

Appendix 15.

SLR Consulting Australia (2020f) *Rum Jungle Rehabilitation – Stage 2A- Geotechnical Investigation Waste Storage Facilities and Borrow Areas*. Report to the Department of Mines and Energy, Northern Territory. PART D.



WRTP-14 Looking East



WRTP-14 Looking West



WRTP-14 Backfilled Looking North West



WRTP-14 Northern Pit Wall



Spoil Pile 0.00m to 1.50m



Spoil Pile 1.50m to 3.00m



Spoil Pile 3.00m to 4.00m



Spoil Pile 4.00m to 5.00m

File Location: \\WU.SLR.Local\\Corporate\\Projects\\SLR\\



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Title:	SLR-WRTP-14 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRTP-15

PROJECT : Rum Jungle Rehabilitation

LOCATION : Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 17/07/19

POSITION : E: 718886, N: 8564021 (52 AMG84) SURFACE ELEVATION : 85.7m (AHD)

LOGGED BY : BT

DATE COMPLETED : 17/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 17/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION		
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket			0.00m (ES)	85	1		GC	GC - clayey GRAVEL, medium plasticity, fine to medium grained, sub-rounded to sub-angular, orange brown; clay, medium plasticity.	D	D	5	Fill	
			0.01m (ES)				D to M	D		Laterite			
			0.10m (ES)										
			0.50m (ES)										
			0.50m (B)				GC	GC - clayey GRAVEL with sand, fine to coarse grained, sub-rounded to sub-angular, dark orange brown and yellow brown. Clay, medium to high plasticity; sand, fine to coarse grained.	M				
				84	2		SHALE, fine grained, dark greeny grey and orange brown, foliated, Extremely Low Strength, Extremely Weathered, in-situ as cobbles/boulders and clayey gravel. Clay seams throughout rock mass.	D to M	VD		Extremely Weathered Bedrock		
				83	3		SHALE, fine grained, dark grey and red brown, foliated, pyrite crystals, Low Strength, Moderately Weathered.				Bedrock		
				82	4								
				81			EOH: 4.40m - Refusal						



WRTP-15 Looking West



WRTP-15 Looking South



WRTP-15 Backfilled Looking West



WRTP-15 Northern Pit Wall



Spoil Pile 0.00m to 1.00m



Spoil Pile 1.00m to 2.00m



Spoil Pile 2.00m to 3.00m



Spoil Pile 3.00m to 4.40m

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Title:	SLR-WRTP-15 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	09/07/2019		



TEST PIT EXCAVATION LOG

PROJECT : Rum Jungle

LOCATION : Rum Jungle Mine Site

HOLE NO.: WRTP-16

FILE / JOB NO.: 680.10421

DATE STARTED : 17/07/19

POSITION : E: 718985, N: 8564241 (52 AMG84) SURFACE ELEVATION : 82.1m (AHD)

LOGGED BY : AR

DATE COMPLETED : 17/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 17/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING					MATERIAL					OBSERVATION				
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations	
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.60m (D) 0.61m (B)	82	1		SC	SC - clayey SAND with gravel, fine to medium grained, grey; clay, low plasticity; gravel, fine to medium grained, sub-rounded to sub-angular.	D	VD	5	Topsoil	0.6m: pp = 600KPa 0.9m: 400 KPa > pp > 450KPa	
							GC	GC - clayey GRAVEL with sand, fine to medium grained, sub-rounded to sub-angular, yellow brown. Clay, medium plasticity; sand, fine to coarse grained.			10	Alluvium		
							CI	CI - sandy CLAY with gravel, medium plasticity, orange brown and dark yellow brown. Sand, fine to coarse grained; gravel, fine to medium grained, sub-rounded to sub-angular.			15	Laterite		
							CH	CH - sandy CLAY, high plasticity, greeny grey and orange brown. Sand, fine to medium grained; with fine to medium grain black carbonaceous inclusions.			20			
							CI-CH	CI-CH - silty CLAY with sand, medium to high plasticity, pale grey, greeny grey and orange brown; sand, fine to medium grained; with black fine to medium grain, carbonaceous inclusions.	=PL					
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	2.40m (D)	80	2		CI	CI - silty CLAY, medium plasticity, blue and orange brown.		H			Saprolite	
Excavator 600mm Toothed Bucket		Groundwater Not Encountered		79	3		CI			<<PL				
Excavator 600mm Toothed Bucket		Groundwater Not Encountered		78	4			3.7m - 4.6m: Becoming yellow brown, pale grey, greeny grey and orange brown.						
								4.6m: Becoming yellow brown, orange brown, pale grey and dark grey.						
Excavator 600mm Toothed Bucket		Groundwater Not Encountered						EOH: 4.70m - Machine Limit						



WRTP-16 Looking East



WRTP-16 Looking South



WRTP-16 Backfilled Looking South West



WRTP-16 Eastern Pit Wall



Spoil Pile 0.00m to 1.00m



Spoil Pile 1.00m to 2.00m



Spoil Pile 2.00m to 3.50m



Spoil Pile 3.50m to 4.70m

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Title:	SLR-WRTP-16 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRTP-17

PROJECT : Rum Jungle Rehabilitation

LOCATION : Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 16/07/19

POSITION : E: 719128, N: 8563964 (52 AMG84) SURFACE ELEVATION : 79m (AHD)

LOGGED BY : AR

DATE COMPLETED : 16/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 16/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION		
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.80m (B)	78	1		SC	SC - clayey SAND, fine to medium grained, dark orange brown. Clay, low to medium plasticity.	D	VD		Laterite	
						SP	SP - gravelly SAND, fine to medium grained, poorly graded, dark greenish grey and red brown. Gravel, fine to medium grained, sub-rounded to sub-angular.						
						GW	GW - sandy GRAVEL with clay, fine to coarse grained, sub-rounded to sub-angular, well graded, brown. Sand, fine to coarse grained.						
						SC	SC - silty SAND with gravel, fine to coarse grained, red brown orange and yellow brown; silt, medium plasticity; gravel, fine to medium grained.						
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	3.10m (B)	77	2			MIXTURE OF SOIL AND COBBLES/BOULDERS (MATRIX SUPPORTED) - GW - silty sandy GRAVEL, fine to coarse grained, angular, well graded, dark red brown and white; sand, fine to coarse grained; cobbles/boulders; cobbles; <80mm, rounded to sub-rounded; tending towards a quartzite hematite breccia	M	VD		Saprolite	2.7m: Recovered as coarse rounded gravel and rounded cobbles <80mm sized with clayey sand 3.6m: Recovered as cobbles <100mm sized 3.9m: Recovered as cobbles and boulders <250mm sized
Excavator 600mm Toothed Bucket		Groundwater Not Encountered		76	3		GW			VD			
Excavator 600mm Toothed Bucket		Groundwater Not Encountered		75	4					VD			
								EOH: 4.60m - Refusal					



Rum Jungle



5 Foelsche Street, Darwin, NT 0800



WRTP-17 Looking West



WRTP-17 Looking South East



WRTP-17 Backfilled Looking South



WRTP-17 Northern Pit Wall



Spoil Pile 0.00m to 1.00m



Spoil Pile 1.00m to 2.00m



Spoil Pile 2.00m to 3.00m



Spoil Pile 2.00m to 3.00m

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Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRTP-18

PROJECT : Rum Jungle Rehabilitation

LOCATION : Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 18/07/19

POSITION : E: 718976, N: 8563645 (52 AMG84) SURFACE ELEVATION : 76.51m (AHD)

LOGGED BY : AR

DATE COMPLETED : 18/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 18/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING					MATERIAL					OBSERVATION			
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket			0.50m (B)	76	1		SW	SW - clayey gravelly SAND, medium plasticity, well graded, fine to coarse grained, red brown; clay, fine to medium grained, rounded to sub-angular, rounded to sub-angular.	D	VD	5 10 15 20	Cover	1.0m: Recovered wood piece
							GC	GC - clayey sandy GRAVEL, medium plasticity, well graded, fine to medium grained, rounded to sub-rounded, rounded to sub-rounded, red brown; sand, fine to coarse grained.	D to M				
							SC	SC - clayey SAND with gravel, medium to high plasticity, fine to coarse grained, dark orange brown; gravel, fine to medium grained, rounded to sub-rounded.					
							MIXTURE OF SOIL AND COBBLES/BOULDERS (MATRIX SUPPORTED) GC clayey GRAVEL, medium to high plasticity, poorly graded, fine to coarse grained, sub-rounded to sub-angular, yellow brown; cobbles; <300mm, sub-rounded to sub-angular, shale (waste rock).	M					
									MD				
		4.20m (B)	73	4		CI	CI - sandy CLAY with gravel, medium plasticity, dark yellow brown, red brown and dark grey. Sand, fine to medium grained; gravel, fine to medium grained, sub-rounded to sub-angular.	=PL	St		Fill	3.6m: Recovered geofabric pieces	
						CI	CI - silty CLAY with sand trace gravel, medium plasticity, grey, red brown and orange brown; sand, fine grained; gravel, fine to medium grained, rounded.	>PL					
						EOH: 4.60m - Machine Limit							



WRTP-18 Looking North West



WRTP-18 Looking South



WRTP-18 Backfilled Looking South West



WRTP-18 Northern Pit Wall



Spoil Pile 0.00m to 0.50m



Spoil Pile 0.50m to 1.50m



Spoil Pile 1.50m to 3.00m



Spoil Pile 3.00m to 4.60m

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Title:	SLR-WRTP-18 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	09/07/2019		



HOLE NO.: WRTP-19

LOCATION : Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 17/07/19

POSITION : E: 719285. N: 8563368 (52 AMG84) SURFACE ELEVATION : 65.14m (AHD)

LOGGED BY : AR

DATE COMPLETED : 17/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 17/07/19

DRILLER : C. McGregor

STABILITY : Stable

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Rum Jungle



5 Foelsche Street, Darwin,
NT 0800



WRTP-19 Looking North



WRTP-19 Looking West



WRTP-19 Backfilled Looking South



WRTP-19 Western Pit Wall



Spoil Pile 0.00m to 0.50m



Spoil Pile 0.50m to 1.00m



Spoil Pile 1.00m to 1.50m



Spoil Pile 1.50m to 2.20m

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Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRTP-20

PROJECT : Rum Jungle Rehabilitation

LOCATION : Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 17/07/19

POSITION : E: 719420, N: 8563544 (52 AMG84)

SURFACE ELEVATION : 69.87m (AHD)

LOGGED BY : AR

DATE COMPLETED : 17/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 17/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION		
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket			28/08/2019	69	1		GW	GW sandy GRAVEL trace silt, well graded, fine to medium grained, sub-rounded to sub-angular, grey and orange brown; sand, fine to coarse grained.	D	D		Fill	
							SP	SP - gravelly SAND with clay, fine to coarse grained, well graded, red brown and yellow brown; gravel, fine to medium grained, sub-rounded to sub-angular.					
							SC	SC - clayey SAND trace gravel, medium plasticity, well graded, fine to coarse grained, orange brown; gravel, fine to coarse grained, sub-rounded to sub-angular.					
								SC - clayey SAND, medium plasticity, poorly graded, fine to medium grained, orange brown, yellow brown and pale grey.					
							CI	CI - clayey SAND, fine to medium grained, yellow brown, orange brown and pale grey; clay, medium plasticity lenses of SC - clayey SAND.					
GRANITE, fine to medium grained, pale grey and pale greenish grey, Extremely Low Strength, Extremely Weathered.													
				68	2			GRANITE, fine to medium grained, pale greenish grey and orange brown, Very Low Strength, Highly Weathered.	VD			Extremely Weathered Bedrock	Bedrock
								EOH: 2.20m - Refusal					
				67	3								
				66	4								
				65									



WRTP-20 Looking West



WRTP-20 Looking South



WRTP-20 Backfilled Looking South West



WRTP-20 Western Pit Wall



Spoil Pile 0.00m to 1.00m



Spoil Pile 1.00m to 1.20m



Spoil Pile 1.20m to 1.80m



Spoil Pile 1.80m to 2.20m

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Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	09/07/2019		



***WRD-SLR-TP* TEST PIT LOGS**

RUM JUNGLE MINE SITE

SLR **OCTOBER 2019** INVESTIGATION



TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP01

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 07/10/19

POSITION : E: 718433.12, N: 8564207.91 (52 AM(SURFACE ELEVATION : 75m (AHD)

LOGGED BY : FC

DATE COMPLETED : 07/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 07/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL				OBSERVATION					
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered 2.00m (D)		74	1		SM	SM - silty SAND with gravel, fine to medium grained, grey brown; gravel, fine to medium grained, rounded to sub-rounded, siltstone and ironstone; frequent rootlets (<2mm diameter) near surface.	D	MD - D		Topsoil	
				73	2		CI - CH	CI - CH - sandy CLAY with silt trace gravel, medium to high plasticity, red brown mottled orange; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-rounded, mudstone and ironstone; frequent lenses of clayey SAND.	<<PL	F - VSt		Laterite	
				72	3		CI - CH		<<PL	F - VSt		Laterite	
				71	4		CI - CH		<<PL	F - VSt		Laterite	
				70	5		CI - CH	EOH: 4.60m - Machine Limit	<<PL	F - VSt		Laterite	



Southern Pit Wall



Eastern Pit Wall



Looking West



Spoil Pile



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Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	AHD
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP02

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 07/10/19

POSITION : E: 718520.84, N: 8564336.46 (52 AM) SURFACE ELEVATION : 76m (AHD)

LOGGED BY : FC

DATE COMPLETED : 07/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 07/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION			
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations	
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.50m (D)	75	1		SM	SM - silty SAND with gravel, fine to medium grained, grey brown; gravel, fine to medium grained, rounded to sub-rounded, siltstone and ironstone; frequent rootlets (<2mm diameter) near surface.	D	MD		Topsoil		
							CI	CI - silty CLAY trace sand and gravel, medium plasticity, red brown mottled grey; sand, fine to coarse grained; gravel, fine to coarse grained, rounded to sub-rounded, mudstone and ironstone; occasional sub-rounded cobbles of mudstone and frequent lenses of SAND.				Laterite		
							GP	GP - sandy GRAVEL with silt, poorly graded, fine to coarse grained, rounded to sub-angular, siltstone, pale grey mottled green, red and white; sand, fine to medium grained; occasional sub-angular cobble of siltstone.				Saprolite		
					2		ML	ML - sandy SILT with gravel, low to medium plasticity, pale grey mottled brown and orange; sand, fine to medium grained; gravel, fine to medium grained, rounded to sub-rounded, siltstone; frequent sub-angular cobble of siltstone.						
				72	4			EOH: 4.60m - Machine Limit						
				71	5									



Western Pit Wall



Looking South



Eastern Pit Wall



Spoil Pile



Spoil Pile

Title:	SLR-WRD-SLR-TP02 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	AHD
Date:	07/10/2019		



TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP03

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 07/10/19

POSITION : E: 718555.26, N: 8564202.07 (52 AM) SURFACE ELEVATION : 77m (AHD)

LOGGED BY : FC

DATE COMPLETED : 07/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 07/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION		
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered		76	0		GP	GP - sandy GRAVEL with silt, poorly graded, fine to coarse grained, rounded to sub-angular, siltstone, ironstone and quartz, red brown; sand, fine to medium grained; occasional sub-angular cobble of siltstone.	D	D - VD		Fill	
					1		ML	FILTER CAKE - sandy SILT with clay, low plasticity, dark brown mottled grey to black; sand, fine grained.	D - M	F - St			
					2		ML	2.5m: Occasional lenses of sandy CLAY present.					
					3		ML						
					4		CI	CI - CH - sandy CLAY with silt trace gravel, medium to high plasticity, red brown; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-angular, siltstone, ironstone and quartz; occasional lenses of clayey SAND	D	St - VSt			
			EOH: 4.70m - Machine Limit	D - M									
				72	5								



Southern Pit Wall - Black Filter Cake Layer



Looking West



Pit Base and Northern Pit Wall



Spoil Pile



Spoil Pile



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Title:	SLR-WRD-SLR-TP03 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	AHD
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP04

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 07/10/19

POSITION : E: 718697.62, N: 8564117.85 (52 AM) SURFACE ELEVATION : 80m (AHD)

LOGGED BY : FC

DATE COMPLETED : 07/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 07/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL								OBSERVATION					
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS				ORIGIN	STRUCTURE & Other Observations	
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	1.00m (B)	79	1		SM	SM - gravelly SAND with silt, poorly graded, fine to medium grained, red brown; gravel, fine to coarse grained, rounded to sub-angular, quartz, ironstone and siltstone; frequent sub-angular cobbles of siltstone.	D	D - VD					Fill		
							ML	FILTER CAKE - clayey SILT trace sand, low plasticity, dark grey to black; sand, fine grained 0.8m - 1.6m: Waste - Filter Cake material not present in the south faces of Test Pit.	D - M	F - St							
							SM	SM - clayey SAND with gravel, fine to coarse grained, orange brown mottled grey; gravel, fine to coarse grained, rounded to sub-angular, sandstone, quartz and ironstone; occasional lenses of sandy CLAY	D	VD							
													EOH: 2.70m - Refusal				
					77	3											
					76	4											
					75	5											

File Location: \\WU.SLR.Local\Corporate\Projects\SLR\



Looking North



Spoil Pile



Western Pit Wall - Layer of Filter Cake



Looking North



Western Pit Wall - Filter Cake Layer



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Title: SLR-WRD-SLR-TP04 Photo Log

Client: DPIR

Project: Rum Jungle Rehabilitation

Project No.: 680.10421

Status: Design

Date: 07/10/2019

Drawn: FC

Reviewed: CDM

Size: A3 Version: 1.0

Datum: AHD





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP05

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 07/10/19

POSITION : E: 718689.01, N: 8564209.31 (52 AM) SURFACE ELEVATION : 78.5m (AHD)

LOGGED BY : FC

DATE COMPLETED : 07/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 07/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL								OBSERVATION			
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS			ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered		78	0		SM	SM - silty SAND with gravel, fine to medium grained, red brown; gravel, fine to medium grained, rounded to sub-rounded, siltstone, quartz and ironstone; frequent rootlets (<2mm diameter) near surface	D	MD				Fill	
					0.1		ML	FILTER CAKE - sandy SILT with clay, low plasticity, dark grey to black; sand, fine grained							
					1		CI	CI - silty CLAY trace sand and gravel, medium plasticity, pale grey mottled red and yellow; sand, fine to medium grained; gravel, fine to medium grained, rounded to sub-rounded, siltstone, quartz and ironstone; frequent pockets of gravelly SAND					Saprolite		
					1.1		ML	MI - clayey SILT trace sand and gravel, low to medium plasticity, pale grey mottled red and white; sand, fine to medium grained; gravel, fine to medium grained, rounded to sub-rounded, siltstone, quartz and ironstone; frequent pockets of gravelly SAND	St - VSt						
					3		SM	SM - clayey SAND with gravel, fine to coarse grained, orange brown mottled red and grey; gravel, fine to coarse grained, rounded to sub-angular, mudstone, quartz and ironstone; occasional lenses of sandy CLAY	D - M						
				75	4		SM	3.8m: Frequent lenses and sub-rounded cobbles of mudstone present.							
					5		SM			D - VD					
EOH: 5.50m - Machine Limit															



Looking North - Filter Cake in the Eastern Pit Wall



Spoil Pile



Eastern Pit Wall - Filter Cake



Looking North



Western Pit Wall



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Title:	SLR-WRD-SLR-TP05 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	AHD
Date:	07/10/2019		



HOLE NO.: WRD-SLR-TP06A

PROJECT : Rum Jungle Geotechnical Investigation

LOCATION : Rum Jungle Mine Site

FILE / JOB NO.: 680.10421.02300

DATE STARTED : 05/10/19

POSITION : E: 718681.62, N: 8564289.6 (52 MGA94) SURFACE ELEVATION : 76m (AHD)

LOGGED BY : FC

DATE COMPLETED : 05/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 05/10/19

DRILLER : C. McGregor

STABILITY : Stable

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Rum Jungle Geotechnical Investigation



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Looking North



Spoil Pile



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Title:	SLR-HR-SLR-TP06A Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	02/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP06B

PROJECT : Rum Jungle Geotechnical Investigation

LOCATION : Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 05/10/19

POSITION : E: 718679.54, N: 8564274.01 (52 MGA94) SURFACE ELEVATION : 75m (AHD)

LOGGED BY : FC

DATE COMPLETED : 05/10/19

RIG TYPE : 20T Tracked Komatsu Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 05/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL				OBSERVATION										
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations					
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.50m (D)	74	1		ML	ML - sandy SILT with clay trace gravel, low to medium plasticity, reddish brown; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-angular, siltstone, ironstone and quartz	D	F - St		Topsoil						
					2		GP	MIXTURE OF SOIL AND COBBLES/BOULDERS (MATRIX SUPPORTED) - GP - sandy GRAVEL, fine to coarse grained, rounded to sub-angular, poorly graded, pale grey and mottled white and yellow; sand, fine to coarse grained; cobbles/boulders, sub-rounded, siltstone.										
					3													
					4													
					5													
			4.00m (D)	71														
				70				EOH: 5.20m - Machine Limit										



Rum Jungle Geotechnical Investigation



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Eastern Pit Wall



Spoil Pile



Spoil Pile



Western Pit Wall



Looking North



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Title:	SLR-WRD-SLR-TP06B Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP06C

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 07/10/19

POSITION : E: 718679.42, N: 8564258.85 (52 AMG84) SURFACE ELEVATION : 75m (AHD)

LOGGED BY : FC

DATE COMPLETED : 07/10/19

RIG TYPE : 20T Tracked Komatsu Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 07/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL								OBSERVATION				
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS				ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div>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Looking North



Spoil Pile



Looking North



TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP06D

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 07/10/19

POSITION : E: 718677.42, N: 8564239.17 (52 AMG84)

SURFACE ELEVATION : 75m (AHD)

LOGGED BY : FC

DATE COMPLETED : 07/10/19

RIG TYPE : 20T Tracked Komatsu Excavator

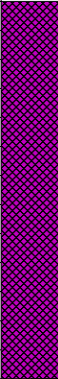
ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 07/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL								OBSERVATION						
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS				ORIGIN	STRUCTURE & Other Observations		
Excavator 600mm Toothed Bucket	<div><div>VE</div><div>UL</div><div>UL</div><div>UL</div><div>H</div></div>	Groundwater Not Encountered		74	1		ML	ML - sandy SILT with clay trace gravel, low to medium plasticity, greyish brown; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-angular, siltstone, ironstone and quartz.	<<PL	F - St	5	10	15	20	Fill			
				73	2													
				72	3													
				71	4													
				70	5													





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP07

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 05/10/19

POSITION : E: 718787.77, N: 8564346.96 (52 AM) SURFACE ELEVATION : 82m (AHD)

LOGGED BY : FC

DATE COMPLETED : 05/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 05/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL								OBSERVATION	
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	1.80m (B)	81	1		SM	SM - silty SAND with gravel, fine to medium grained, red brown; gravel, fine to medium grained, rounded to sub-rounded, siltstone and ironstone; frequent rootlets (<2mm diameter) near surface	D	St		Topsoil	
					2		GP	GP - sandy GRAVEL with silt, poorly graded, fine to medium grained (rare coarse), rounded to sub-rounded, siltstone, ironstone and quartz, orange brown; sand, fine to medium grained					
					3		CI - CH	CI - CH - silty CLAY trace sand, medium to high plasticity, pale grey mottled red, orange and brown; sand, fine to medium grained; rare fine to medium grained sub-rounded gravel of quartz and ironstone					
					4		GP	GP - sandy GRAVEL trace silt, poorly graded, fine to coarse grained, rounded to sub-angular, mudstone, pale grey mottled red and white; sand, fine to coarse grained; frequent sub-angular cobbles of siltstone					
								EOH: 4.50m - Machine Limit					
				77	5								



Northern Pit Wall



Spoil Pile



Spoil Pile



Looking East



Looking East



2 LINCOLN STREET
LANE COVE
NEW SOUTH WALES 2066
AUSTRALIA
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Title:	SLR-WRD-SLR-TP07 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP08

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 04/10/19

POSITION : E: 718832, N: 8564203 (52 AMG84) SURFACE ELEVATION : 81m (AHD)

LOGGED BY : FC

DATE COMPLETED : 04/10/19

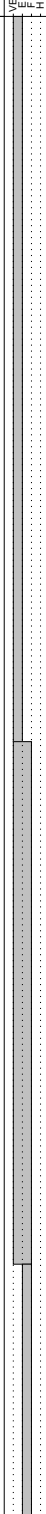
RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 04/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL				OBSERVATION					
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered		3.40m (B)			SM	SM - silty SAND with gravel, fine to medium grained, red brown; gravel, fine to medium grained, rounded to sub-rounded, siltstone and ironstone; frequent rootlets (<2mm diameter) near surface and rare sub-angular cobble of siltstone				Topsoil	
					1		ML	FILTER CAKE - sandy SILT, low plasticity, dark grey to black; sand, fine grained					
					2								
					3		CI	CI - gravelly CLAY with sand, low to medium plasticity, pale grey mottled red and yellow; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-rounded, quartz and ironstone				Fill	
					4								
					5		ML	MI - clayey SILT with sand trace gravel, low to medium plasticity, pale grey mottled red and white; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-rounded, ironstone and quartz; frequent sub-angular cobbles of siltstone				Laterite	
								EOH: 5.20m - Machine Limit					



Looking East



Spoil Pile



Spoil Pile



Looking East



Southern Pit Wall - Grey Filter Cake



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Title:	SLR-WRD-SLR-TP08 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP09

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 05/10/19

POSITION : E: 718939, N: 8564106 (52 AMG84) SURFACE ELEVATION : 84m (AHD)

LOGGED BY : FC

DATE COMPLETED : 05/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 05/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION			
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations	
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.60m (B)	83	1		SM	SM - silty SAND with gravel, fine to medium grained, orange brown mottled yellow; gravel, fine to medium grained, rounded to sub-rounded, siltstone, ironstone and quartz; frequent rootlets (<2mm diameter) near surface	MD - D			Fill		
							SM - gravelly SAND trace silt and clay, poorly graded, fine to medium grained, red brown; gravel, fine to coarse grained, rounded to sub-rounded, quartz, ironstone, shale and meta-sediment; occasional lenses sandy CLAY and SILT							
				82	2			CI - sandy CLAY with silt and gravel, medium to high plasticity, pale grey mottled red, green and brown; sand, fine to coarse grained; gravel, fine to coarse grained, rounded to sub-angular, mudstone, quartz and ironstone; frequent sub-rounded cobbles of mudstone	D					
							2.6m: Frequent lenses of mudstone present.							
				81	3									
		CI	CI - silty CLAY trace sand and gravel, medium to high plasticity, pale grey mottled red and yellow; sand, fine to coarse grained; gravel, fine to coarse grained, rounded to sub-angular, mudstone, quartz and ironstone; frequent lenses of gravelly SAND	F - VSt		Laterite								
80	4													
			4.00m (D)					EOH: 4.70m - Machine Limit						
				79	5									



Looking East



Spoil Pile



Spoil Pile



Looking East



Pit Walls and Base



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Title:	SLR-WRD-SLR-TP09 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP10

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 05/10/19

POSITION : E: 718866.59, N: 8564323.66 (52 AM) SURFACE ELEVATION : 83m (AHD)

LOGGED BY : FC

DATE COMPLETED : 05/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 05/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL				OBSERVATION					
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.90m (B)	82	1		ML	ML - sandy SILT with gravel, low plasticity, grey brown; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-angular, siltstone, ironstone and quartz; frequent rootlets (<2mm diameter)	D	St		Topsoil	
							GP	GP - sandy GRAVEL with silt, poorly graded, fine to medium grained (rare coarse), rounded to sub-rounded, siltstone, ironstone and quartz, orange brown; sand, fine to medium grained					
							CI	CI - CH - silty CLAY trace sand, medium to high plasticity, pale grey mottled red, orange and brown; sand, fine to medium grained; rare fine to medium grained sub-rounded gravel of quartz and ironstone					
							GP	GP - sandy GRAVEL trace silt, poorly graded, fine to coarse grained, rounded to sub-angular, mudstone, pale grey mottled red, orange and brown; sand, fine to coarse grained; frequent sub-angular cobbles of mudstone					
							GP	2.3m: Becomes sandy GRAVEL with silt. Occasional lenses of white siltstone present.					
		Groundwater Not Encountered	0.90m (B)	81	2		GP		D	D - VD		Saprolite	
							GP						
							GP						
							GP						
							GP						
		Groundwater Not Encountered	0.90m (B)	80	3		GP		D	D - VD		Saprolite	
							GP						
							GP						
							GP						
							GP						
		Groundwater Not Encountered	0.90m (B)	79	4		GP		D	D - VD		Saprolite	
							GP						
							GP						
							GP						
							GP						
		Groundwater Not Encountered	0.90m (B)	78	5		GP	EOH: 5.00m - Machine Limit	D	D - VD		Saprolite	
							GP						
							GP						
							GP						
							GP						

File Location: \\WU.SLR.Local\Corporate\Projects\SLR\



Looking South



Spoil Pile



Spoil Pile



Eastern Pit Wall



Looking South



2 LINCOLN STREET
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Title:	SLR-WRD-SLR-TP10 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP11

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 04/10/19

POSITION : E: 719120.87, N: 8564217.07 (52 AM) SURFACE ELEVATION : 76m (AHD)

LOGGED BY : FC

DATE COMPLETED : 04/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 04/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL								OBSERVATION	
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		<div>Groundwater Not Encountered</div>	<div>0.70m (B)</div>	75	1		ML	ML - sandy SILT with gravel, low plasticity, grey brown; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-angular, siltstone, ironstone and quartz; frequent rootlets (<2mm diameter)	D - VD	St		Topsoil	
							SM	SM - silty SAND with gravel, fine to medium grained, red brown mottled grey; gravel, fine to medium grained, rounded to sub-angular, siltstone, ironstone and quartz; rare sub-rounded cobble of mudstone					
							GP	GP - SAND & GRAVEL trace silt, poorly graded, fine to coarse grained, rounded to sub-angular, mudstone, ironstone and quartz, dark red brown mottled grey; sand, fine to medium grained					
				74	2		CI	CI - sandy CLAY with silt and gravel, medium to high plasticity, pale grey mottled red and brown; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-rounded, mudstone and ironstone; frequent lenses of clayey SAND	D			Laterite	
					3		ML	3.0m: Trace gravel present.					
				72	4		ML	ML - sandy SILT with gravel, low to medium plasticity, pale grey mottled red and brown; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-rounded, siltstone; frequent lenses of clayey SAND	M	St - VSt			
				71	5			EOH: 5.00m - Machine Limit					

File Location: \\U:\SLR\Local\Corporate\Projects\SLR\



Looking East



Spoil Pile



Spoil Pile



Northern Pit Wall



Looking East



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Title:	SLR-WRD-SLR-TP11 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP12

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 04/10/19

POSITION : E: 719109.11, N: 8564116.25 (52 AM) SURFACE ELEVATION : 77m (AHD)

LOGGED BY : FC

DATE COMPLETED : 04/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 04/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL								OBSERVATION	
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div>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Looking North



Western Pit Wall



Spoil Pile



Eastern Pit Wall



Western Pit Wall

Title:	SLR-WRD-SLR-TP12 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	07/10/2019		



TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP13

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 04/10/19

POSITION : E: 719196.84, N: 8563985.87 (52 AMG84) SURFACE ELEVATION : 77m (AHD)

LOGGED BY : FC

DATE COMPLETED : 04/10/19

RIG TYPE : 20T Tracked Komatsu Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 04/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL				OBSERVATION						
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations	
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.10m (B)					SM - gravelly SAND trace silt, poorly graded, fine to medium grained, reddish brown; gravel, fine to coarse grained, sub-rounded to sub-angular, siltstone, shale and meta-sediment; occasional sub-rounded cobbles of siltstone.	D	D - VD		Fill		
								SM - gravelly SAND trace silt, poorly graded, fine to coarse grained, reddish brown mottled grey; gravel, fine to coarse grained, rounded to sub-angular, shale and meta-sediment; occasional lenses and cobbles of shale.						
								SM - gravelly SAND with silt, poorly graded, fine to medium grained, greyish brown mottled red; gravel, fine to coarse grained, rounded to sub-angular, siltstone and slate; frequent cobbles of sub-angular to angular slate.						
								GP - sandy GRAVEL, poorly sorted, fine to coarse grained, rounded to sub-angular, slate, greyish brown; sand, fine to medium grained; frequent sub-angular cobbles of slate.						
								SHALE, dark grey and mottled brown, Extremely Low Strength, Extremely Weathered, highly fractured.						
								EOH: 4.90m - Machine Limit						
				72	5									



Looking East



Spoil Pile



Spoil Pile



Looking East



Northern Pit Wall



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LANE COVE
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Title:	SLR-WRD-SLR-TP14 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP14

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 04/10/19

POSITION : E: 719203.9, N: 8563863.2 (52 AMG8 SURFACE ELEVATION : 76m (AHD))

LOGGED BY : FC

DATE COMPLETED : 04/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 04/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION				
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations		
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	1.30m (B)	75	1		SM	SM - gravelly SAND with silt, poorly graded, fine to medium grained, red brown; gravel, fine to coarse grained, rounded to sub-angular, siltstone, shale and quartz	D	D - VD		Fill			
					GP	GP - SAND & GRAVEL trace silt and clay, poorly graded, fine to coarse grained, yellow brown mottled red; gravel, fine to coarse grained, rounded to sub-angular, quartz and siltstone; rare sub-rounded cobble of siltstone									
					2		CI	CI - sandy CLAY with gravel, medium to high plasticity, yellow brown mottled red and grey; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-rounded, siltstone, ironstone and quartz; frequent lenses of SAND						D - M	St - VSt
					3		GP	GP - SAND & GRAVEL trace silt and clay, poorly graded, fine to coarse grained, yellow brown mottled red; gravel, fine to coarse grained, rounded to sub-angular, quartz and siltstone; occasional sub-angular cobble of quartz and frequent lenses of gravelly CLAY							
				72	4			EOH: 4.00m - Machine Limit							
			3.00m (B)	73											
				71	5										



Looking South



Spoil Pile



Spoil Pile



Western Pit Wall



Eastern Pit Wall



2 LINCOLN STREET
LANE COVE
NEW SOUTH WALES 2066
AUSTRALIA
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Title:	SLR-WRD-SLR-TP14 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	AHD
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP15

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 04/10/19

POSITION : E: 719352.66, N: 8563847.53 (52 AM) SURFACE ELEVATION : 70m (AHD)

LOGGED BY : FC

DATE COMPLETED : 04/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 04/10/19

DRILLER : C. McGregor

STABILITY : Unstable

DRILLING				MATERIAL								OBSERVATION	
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket			1.30m (D)	69	1		ML	ML - sandy SILT with gravel, low plasticity, brown grey; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-angular, siltstone, ironstone and quartz	St	D - VD		Topsoil	
							GP	GP - sandy GRAVEL trace silt, poorly graded, fine to medium grained, rounded to sub-rounded, siltstone and ironstone, orange brown; sand, fine to medium grained 0.5m: Becomes less sandy. 1.1m: Becomes red brown.					
							CI	CI - CH - silty CLAY with gravel, medium to high plasticity, pale grey mottled red and brown; gravel, fine to medium grained, rounded to sub-rounded, ironstone and siltstone; frequent lenses of sandy GRAVEL					
							MI	MI - clayey SILT trace sand and gravel, low to medium plasticity, pale grey mottled red and white; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-rounded, ironstone and siltstone					
							ML	MI - clayey SILT trace sand and gravel, low to medium plasticity, pale grey mottled red and white; sand, fine to coarse grained; gravel, fine to medium grained, rounded to sub-rounded, ironstone and siltstone; frequent sub-angular cobbles and lenses of siltstone					
			2.20m (D)	68	2		CI					Laterite	
				67	3		ML		St - VSt				
				66	4								
				65	5			EOH: 4.40m - Target depth					



Looking North



Looking North



Spoil Pile



Eastern Pit Wall



Western Pit Wall



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Title:	SLR-WRD-SLR-TP15 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	AHD
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP16

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 04/10/19

POSITION : E: 719322, N: 8564100 (52 AMG84) SURFACE ELEVATION : 73m (AHD)

LOGGED BY : FC

DATE COMPLETED : 04/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 04/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL				OBSERVATION					
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY /	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
										RELATIVE DENSITY			
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	1.90m (D)	72	1		SM	SM - silty SAND, fine to coarse grained, yellow brown; frequent rootlets (<2mm diameter)	D	St		Topsoil	
								VD					
					2		CI-CH	CI - CH - sandy CLAY trace gravel, medium to high plasticity, yellow brown mottled red and grey; sand, fine to medium grained; gravel, fine to medium grained, rounded to sub-rounded, ironstone and quartz		St - VSt			
					3			CH - gravelly CLAY trace sand, medium to high plasticity, pale grey mottled red and brown; gravel, fine to medium grained, sub-rounded, mudstone, ironstone and quartz; sand, fine to medium grained					
					4		ML	ML - sandy SILT with clay, low plasticity, pale grey mottled yellow and white; sand, fine to coarse grained; rare sub-rounded fine to medium grained gravel of siltstone					
EOH: 4.80m - Machine Limit													
				68	5								

File Location: \\WU.SLR.Local\Corporate\Projects\SLR\



Looking West



Spoil Pile



Spoil Pile



Looking West



Looking West



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Title:	SLR-WRD-SLR-TP16 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	AHD
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP17

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 03/10/19

POSITION : E: 719111.94, N: 8563692.97 (52 AM) SURFACE ELEVATION : 75m (AHD)

LOGGED BY : FC

DATE COMPLETED : 03/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 03/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING						MATERIAL				OBSERVATION			
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered		74	1			SHALE; extremely weathered, red brown, low strength; Recovered as sandy GRAVEL with silt, poorly graded, fine to coarse grained, sub-rounded, siltstone and shale, red brown; sand, fine to medium grained.	D	D - VD		Extremely Weathered Bedrock	
				73	2			SHALE; extremely weathered, red brown, low strength; Recovered as sandy GRAVEL with silt, poorly graded, fine to coarse grained, sub-rounded, siltstone and shale, red brown; sand, fine to medium grained; occasional sub-rounded to sub-angular cobbles of shale and slate.					
				72	3			EOH: 3.00m - Machine Limit					
				71	4								
				70	5								



Looking East



Looking East



Spoil Pile



Spoil Pile



Southern Pit Wall



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Title:	SLR-WRD-SLR-TP17 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	07/10/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: WRD-SLR-TP18

PROJECT : Rum Jungle

LOCATION : Former Rum Jungle Mine Site

FILE / JOB NO.: 680.10421

DATE STARTED : 04/10/19

POSITION : E: 719284, N: 8563710 (52 AMG84) SURFACE ELEVATION : 74m (AHD)

LOGGED BY : FC

DATE COMPLETED : 04/10/19

RIG TYPE : 20T Tracked Komatsu Excavator ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 04/10/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL				OBSERVATION					
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered		73	1		ML	ML - sandy SILT with gravel, low to medium plasticity, pale grey brown; sand, fine to medium grained; gravel, fine to coarse grained, sub-rounded, quartz, granite and siltstone; frequent rootlets (<2mm diameter)	D			Topsoil	
								Extremely Weathered Bedrock					
			1.80m (D)	72	2								
				71	3								
				70	4								
				69	5								



Rum Jungle

5 Foelsche Street, Darwin,
NT 0800



Looking North



Looking North



Eastern Pit Wall



Spoil Pile



Spoil Pile



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Title:	SLR-WRD-SLR-TP18 Photo Log	Drawn:	FC
Client:	DPIR	Reviewed:	BT
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	AHD
Date:	07/10/2019		

















CLASSIFICATION SYMBOLS AND SOIL DESCRIPTION

PARTICLE SIZE DEFINITIONS*

Fraction	Components	Subdivision	Size (mm)
Oversize	BOULDERS		>200
	COBBLES		63-200
Coarse grained soil	GRAVEL	Coarse	19-63
		Medium	6.7-19
		Fine	2.36-6.7
	SAND	Coarse	0.6-2.36
		Medium	0.21-0.6
		Fine	0.075-0.21
Fine grained soil	SILT		0.002-0.075
	CLAY		<0.002

GRAPHIC LOG

	PEAT		TOPSOIL
	CLAY		FILL
	SILT		BASALT
	SAND		GREYWACKE
	GRAVEL		METAMORPHIC
	COBBLES		LIMESTONE
	BOULDERS		CORAL

MOISTURE CONDITION*

Term	Description
Dry (D)	- Non-cohesive and free-running
Moist (M)	- Soil feels cool, darkened in colour. - Soil tends to stick together.
Wet (W)	- Soil feels cool, darkened in colour. - Soil tends to stick together, free water forms when handling.

For Fine Grained Soils*





'Moist, dry of plastic limit'	- Hard and friable or powdery, or ('w < PL').
'Moist, near plastic limit'	- Soils can be moulded at a moisture content approximately equal to the plastic limit, or ('w ≈ PL').
'Moist, wet of plastic limit'	- Soils usually weakened and free water forms on hands when handling, or ('w > PL').
'Wet, near liquid limit'	- Or ('w ≈ LL').
'Wet, wet of liquid limit'	- Or ('w > LL').

USCS SOIL CLASSIFICATION CODES

GW - well graded gravel	ML - silt, low plasticity
GP - poorly graded gravel	CL - clay, low plasticity
GM - silt gravel	CI - clay, medium plasticity
GC - clayey gravel	OL - organic silt / organic clay
SW - well graded sand	MH - silt, high plasticity
SP - poorly graded sand	CH - clay, high plasticity
SM - silty sand	OH - organic silt / organic clay, high plasticity
SC - clayey sand	Pt - peat

G= Gravel, S= Sand, M= Silt, C= Clay

WATER

	- Level (date observed)
	- Inflow
	- Partial Loss
	- Complete Loss

CONSISTENCY*

Term	Field guide to consistency	Indicative Undrained Shear Strength (kPa)
Very Soft (VS)	Exudes between the fingers when squeezed in hand	≤12
Soft (S)	Can be moulded by light finger pressure	>12 and ≤25
Firm (F)	Can be moulded by strong finger pressure	>25 and ≤50
Stiff (St)	Cannot be moulded by fingers	>50 and ≤100
Very Stiff (VSt)	Can be indented by thumbnail	>100 and ≤200
Hard (H)	Can be indented with difficulty by thumbnail	>200
Friable (Fr)	Can be easily crumbled or broken into small pieces by hand	-

RELATIVE DENSITY*

Term	Density index %
Very Loose (VL)	≤15
Loose (L)	>15 and ≤35
Medium Dense (MD)	>35 and ≤65
Dense (D)	>65 and ≤85
Very Dense (VD)	>85

PLASTICITY (fine grained soil)*

Term	Range of liquid limit for silt	Range of liquid limit for clay
Non-Plastic (NP)	Not applicable	Not applicable
Low Plasticity (LP)	≤50	≤35
Medium Plasticity (IP)	Not applicable	35 and ≤50
High Plasticity (HP)	>50	>50

GRADING (coarse grained soil)*

Term	Description
Well Graded (WG)	Having good representation of all particle sizes from the largest to the smallest.
Poorly Graded (PG)	With one or more intermediate sizes poorly represented.
Gap Graded (GG)	With one or more intermediate sizes absent.
Uniform (UG)	Essentially of one size.

Notes

* AS1726:2017

** AGS3.1 RTA








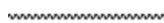



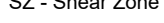





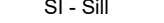





CLASSIFICATION SYMBOLS AND ROCK DESCRIPTION

MOISTURE CONDITION*			ALTERATION*		
Term	Description		XA - Extremely Altered HA - Highly Altered MA - Moderately Altered DA - Distinctly Altered SA - Slightly Altered		
Dry (D)	Looks and feels dry.				
Moist (M)	Feels cool, darkened in colour, but no water is visible on the surface.				
Wet (M)	Feels cool, darkened in colour, water film or droplets visible on the surface.				

STRENGTH*			WEATHERING**		
Term	Uniaxial Compressive Strength MPa	Point load strength index Is(50) MPa	RS - Residual Soil* EW - Extremely Weathered (XW *) HW - Highly Weathered MW - Moderately Weathered DW - Distinctly Weathered * SW - Slightly Weathered F - Fresh (FR *)		
Extremely Low Strength (EL) **	-	-			
Very Low Strength (VL)	0.6 to 2	0.03 to 0.1			
Low Strength (L)	2 to 6	0.1 to 0.3			
Medium Strength (M)	6 to 20	0.3 to 1			
High Strength (H)	20 to 60	1 to 3			
Very High Strength (VH)	60 to 200	3 to 10			
Extremely High Strength (EH)	more than 200	more than 10			

TEXTURE*		FABRIC*	
Term	Description	Term	Description
Bedding	Layering produced by changes in sedimentation, which may be defined by grain size, colour, or other features.	Indistinct fabric	There is little effect on strength properties.
Lamination	Similar to bedding but developed in layer thicknesses of less than 20 mm.	Distinct fabric	The rock may break more easily parallel to the fabric.
Foliation	The parallel arrangement of minerals due to metamorphic processes.		
Cleavage	A type of foliation developed in fine grained metamorphic rocks such as slates.		
Flow Banding	A layering produced during flow of a partially solidified igneous rock that causes crystals to become oriented. Sometimes called a trachytic fabric.		

BLOCK SHAPE*	
Term	Description
Polyhedral blocks	Irregular discontinuities without arrangement into distinct sets, and of small persistence.
Tabular blocks	One dominant set of parallel discontinuities (1), for example bedding planes, with other noncontinuous joints; thickness of blocks much less than length or width.
Prismatic blocks	Two dominant sets of discontinuities (1 and 2), approximately orthogonal and parallel, with a third irregular set; thickness of blocks much less than length or width.
Equidimensional blocks	Three dominant sets of discontinuities (1, 2 and 3), approximately orthogonal, with occasional irregular joints, giving equidimensional blocks.
Rhomboidal blocks	Three (or more) dominant, mutually oblique, sets of joints (1, 2 and 3) giving oblique-shaped, equidimensional blocks.
Columnar blocks	Several, usually more than three sets of continuous, parallel joints (1, 2, 3, 4, 5) usually crossed by irregular joints; lengths much greater than other dimensions.

DISCONTINUITY SYMBOLS					
 BD - Bedding	 CS - Crushed Seam	 DK - Dyke	 FC - Fracture	 JT - Joint	 SZ - Shear Zone
 CL - Cleavage	 DZ - Decomposed Zone	 FL - Fault	 FZ - Fracture Zone	 SH - Schistosity	 SI - Sill
 CO - Contact	 DB - Drilling Break	 VN - Vein	 HB - Handling Break	 SM - Seam	 VO - Void
 CZ - Crush Zone	 DL - Drilling Lift	 FL - Foliation	 IS - Infilled Seam	 SS - Shear Seam	

Notes

* AS1726:2017

** AGS3.1 RTA


DRILLING / EXCAVATION METHOD


AD/T - Auger Drilling with TC-bit
 AD/V - Auger Drilling with V-bit
 AS - Auger Screwing
 AT - Air Track
 B - Dozer Blade
 BH - Backhoe Bucket
 CT - Cable Tool
 DB - Washbore Drag Bit
 DT - Diatube

E - Excavator
 EH - Excavator with Hammer
 HA - Hand Auger
 HMLC - HMLC Core Barrel
 HQ3 - HQ3 Core Barrel
 MZ - Mazier
 N - Natural Exposure
 NMLC - NMLC Core Barrel
 NQ3 - NQ3 Core Barrel


PQ3 - PQ3 Core Barrel
 Pushed SPT - Pushed SPT
 PT - Push Tube
 R - Ripper
 RR - Rock Roller
 SPT - Driven SPT
 WB - Washbore
 X - Existing Excavation


BACKFILL TYPES


 Bituminous Material (BITUBKFL)


 Sand (SANDBKFL)

 Cuttings (CUTTBKFL)

 Concrete (CONCBKFL)

 Bentonite (BENTBKFL)


 Gravel (GRAVBKFL)

 Grout (GROUBKFL)


SAMPLES & TESTS **


 B - Bulk Disturbed Sample


 BLK - Block Sample

 C - Core Sample (general)


 CBR - CBR Mould Sample

 D - Small Disturbed Sample

 ES - Soil Sample for Environmental Testing

 EW - Water Sample for Environmental Testing

 G - Gas Sample

 LB - Large Bulk Disturbed Sample (earthworks testing)

 M - Mazier Type Sample


 P - Piston Sample


 U - Undisturbed Sample - Open Drive


 W - Water Sample

 SPT - Standard Penetration Test - No Liner


TEST TYPE **


 BH - Borehole


 CPT - Core Penetration Test


 DCP - Dynamic Cone Penetrometer

 EXP - Logged Exposure


 ICBR - In Situ CBR Test


 INST - Instrument


 IRDX - In Situ Redox Test

 IVAN - In Situ Vane Test

 OP - Observation Pit/ Trench


 PM - Pressuremeter Test Hole

 S - Shaft

 SRAL - Seismic Refraction Line

 TP - Trial Pit/ Trench

 IDEN - In Situ Density Test

 TRAV - Linear Logging, Traverse, or Scanline Survey

TOTAL CORE RECOVERY*

Total core recovery (TCR) is defined as:

$$TCR = \frac{\text{Length of core recovered}}{\text{Length of core run}} \times 100\%$$

PIEZOMETER TYPE

EPIE - Electronic Piezometer
 HPIE - Hydraulic Piezometer
 PPIE - Pneumatic Piezometer
 SPIE - Standpipe Piezometer

Notes

* AS1726:2017

** AGS3.1 RTA

DPIR TEST PIT LOGS

BORROW AREA A

DPIR **MAY 2019** INVESTIGATION



TEST PIT EXCAVATION LOG

PROJECT : Rum Jungle

LOCATION : Clay Borrow Area

HOLE NO.: DPIR-TP01

FILE / JOB NO.: 680.10421

DATE STARTED : 14/05/19

POSITION : E: 715528, N: 8557573 (52 AMG84)

SURFACE ELEVATION : 68.46m (AHD)

LOGGED BY : GF

DATE COMPLETED : 14/05/19

RIG TYPE : 30t Excavator with 800mm toothed bucket

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 14/05/19

OPERATOR : Unknown

STABILITY : Stable

DRILLING						MATERIAL					OBSERVATION										
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations								
Excavator 800mm toothed bucket		Groundwater Not Encountered	0.60m (D)	68	1		SM	SM - silty SAND trace organic matter (root fibres less than 2mm diameter), fine to medium grained, brown.	M			Topsoil									
							SC	SC - clayey SAND trace gravel, medium plasticity, fine to medium grained, orange brown; gravel, fine grained, rounded.													
							2		CI					CI - sandy CLAY, medium plasticity, red brown; sand, fine to medium grained; increasing sand content with depth.	D	Laterite					
																		3		SC	SC - clayey SAND trace gravel, medium plasticity, fine to medium grained, red brown; gravel, fine grained, rounded.
EOH: 5.00m - Machine Limit																					



TEST PIT EXCAVATION LOG

HOLE NO.: DPIR-TP02

PROJECT : Rum Jungle

LOCATION : Clay Borrow Area

FILE / JOB NO.: 680.10421

DATE STARTED : 14/05/19

POSITION : E: 715598, N: 8557875 (52 AMG84)

SURFACE ELEVATION : 73.84m (AHD)

LOGGED BY : GF

DATE COMPLETED : 14/05/19

RIG TYPE : 30t Excavator with 800mm toothed bucket

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 14/05/19

OPERATOR : Unknown

STABILITY : Stable

DRILLING						MATERIAL					OBSERVATION		
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 800mm toothed bucket		Groundwater Not Encountered	0.40m (D)	73	1		SP	SP - SAND with clay, medium plasticity, medium to coarse grained, brown.	D		5 10 15 20	Topsoil	
					SC		SC - clayey SAND trace gravel, medium plasticity, fine to medium grained, orange brown.	M	Laterite				
					CI		CI - sandy CLAY trace gravel, medium plasticity, orange brown and grey; gravel, fine to medium grained, angular, shale.	D	Saprolite				
				72	2								
				71	3				D				
				70	4								
			4.60m (D)	69				4.5m - 5.0m: inclusions of cobbles; angular, sandstone					
								EOH: 5.00m - Machine Limit					



Rum Jungle

5 Foelsche Street, Darwin,
NT 0800



TEST PIT EXCAVATION LOG

HOLE NO.: DPIR-TP03

PROJECT : Rum Jungle

LOCATION : Clay Borrow Area

FILE / JOB NO.: 680.10421

DATE STARTED : 14/05/19

POSITION : E: 715283, N: 8557630 (52 AMG84)

SURFACE ELEVATION : 67.58m (AHD)

LOGGED BY : GF

DATE COMPLETED : 14/05/19

RIG TYPE : 30t Excavator with 800mm toothed bucket

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 14/05/19

OPERATOR : Unknown

STABILITY : Stable

DRILLING										MATERIAL				OBSERVATION				
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS				ORIGIN	STRUCTURE & Other Observations		
Excavator 800mm toothed bucket		Groundwater Not Encountered	1.00m (D)	67	1		SM	SM - silty SAND with organic matter (root fibres less than 2mm diameter), fine to medium grained, brown.	M		5	10	15	20	Topsoil			
							CI	CI sandy CLAY trace gravel, medium plasticity, orange brown; sand, fine to medium grained; gravel, fine grained.										
					2												CI	
					4		SC	SC - clayey SAND trace gravel, medium plasticity, medium to coarse grained, light brown; gravel, fine grained, rounded; occasional floating cobbles.										
5		SC																
EOH: 5.50m - Machine Limit																		



Rum Jungle

5 Foelsche Street, Darwin,
NT 0800



TEST PIT EXCAVATION LOG

HOLE NO.: DPIR-TP04

PROJECT : Rum Jungle

LOCATION : Clay Borrow Area

FILE / JOB NO.: 680.10421

DATE STARTED : 14/05/19

POSITION : E: 715303, N: 8557887 (52 AMG84)

SURFACE ELEVATION : 70.88m (AHD)

LOGGED BY : GF

DATE COMPLETED : 14/05/19

RIG TYPE : 30t Excavator with 800mm toothed bucket

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 14/05/19

OPERATOR : Unknown

STABILITY : Stable

DRILLING												MATERIAL				OBSERVATION	
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations				
														5	10	15	20
Excavator 800mm toothed bucket	Groundwater Not Encountered	1.00m (D)		70	1		SM	SM - silty SAND trace organic matter (root fibres less than 2mm diameter), fine to medium grained, brown.	M			Topsoil					
							SC	SC - clayey SAND, medium plasticity, medium to coarse grained, orange brown.									
		2.80m (D)		69	2		CH	CH - silty CLAY trace sand & gravel, high plasticity, orange brown with grey and yellow mottle; silt, high plasticity; sand, medium to coarse grained, gravel, fine grained, rounded.				Saprolite					
							68	3						CH			
		4.30m (D)		67	4		SC	SC - clayey SAND, medium plasticity, fine to medium grained, grey with light brown mottle.	M								
							66								EOH: 5.00m - Machine Limit		



TEST PIT EXCAVATION LOG

PROJECT : Rum Jungle

LOCATION : Clay Borrow Area

HOLE NO.: DPIP-TP05

FILE / JOB NO.: 680.10421

DATE STARTED : 14/05/19

POSITION : E: 715016, N: 8557894 (52 AMG84)

SURFACE ELEVATION : 70.05m (AHD)

LOGGED BY : GF

DATE COMPLETED : 14/05/19

RIG TYPE : 30t Excavation with 800mm toothed

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 14/05/19

OPERATOR : Unknown

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION							
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS			ORIGIN	STRUCTURE & Other Observations			
Excavator 800mm toothed bucket		Groundwater Not Encountered	0.80m (D)	70			SC	SP - SAND with silt trace organic matter (root fibres less than 2mm diameter), fine to medium grained, brown	D		5	10	15	20	Topsoil			
				69	1		SM	SM - silty gravelly SAND with clay trace organic matter (roots greater than 2mm diameter), fine to medium grained, red brown; silt, medium plasticity, gravel, fine to medium grained, sub-rounded to sub-angular.	M									Laterite
			3.00m (D)	68	2		CI	CI - CLAY trace sand, medium plasticity, brown with mottled orange white; sand, coarse grained.							Saprolite			
			67	3														
				66	4		CI	CI - CLAY with sand, high plasticity, brown with orange white mottling; sand, fine to coarse grained.										
EOH: 5.00m - Machine Limit																		



TEST PIT EXCAVATION LOG

PROJECT : Rum Jungle

LOCATION : Clay Borrow

HOLE NO.: DPIP-TP06

FILE / JOB NO.: 680.10421

DATE STARTED : 15/05/19

POSITION : E: 714834, N: 8557643 (52 AMG84)

SURFACE ELEVATION : 66m (AHD)

LOGGED BY : GF

DATE COMPLETED : 15/05/19

RIG TYPE : 30T Excavator with 800mm toothed

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : BT

DATE LOGGED : 15/05/19

OPERATOR : Unknown

STABILITY : Stable

DRILLING						MATERIAL						OBSERVATION	
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 800mm toothed bucket			0.80m (D)	65	1		SM	SM - silty SAND with organic matter (root fibres less than 2mm diameter), fine to medium grained, brown.	D		5 10 15 20	Topsoil	
					2		CI	CI - sandy CLAY, medium plasticity, dark red; sand, fine to coarse grained.					
					3								
					4	SC	SC - clayey silty SAND trace gravel, medium to coarse grained, orange brown with white mottle; clay, high plasticity, silt, high plasticity; gravel, fine to medium grained, rounded.						
			3.80m (D)	62	4			Bedrock				Saprolite	
								EOH: 5.00m - Machine Limit				Bedrock	

SLR TEST PIT LOGS

BORROW AREA A

SLR **JULY 2019** INVESTIGATION



TEST PIT EXCAVATION LOG

PROJECT : Rum Jungle

LOCATION : Clay and Growth Borrow

HOLE NO.: NTP-01

FILE / JOB NO.: 680.10421

DATE STARTED : 10/07/19

POSITION : E: 714703, N: 8557926 (52 AMG84)

SURFACE ELEVATION : 75m (AHD)

LOGGED BY : BT

DATE COMPLETED : 10/12/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 10/07/19

OPERATOR : C.McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION		
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm toothed bucket	<div>Penetration Scale</div> <div>0.00m (ES)</div> <div>0.01m (ES)</div> <div>0.40m (B)</div> <div>0.50m (LB)</div> <div>0.60m (ES)</div> <div>2.50m (B)</div> <div>4.00m (ES)</div> <div>4.00m (B)</div> <div>4.90m (LB)</div> <div>5.20m (B)</div> <div>5.30m (LB)</div>	<div>Water Level</div> <div>Groundwater Not Encountered</div>		74	1	<div>SC</div>	SC	SC - clayey SAND trace organic matter (root fibres less than 2mm diameter) & gravel, dark red brown and grey; clay, medium plasticity; gravel, fine to medium grained.	D	D - VD	5	Topsoil	2.7m: PP > 600 kPa
							CH	CH - CLAY with silt & sand, high plasticity, red brown; sand, fine to medium grained.	<<PL	H	10	Laterite	
							CI-CH	CI-CH - silty CLAY with sand, medium to high plasticity, dark red brown; silt, medium to high plasticity; sand, fine to medium grained.	=PL		15	Saprolite	
							MH	MH - clayey SILT with sand, high plasticity, yellow brown and orange brown; clay, high plasticity; sand, fine to medium grained.	<PL to =PL		20		
							EOH: 5.40m - Machine Limit		=PL				



NTP-01 Looking East



NTP-01 Looking South



NTP-01 Backfilled Looking South West



NTP-01 Eastern Pit Wall



Spoil Pile 0.00m to 1.50m



Spoil Pile 1.50m to 3.00m



Spoil Pile 3.00m to 4.50m



Spoil Pile 4.50m to 5.40m

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Title:	SLR-NTP-01 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	0.1
Status:	Preliminary Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: NTP-02

PROJECT : Rum Jungle

LOCATION : Clay and Growth Borrow

FILE / JOB NO.: 680.10421

DATE STARTED : 10/07/19

POSITION : E: 714765, N: 8557770 (52 AMG84)

SURFACE ELEVATION : 66.94m (AHD)

LOGGED BY : BT

DATE COMPLETED : 10/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 10/07/19

OPERATOR : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL								OBSERVATION	
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.80m (B)	66	1		SC	SC - clayey SAND, medium plasticity, fine to medium grained, dark red brown.	D	VD		Topsoil	
					65	2		CH	CH - sandy CLAY with silt, high plasticity, red brown; sand, fine to medium grained.	<<PL			
64	3				<PL								
63	4		MH	MH clayey SILT with sand trace gravel, high plasticity, yellow brown with green grey and grey mottling; sand, fine to medium grained; gravel, fine to medium grained, sub-angular to angular; friable.	=PL to <PL								
	4.3m - 4.9m: becoming yellow brown with dark grey inclusion, occasional highly weathered cobbles												
62	5			MIXTURE OF SOIL AND COBBLES/BOULDERS (MATRIX SUPPORTED) - MH - clayey sandy SILT, high plasticity, yellow brown and green grey; clay, high plasticity, sand, fine to medium grained; cobbles/boulders, rounded to sub-rounded, up to 200mm.	<PL								
				EOH: 5.40m - Machine Limit									



NTP-02 Looking North East



NTP-02 Looking West



NTP-02 Backfilled Looking Northern



NTP-02 Northern Pit Wall



Spoil Pile 0.00m to 1.20m



Spoil Pile 1.20m to 2.50m



Spoil Pile 2.50m to 4.00m



Spoil Pile 4.00m to 5.40m

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Title:	SLR-NTP-02 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	0.1
Status:	Preliminary Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

PROJECT : Rum Jungle

LOCATION : Clay and Growth Borrow

HOLE NO.: NTP-05

FILE / JOB NO.: 680.10421

DATE STARTED : 10/07/19

POSITION : E: 715919, N: 8557889 (52 AMG84) SURFACE ELEVATION : 79.35m (AHD)

LOGGED BY : BT

DATE COMPLETED : 10/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 10/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING					MATERIAL					OBSERVATION					
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations		
Excavator 600mm Toothed Bucket Groundwater Not Encountered			0.00m (ES)				SM	SM silty SAND trace organic matter (root fibres less than 2mm diameter) & gravel, fine to medium grained, dark grey; gravel, fine to medium grained, rounded.	D	MD	5	Topsoil	1.1m - 1.5m: PP @ 1.10m: 400kPa to >600 kPa		
			0.30m (ES)	79			CI	CI - sandy CLAY, medium plasticity, orange brown; sand, fine and medium grained.	<PL	VSt	10				
			0.90m (B)	1			1.0m - 1.5m: Occasional cobbles; <90mm, extremely weathered, extremely low strength dolostone.	St		15					
			1.50m (ES)	78				VSt		20					
			1.50m (B)					H							
								GC	GC clayey GRAVEL with sand, medium plasticity, poorly graded, fine to medium grained, sub-rounded to sub-angular, orange brown; sand, fine to coarse grained.	VD					Laterite
				2			1.8m - 2.2m: Gravel becoming fine to coarse size.								
							MIXTURE OF SOIL AND COBBLES/BOULDERS (MATRIX SUPPORTED) GC clayey GRAVEL with sand, medium plasticity, well graded, fine to coarse grained, sub-rounded to sub-angular, orange brown; sand, fine to coarse grained.								
				3			2.5m - 3.2m: Cobble size increasing to 200mm.								
			3.40m (ES)	76			CI - CH	CI-CH sandy CLAY, medium to high plasticity, greenish grey and dark yellow brown; sand, fine to medium grained.	<<PL	H			Saprolite	4.2m - 5.0m: Moisture within fissures.	
		3.50m (B)													
		4.20m (B)	75			CH	CH CLAY with sand, high plasticity, dark blue and dark grey; sand, fine to medium grained; highly fissured and friable.								Saprolite
			4.20m (ES)					EOH: 5.00m - Machine Limit							



NTP-05 Looking South West



NTP-05 Looking North



NTP-05 Backfilled Looking North East



NTP-05 Eastern Pit Wall



Spoil Pile 0.00m to 1.50m



Spoil Pile 1.50m to 2.50m



Spoil Pile 2.50m to 3.50m



Spoil Pile 3.50m to 5.00m

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Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	0.1
Status:	Preliminary Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

PROJECT : Rum Jungle

LOCATION : Clay and Growth Borrow

HOLE NO.: NTP-06

FILE / JOB NO.: 680.10421

DATE STARTED : 09/07/19

POSITION : E: 716215, N: 8557813 (52 AMG84)

SURFACE ELEVATION : 83.37m (AHD)

LOGGED BY : BT

DATE COMPLETED : 09/07/19

RIG TYPE : 20t Excavator



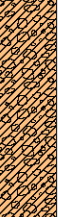
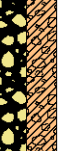
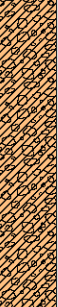



ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 09/07/19

OPERATOR : C. McGregor

STABILITY : Stable

DRILLING					MATERIAL					OBSERVATION			
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket	<div></div>	Groundwater Not Encountered	<div>0.30m (D)</div> <div>0.90m (D)</div> <div>1.80m (B)</div> <div>3.40m (D)</div> <div>4.20m (D)</div>	<div>83</div> <div>82</div> <div>81</div> <div>80</div> <div>79</div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	GC	GC clayey GRAVEL, low plasticity, poorly graded, fine to medium grained, sub-rounded to sub-angular, dark red brown.	D	D 				



NTP-06 Looking East



NTP-06 Looking South



NTP-06 Backfilled Looking South West



NTP-06 Eastern Pit Wall



Spoil Pile 0.00m to 1.50m



Spoil Pile 2.00m to 3.00m



Spoil Pile 3.00m to 4.00m



Spoil Pile 4.00m to 4.50m

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Title:	SLR-NTP-06 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	0.1
Status:	Preliminary Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

PROJECT : Rum Jungle

LOCATION : Clay and Growth Borrow

HOLE NO.: NTP-07

FILE / JOB NO.: 680.10421

DATE STARTED : 09/07/19

POSITION : E: 716096, N: 8557629 (52 AMG84)

SURFACE ELEVATION : 77.93m (AHD)

LOGGED BY : BT

DATE COMPLETED : 09/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 09/07/19

OPERATOR : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION		
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.10m (ES)	77	1		SM	SM - silty SAND, fine to medium grained, dark grey and grey.	D	D		Topsoil	
			GW				GW - clayey sandy GRAVEL, medium plasticity, well graded, fine to medium grained, yellow brown; clay, fine to coarse grained.	D to M	D - VD				
			GC				GC - clayey GRAVEL with sand, medium plasticity, gap graded, fine to medium grained, yellow brown; sand, fine to coarse grained.		VD				
			CI				CI - gravelly CLAY, medium plasticity, yellow brown and orange brown; gravel, fine to medium grained, rounded to sub-rounded.						
			SC				SC - clayey silty SAND with gravel, fine to medium grained, yellow brown and red brown; clay, low plasticity, silt, low plasticity; gravel, fine to medium grained.	=PL to <PL	H				
			1.7m - 2.0m: Sand becoming fine to coarse grained.										
			2.2m - 2.4m: 2mm to 10mm diameter solution voids throughout soil matrix.										
			2.4m - 3.4m: Becoming dark red brown with dark yellow brown and grey mottle.										
			MH - clayey SILT, high plasticity, grey and blue; clay, high plasticity.										
			EOH: 4.40m - Machine Limit										
			2.80m (ES)	75	3						Laterite		
		2.90m (B)											
			3.70m (B)	74	4		MH					Saprolite	
		3.80m (ES)											
				73									



NTP-07 Looking South



NTP-07 Looking South East



NTP-07 Backfilled Looking North



NTP-07 Eastern Pit Wall



Spoil Pile 0.00m to 1.00m



Spoil Pile 1.00m to 2.00m



Spoil Pile 2.00m to 3.00m



Spoil Pile 3.00m to 4.40m

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Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	0.1
Status:	Preliminary Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

PROJECT : Rum Jungle

LOCATION : Clay and Growth Borrow

HOLE NO.: NTP-08

FILE / JOB NO.: 680.10421

DATE STARTED : 10/07/19

POSITION : E: 715944, N: 8557719 (52 AMG84) SURFACE ELEVATION : 76.39m (AHD)

LOGGED BY : BT

DATE COMPLETED : 10/07/19

RIG TYPE : 20t Excavator

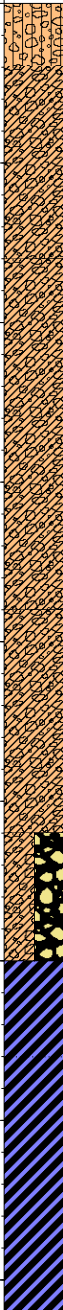

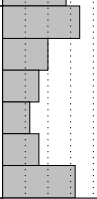

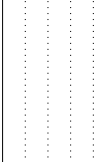
ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 10/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING					MATERIAL					OBSERVATION			
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator	600mm Toothed Bucket	Groundwater Not Encountered	0.40m (B)	76	1		GM	GM - silty sandy GRAVEL, well graded, fine to medium grained, greg and brown; silt, fine to coarse grained.	D	MD		Topsoil	
							GC	GC - clayey GRAVEL with sand, medium plasticity, fine to medium grained, orange brown and red brown; sand, fine to coarse grained.	D - M	MD - D			
								GC clayey GRAVEL trace silt, medium plasticity, fine to coarse grained, sub-rounded to sub-angular, dark red brown; Cobbles; <100mm, sub-rounded to sub-angular, extremely weathered, extremely low strength, sandstone	M	D			
								GC clayey sandy GRAVEL, medium plasticity, fine to coarse grained, sub-rounded to sub-angular, orange brown; sand, fine to coarse grained.					
							MIXTURE OF SOIL AND COBBLES/BOULDERS (MATRIX SUPPORTED) GC clayey GRAVEL, medium plasticity, well graded, fine to coarse grained, purple and red brown; Cobbles; <200mm, sub-rounded to sub-angular, sandstone.						
CH	CH silty CLAY trace sand, high plasticity, greeny grey, grey and pale grey; sand, fine to medium grained.	<PL	H		Saprolite								
	3.3m - 4.1m: Soil becoming light grey and blue. Rock structure evident. White quartz crystallization throughout. Tending to extremely low strength, extremely weathered dolostone.												
					4		EOH: 4.10m - Refusal						
				72									



NTP-08 Looking East



NTP-08 Looking South



NTP-08 Backfilled Looking South West



NTP-08 Eastern Pit Wall



Spoil Pile 0.00m to 1.00m



Spoil Pile 1.00m to 2.00m



Spoil Pile 2.00m to 3.00m



Spoil Pile 3.00m to 4.10m

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Title:	SLR-NTP-08 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	0.1
Status:	Preliminary Design	Datum:	None
Date:	09/07/2019		



SLR TEST PIT LOGS

BORROW AREA B

SLR **JULY 2019** INVESTIGATION

HOLE NO.: STP-01

FILE / JOB NO.: 680.10421

PROJECT : Rum Jungle Rehabilitation

LOCATION : Granular & Growth Borrow

DATE STARTED : 12/07/19

POSITION : E: 717521, N: 8561240 (52 AMG84) SURFACE ELEVATION : 80.82m (AHD)

LOGGED BY : BT

DATE COMPLETED : 12/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 12/07/19

DRILLER : C. McGregor

STABILITY : Stable

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Rum Jungle



5 Foelsche Street, Darwin,
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STP-01 Looking East



STP-01 Looking North



STP-01 Backfilled Looking South West



STP-01 Eastern Pit Wall



Spoil Pile 0.00m to 1.00m



Spoil Pile 1.00m to 2.00m



Spoil Pile 2.00m to 3.00m



Spoil Pile 3.00m to 4.30m

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Title:	SLR-STP-01 Photo Log	Drawn:	BT		
Client:	DPIR	Reviewed:	CDM		
Project:	Rum Jungle Rehabilitation	Size:	A3	Version:	1.0
Project No.:	680.10421	Datum:	None		
Status:	Design				
Date:	09/07/2019				



HOLE NO.: STP-02

PROJECT : Rum Jungle Rehabilitation

LOCATION : Granular & Growth Borrow

FILE / JOB NO.: 680.10421

DATE STARTED : 12/07/19

POSITION : E: 717776. N: 8561484 (52 AMG84) SURFACE ELEVATION : 79.9m (AHD)

LOGGED BY : BT

DATE COMPLETED : 12/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 12/07/19

DRILLER : C. McGregor

STABILITY : Stable

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STP-02 Looking South



STP-02 Looking East



STP-02 Backfilled Looking West



STP-02 Northern Pit Wall



Spoil Pile 0.00m to 0.75m



Spoil Pile 0.75m to 1.50m



Spoil Pile 1.50m to 2.00m

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Title:	SLR-STP-02 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: STP-03

PROJECT : Rum Jungle Rehabilitation

LOCATION : Granular & Growth Borrow

FILE / JOB NO.: 680.10421

DATE STARTED : 12/07/19

POSITION : E: 718060, N: 8561756 (52 AMG84) SURFACE ELEVATION : 76.28m (AHD)

LOGGED BY : BT

DATE COMPLETED : 12/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 12/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL								OBSERVATION		
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations	
Excavator 600mm Toothed Bucket			0.00m (ES)	76		SW	SW - gravelly SAND, well graded, fine to coarse grained, grey and dark grey; gravel, fine to medium grained, sub-rounded to sub-angular.	D				Topsoil		
			0.01m (ES)											
			0.20m (B)			GW	GW - sandy GRAVEL, well graded, fine to medium grained, rounded to sub-angular, yellow brown; sand, fine to coarse grained.							
			0.40m (ES)											
			0.90m (ES)											
			1.00m (B)											
			1.8m - 2.2m: Becoming pale grey and yellow brown, structure evident, trending towards extremely weathered, extremely low strength granite. Gravel throughout, fine to medium grain, angular to sub-angular.											
			2.2m - 3.3m: Increase in clay content. Recovered as pale red brown, yellow brown and pale gray.											
			EOH: 3.30m - Refusal											
					</									



STP-03 Looking South West



STP-03 Looking North East



STP-03 Backfilled Looking North East



STP-03 Western Pit Wall



Spoil Pile 0.00m to 0.80m



Spoil Pile 0.80m to 1.60m



Spoil Pile 1.60m to 2.40m



Spoil Pile 2.40m to 3.30m

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Title:	SLR-STP-03 Photo Log	Drawn:	BT
Client:	DPIR	Reviewed:	CDM
Project:	Rum Jungle Rehabilitation	Size:	A3
Project No.:	680.10421	Version:	1.0
Status:	Design	Datum:	None
Date:	09/07/2019		





TEST PIT EXCAVATION LOG

HOLE NO.: STP-04

PROJECT : Rum Jungle Rehabilitation

LOCATION : Granular & Growth Borrow

FILE / JOB NO.: 680.10421

DATE STARTED : 11/07/19

POSITION : E: 717935, N: 8560353 (52 AMG84) SURFACE ELEVATION : 88m (AHD)

LOGGED BY : BT

DATE COMPLETED : 11/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 11/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING				MATERIAL							OBSERVATION		
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
<div>Excavator</div> <div>600mm Toothed Bucket</div>	<div>VE</div> <div>DEPTH</div>	Groundwater Not Encountered	0.30m (B)	87	1	<div></div>	SP	SP - SAND with silt, poorly graded, fine to coarse grained, grey and pale grey.	D	<div></div>	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> 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Rum Jungle



5 Foelsche Street, Darwin, NT 0800



STP-04 Looking North East



STP-04 Looking South East



STP-04 Backfilled Looking South West



STP-04 Eastern Pit Wall



Spoil Pile 0.00m to 0.50m



Spoil Pile 0.50m to 1.00m

File Location: \\U:\SLR\Local\Corporate\Projects\SLR\



TEST PIT EXCAVATION LOG

HOLE NO.: STP-05
PROJECT : Rum Jungle Rehabilitation

LOCATION : Granular & Growth Borrow

FILE / JOB NO.: 680.10421

DATE STARTED : 11/07/19

POSITION : E: 718642, N: 8561314 (52 AMG84)

SURFACE ELEVATION : 76.93m (AHD)

LOGGED BY : BT

DATE COMPLETED : 11/07/19

RIG TYPE : 20t Excavator

ANGLE FROM HORIZONTAL : 90°

CHECKED BY : FC

DATE LOGGED : 11/07/19

DRILLER : C. McGregor

STABILITY : Stable

DRILLING					MATERIAL					OBSERVATION			
METHOD & BUCKET TYPE	PENETRATION	WATER	SAMPLES TESTS REMARKS	RL (m)	DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	MATERIAL DESCRIPTION SOIL/ROCK TYPE; colour, grain characteristics, structure, minor components	MOISTURE CONDITION	CONSISTENCY / RELATIVE DENSITY	DCP RESULTS	ORIGIN	STRUCTURE & Other Observations
Excavator 600mm Toothed Bucket		Groundwater Not Encountered	0.00m (ES)	76	1		SM	SM - silty gravelly SAND, fine to medium grained, dark grey; gravel, fine to medium grained, sub-rounded to sub-angular.	D		5	Topsoil	2.0m: Spoil recovered as gravelly cobbles
			0.01m (ES)								10	Alluvium	
			0.50m (ES)								15	Residual Soil	
			0.60m (B)								20		
			1.80m (B)									Extremely Weathered Bedrock	
				75	2		GW	GRANITE recovered as GW - sandy GRAVEL, fine to coarse grained, well graded, pale green grey and pale grey; sand, fine to coarse grained, quartz; tending towards an extremely weathered, extremely low strength granite.	D - M			Bedrock	
								GRANITE, fine to coarse grained, pale green grey and pale grey, Extremely Low Strength, Extremely Weathered.					
								EOH: 2.30m - Refusal					
				74	3								
				73	4								
				72									



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NT 0800