11.0							

Water Information		Sample Type	Odour Scale	Material Legend	
↗	Seepage	J - Jar	0 - None		- Sand
		V - Vial	1 - Slight		- Bentonite
≡	Standing Water Level (S.W.L.)	JV - Jar & Vial	2 - Medium		- Concrete
		B - Bulk	3 - Strong		-

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLICWORKS

Job Name: ATP EVELEIGH

Job Number: EA8005

Bore hole location: MW4

Bore hole depth: 10.3 M

Drill rig: EDSON 3000

R.L. casing: 21.36 M

Drilling fluid:

Date hole commenced: 19/8/94

R.L. surface:

Logged by: JL/MG

Date hole completed: 19/8/94

Datum: AHD

Checked by:

Drilling Method	Water Encountered	S.W.L.	R.L. Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	locat	odour		
					ASPHALT	J		MW4 0.5M		
					FILL - LIGHT TAN/YELLOW SAND, HIGH GRAVEL CONTENT (RIVER ROCK) (L.M)	J		MW4 1.0M		
			1.0		FILL - ORANGE CLAY WITH RED AND WHITE MOTTLING, HIGH SAND CONTENT. (D.M)					
			2.0							
			3.0		FILL - LIGHT BROWN/ORANGE SAND, SOME RED AND WHITE CLAY LENSES. (L.M)					
			4.0		CLAY - RED/GREY MOTTLED, HIGH SAND CONTENT, SOME IRONSTONE INCLUSIONS. (St.M)					
			5.0							
			6.0		CLAY - RED/ORANGE/GREY MOTTLED, SOME SAND. (St.M)					
			7.0		SAND - DARK GREY, MEDIUM GRAINED, STRONG HYDROCARBON ODOUR (L.M)	J		MW4 6.5M		
					CLAY - RED/ORANGE LENSES, HIGH SAND CONTENT, LIGHT GREY. (F.M) SLIGHT HYDROCARBON ODOUR.	J		MW4 7.0M		

Water Information

Sample Type

Odour Scale

Material Legend



Seepage

J - Jar

0 - None



- Sand

Standing Water
Level (S.W.L.)

V - Vial

1 - Slight



- Bentonite

JV - Jar & Vial

2 - Medium



- Concrete

B - Bulk

3 - Strong



- GRAVEL

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLICWORKS

Job Name: ATP EVELEIGH

Job Number: EA 8005

Bore hole location: MW4 (CONVD)

Bore hole depth: 10.3 m

Drill rig: EDSON 3000

R.L. casing: 21.36 m

Drilling fluid:

Date hole commenced: 19/8/94

R.L. surface:

Logged by: JL/MG

Datum: AHD

Checked by:

Date hole completed: 19/8/94

Drilling Method	Water Encountered	S.W.L.	R.L. Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	locat	odour		
			80		CONTINUATION OF CLAY, SLIGHT HYDROCARBON ODOUR.					
			90							
			100		SANDSTONE - HIGHLY WEATHERED - BECOMING MODERATELY WEATHERED.					
			11.0		T.C. BIT REFUSAL AT 10.3 M.					

Water Information

Sample Type

Odour Scale

Material Legend



Seepage

J - Jar

0 - None



- Sand



Standing Water Level (S.W.L.)

V - Vial

1 - Slight



- Bentonite

JV - Jar & Vial

2 - Medium



- Concrete

B - Bulk

3 - Strong



- GRAVEL

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLICWORKS

Job Name: ATP EVELEIGH

Job Number: EA 8005

Bore hole location: MW5

Bore hole depth: 8.8 m

Drill rig: EDSON 3000

R.L. casing: 21.66

Drilling fluid:

Date hole commenced: 19/8/94

R.L. surface:

Logged by: JLMG

Datum: AHD

Checked by:

Date hole completed: 19/8/94

Drilling Method	Water Encount	S.W.L.	R.L. Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	locat	odour		
			1.0		FILL - BUILDING RUBBLE, LIGHT GREY (D.L.) SILT, SANDSTONE FRAGMENTS			MUS/ 0.5m		
					FILL - BLACK ASH, FURNACE SLAG.			MUS/ 1.0m		
			2.0		CLAY - ORANGE/RED WITH RED AND WHITE MOTTLING, HIGH IRONSTONE CONTENT. (M, St)					
			3.0		IRONSTONE BAND, MODERATELY WEATHERED.					
			4.0		CLAY - ORANGE/RED WITH RED AND WHITE MOTTLING, HIGH IRONSTONE CONTENT. (M, St)					
			5.0		IRONSTONE BAND, MODERATELY WEATHERED.					
			6.0		CLAY - ORANGE/RED WITH RED AND WHITE MOTTLING, HIGH IRONSTONE CONTENT. (M, St)					
			7.0		SAND - LIGHT BROWN, HIGH CLAY CONTENT. (M, F)			MUS/ 6.9m		

Water Information

Sample Type

Odour Scale

Material Legend



Seepage

J - Jar

0 - None



- Sand



Standing Water Level (S.W.L.)

V - Vial

1 - Slight



- Bentonite

JV - Jar & Vial

2 - Medium



- Concrete

B - Bulk

3 - Strong



- GRAVEL

BOREHOLE LOG REPORT

CAMP SCOTT FURPHY

Client: PUBLICWORKS

Job Name: ATP EVELEIGH

Job Number: EA 8005

Bore hole location: MW5

Bore hole depth: 8.8 m

Drill rig: EDSON 3000

R.L. casing: 21.66

Drilling fluid:

Date hole commenced: 19/8/94

R.L. surface:

Logged by: J.L./M.G.

Date hole completed: 19/8/94

Datum: AHD

Checked by:

Drilling Method	Water Encount	S.W.L.	R.L. Depth metres	Graphic log	Material Description	Sample			PID (ppm)	Bore Construction Details
						type	local	odour		
			8.0		CLAY - RESIDUAL SOIL, WHITE / RED / GREY, MOTTLED (Vst, M)					
			9.0		T.C. BIT REFUSAL AT 8.8 M.					
			10.0							

Water Information

Sample Type

Odour Scale

Material Legend



Seepage

J - Jar

0 - None



- Sand

V - Vial

1 - Slight



- Bentonite

Standing Water
Level (S.W.L.)

JV - Jar & Vial

2 - Medium



- Concrete

B - Bulk

3 - Strong



- GRAVEL