

BOREHOLE LOG	PROJECT: 97-557 TARO	BOREHOLE: 69-III	2 of 2
HYDROGEOLOGICAL INVESTIGATIONS Stoney Creek, Ontario FOR: TARO AGGREGATES LTD.		DATE: 10 December 1997 GEOLOGIST: PW ELEVATION: 206.97 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						N VALUE				WATER CONTENT (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	15	30	45	60	10	20	30	40
16		Increasingly shaly below about 14.9 m. Thin calcite seams (less than 0.08 m thick) at about 15.8 m, 16.9 m and 17.0 m.																
17		Fossiliferous layer at about 17.1 m.																
18.3																		
19.2		<u>VINEMOUNT SHALE</u> Grey thin bedded, aphanitic shale, occasionally interbedded with dolostone, occasional fossil-rich layers.																
20.0		Grey dolostone bed from about 19.2 m to 20.0 m.																
21																		
22																		
23																		
23.6																		
24		<u>GOAT ISLAND DOLOSTONE</u> Grey fine crystalline, thick bedded dolostone, occasional shaley stringers.																
24.5		0.02 m thick gypsum seam at about 24.1 m. Borehole terminated at 24.46 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole 69-I. Borehole logged to confirm contacts and for monitor placement.																

BOREHOLE LOG	PROJECT: 97-557 TARO	BOREHOLE: 69-IV 1 of 2
HYDROGEOLOGICAL INVESTIGATIONS Stoney Creek, Ontario FOR: TARO AGGREGATES LTD.	DATE: 11 December 1997 GEOLOGIST PW ELEVATION 206.91 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					N VALUE				WATER CONTENT (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD									
											15	30	45	60	10	20	30	40	
0.8		<u>TOPSOIL</u> Dark brown clayey silt topsoil with gravel and rootlets, very soft, moist.																	
1		<u>CLAYEY SILT</u> Brown mottled grey clayey silt with trace sand and rare gravel, very soft to soft, DTPL.																	
2		Fractured below about 2 m. Occasional limonite (yellow), iron (rust) and manganese (black) staining along fracture surfaces.																	
3		Occasional thinly laminated sections below about 3 m.																	
4		Becoming dark grey below about 3.9 m. Rare fine gravel, no fractures, WTPL.																	
5		Speckled dark red throughout sample below about 4.5 m.																	
6.2		Becoming APL below about 6.1 m. Some medium gravel.																	
7		<u>ERAMOSA DOLOSTONE</u> Brownish-grey fine crystalline, thin to medium bedded dolostone, slightly weathered to about 12.0 m, occasional shale stringers and vugs, rare fossils.																	
8																			
9		Becoming brownish-grey to grey below about 9 m. Occasional shale interbeds, some vuggy sections with calcite infilling.																	
10																			
11																			
12																			
13																			
14		Gypsum seam at 13.4 m.																	

BOREHOLE LOG	PROJECT: 97-557 TARO	BOREHOLE: 69-IV 2 of 2
HYDROGEOLOGICAL INVESTIGATIONS Stoney Creek, Ontario FOR: TARO AGGREGATES LTD.	DATE: 11 December 1997 GEOLOGIST: PW ELEVATION: 206.91 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					N VALUE				WATER CONTENT (%)				
				NUMBER	INTERVAL TYPE	N VALUE	% WATER	% REC	% RQD	15	30	45	60	10	20	30	40
16		Increasingly shaley below about 14.9 m. Thin calcite seams (less than 0.08 m thick) at about 15.8 m, 16.9 m and 17.0 m.															
17		Fossiliferous layer at about 17.1 m.															
18.3		<u>VINEMOUNT SHALE</u>															
19.2		Grey thin bedded, aphanitic shale, occasionally interbedded with dolostone, occasional fossil-rich layers.															
20.0		Grey dolostone bed from about 19.2 m to 20.0 m.															
20.4		Borehole terminated at 20.42 m in shale. NOTE: Stratigraphy inferred from adjacent borehole 69-I. Borehole logged to confirm contacts and for monitor placement.															

BOREHOLE LOG	PROJECT: 97-557 TARO	BOREHOLE: 69-V 1 of 1
HYDROGEOLOGICAL INVESTIGATIONS Stoney Creek, Ontario FOR: TARO AGGREGATES LTD.	DATE: 15 December 1997 GEOLOGIST: PW ELEVATION: 206.98 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				N VALUE				WATER CONTENT (%)								
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											15	30	45	60	10	20	30	40		
0.8		<u>TOPSOIL</u> Dark brown clayey silt topsoil with gravel and rootlets, very soft, moist.																		
1		<u>CLAYEY SILT</u> Brown mottled grey clayey silt with trace sand and rare gravel, very soft to soft, DTPL.																		
2		Fractured below about 2 m. Occasional limonite (yellow), iron (rust) and manganese (black) staining along fracture surfaces.																		
3		Occasional thinly laminated sections below about 3 m.																		
4		Becoming dark grey below about 3.9 m. Rare fine gravel, no fractures, WTPL. Speckled dark red throughout sample below about 4.5 m.																		
5																				
6.2		Becoming APL below about 6.1 m. Some medium gravel.																		
7		<u>ERAMOSIA DOLOSTONE</u> Brownish-grey fine crystalline, thin to medium bedded dolostone, slightly weathered to about 12.0 m, occasional shale stringers and vugs, rare fossils.																		
8.4		Borehole terminated at 8.38 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole 69-I. Borehole logged to confirm contacts and for monitor placement.																		

BOREHOLE LOG	PROJECT: 97-557 TARO	BOREHOLE: 69-VI 1 of 1
HYDROGEOLOGICAL INVESTIGATIONS Stoney Creek, Ontario FOR: TARO AGGREGATES LTD.	DATE: 16 December 1997 GEOLOGIST PW ELEVATION 206.98 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						N VALUE				WATER CONTENT (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	15	30	45	60	10	20	30	40
0.8		<u>TOPSOIL</u> Dark brown clayey silt topsoil with gravel and rootlets, very soft, moist.																
1		<u>CLAYEY SILT</u> Brown mottled grey clayey silt with trace sand and rare gravel, very soft to soft, DTPL.																
2		Fractured below about 2 m. Occasional limonite (yellow), iron (rust) and manganese (black) staining along fracture surfaces.																
3		Occasional thinly laminated sections below about 3 m.																
4		Becoming dark grey below about 3.9 m. Rare fine gravel, no fractures, WTPL.																
5		Speckled dark red throughout sample below about 4.5 m.																
6.0		Borehole terminated at 5.99 m in clayey silt. NOTE: Borehole stratigraphy inferred from adjacent borehole 69-I.																

BOREHOLE LOG	PROJECT: 97-557 TARO	BOREHOLE: 69-VI 1 of 1
HYDROGEOLOGICAL INVESTIGATIONS Stoney Creek, Ontario FOR: TARO AGGREGATES LTD.		DATE: 16 December 1997 GEOLOGIST: PW ELEVATION: 206.98 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				N VALUE				WATER CONTENT (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	15	30	45	60	10	20	30	40
0.8		<u>TOPSOIL</u> Dark brown clayey silt topsoil with gravel and rootlets, very soft, moist.																
1		<u>CLAYEY SILT</u> Brown mottled grey clayey silt with trace sand and rare gravel, very soft to soft, DTPL.																
2		Fractured below about 2 m. Occasional limonite (yellow), iron (rust) and manganese (black) staining along fracture surfaces.																
3		Occasional thinly laminated sections below about 3 m.																
4		Becoming dark grey below about 3.9 m. Rare fine gravel, no fractures, WTPL.																
5		Speckled dark red throughout sample below about 4.5 m.																
6.0		Borehole terminated at 5.99 m in clayey silt. NOTE: Borehole stratigraphy inferred from adjacent borehole 69-I.																

BOREHOLE LOG	PROJECT: 99-651.2	BOREHOLE: 70-I	1 of 1
Taro East and West Landfills Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 14 July 1999 GEOLOGIST LM/TLC ELEVATION 192.7 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
0.2		FILL		1		HQ				100										
		VINEMOUNT SHALE Dark grey, aphenitic to fine crystalline, thin to medium bedded shale. Occasional dolostone beds with bioturbation associated with lower contacts.		2		HQ				100	66									
1				3		HQ				100	81									
2		Dolostone bed observed from about 0.2 to 1.3 m -Interlaminated to interbedded shale and dolostone from about 1.4 to 3.0 m.		4		HQ				100	95									
3				5		HQ				100	100									
4.4		GOAT ISLAND SHALE Medium to dark grey, fine crystalline, medium to thick bedded dolostone, numerous shale stringers and gypsum infilling.		6		HQ				100	82									
5		-Seam and large vug infilled with gypsum, some weathering noted, at 5.5 m.		7		HQ				100										
5.9		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone and siltstone, bioturbation at upper contact.																		
6.7																				
7																				
8																				
8.9		Borehole terminated at 8.94 m in dolostone.																		

BOREHOLE LOG	PROJECT: 99-651.2	BOREHOLE: 70-II	1 of 1
Taro East and West Landfills Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 14 July 1999 GEOLOGIST: LM ELEVATION: 192.8 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY				RQD							
				INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	%				%							
										25	50	75	100	25	50	75	100				
0.2		FILL																			
1		VINEMOUNT SHALE Dark grey, aphenitic to fine crystalline, thin to medium bedded shale. Occasional dolostone beds with bioturbation associated with lower contacts.																			
2		Dolostone bed observed from about 0.2 to 1.3 m -Interlaminated to interbedded shale and dolostone from about 1.4 to 3.0 m.																			
3																					
4																					
4.4		GOAT ISLAND SHALE																			
5		Medium to dark grey, fine crystalline, medium to thick bedded dolostone, numerous shale stringers and gypsum infilling. -Seam and large vug infilled with gypsum, some weathering noted, at 5.5 m.																			
5.9		Borehole terminated at 5.97 m in dolostone.																			
6.0		Stratigraphy inferred from adjacent borehole 70-1.																			

Jackman Geoscience Inc.

96 Newcombe Road. Dundas ON

Monitor Completion Date: October 10, 2008

Drilling method - Mud Rotary

Borehole Log Report

Project: Newalta Corporation

Location: Newalta Hamilton (Stoney Creek) Landfills

Log of Monitor - 70-IIR

Drilling Contractor - Lantech Drilling Services Inc.

Depth [m]	Depth [ft]	Monitor details	Geologic Unit	Unit Description
0.0	0	0		
0.5	2	2	VFZ	Dolostone Bed: Interlaminated to interbedded shale and dolostone
1.0	4	4		
1.5	6	6		
2.0	8	8	vinemount shale	Vinemount Shale: aphanitic to fine crystalline, thin to medium bedded shale. Occasional dolostone beds with bioturbation associated with lower contacts.
2.5	10	10		
3.0	12	12		
3.5	14	14	goat island dolostone	Goat Island Dolostone: Medium to dark grey, fine crystalline, medium to thick bedded dolostone, numerous shale stringers and gypsum infilling.
4.0	16	16		
4.5	18	18	UFZ	Goat Island Dolostone: Seam and large vug infilled with gypsum, weathered
5.0			goat island 2	Goat Island Dolostone: Medium to dark grey, fine crystalline, medium to thick bedded dolostone, numerous shale stringers and gypsum infilling.
5.5			shale	Shale: Dark brownish grey, medium bedded shale, interlaminated with dolostone and siltstone, bioturbation at upper contact.
6.0				

Ground Surface Elevation - N/A

Top of Casing/Measuring Point - 193.99

Prepared by W. Jackman, P.Geo.

Borehole Diameter - 10.16 cm

Casing Diameter - 5.08 cm

Screen Slot Size - N/A

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 71-I	1 of 2
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 10 September 2001	GEOLOGIST YS ELEVATION 189.1 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
0.5		TOPSOIL Dark brown silt with some clay and rootlets, trace fine sand, moist																	
1		CLAYEY SILT Greyish brown clayey silt, trace very fine sand, APL, very stiff																	
2				1	SS	21			100										
3		-Becoming brownish grey below about 3.1 m		2	SS	22			100										
4				3	SS	23			100										
5		-Becoming WTPL, thin seams of silt/fine sand occur below about 4.5 m.		4	HQ				90	77									
5.5		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone, some shale stringers, occasional fossils, occasional calcite filled nodules.		5	HQ				100	98									
6		-Fractured zone between about 5.8 and 6.2 m		6	HQ				100	74									
7		-Some chert nodules occur below about 7.7 m		7	HQ				100	98									
8		-Clay infilling found in fracture at about 9.0 m		8	HQ				100	90									
9.4		ANCASTER CHERT BEDS Light brownish grey fine crystalline, thick bedded siliceous dolostone, numerous chert nodules.																	
10		-Fractured with clay infilling along shale stringers between about 9.5 and 9.6 m																	
11		-Gypsum stringers/nodules encountered below about 10.2 m																	
12		-Fractured zone between about 11.0 and 12.2 m																	

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 71-I 2 of 2
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.	DATE: 10 September 2001 GEOLOGIST YS ELEVATION 189.1 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
12.6		Borehole terminated at 12.60 m in siliceous dolostone.																	

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 71-II 1 of 1
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 11 September 2001 GEOLOGIST YS ELEVATION 189.1 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.5		TOPSOIL Dark brown silt with some clay and rootlets, trace fine sand, moist																
1		CLAYEY SILT Greyish brown clayey silt, trace very fine sand, APL, very stiff																
2																		
3		-Becoming brownish grey below about 3.1 m																
4																		
5		-Becoming WTPL, thin seams of silt/fine sand occur below about 4.5 m.																
5.5		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone, some shale stringers, occasional fossils, occasional calcite filled nodules.																
6		-Fractured zone between about 5.8 and 6.2 m																
7																		
8		-Some chert nodules occur below about 7.7 m																
9																		
9.4		-Clay infilling found in fracture at about 9.0 m																
9.8		ANCASTER CHERT BEDS Light brownish grey fine crystalline, thick bedded siliceous dolostone, numerous chert nodules. -Fractured with clay infilling along shale stringers between about 9.5 and 9.6 m Borehole terminated at 9.83 m in siliceous dolostone Stratigraphy inferred from adjacent borehole 71-I																

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 71-III 1 of 1
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 11 September 2001 GEOLOGIST YS ELEVATION 189.1 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.5		<u>TOPSOIL</u> Dark brown silt with some clay and rootlets, trace fine sand, moist																
1		<u>CLAYEY SILT</u> Greyish brown clayey silt, trace very fine sand, APL, very stiff																
2																		
3		-Becoming brownish grey below about 3.1 m																
4																		
5		-Becoming WTPL, thin seams of silt/fine sand occur below about 4.5 m.																
5.5		<u>GOAT ISLAND DOLOSTONE</u> Medium grey, fine crystalline, medium bedded dolostone, some shale stringers, occasional fossils, occasional calcite filled nodules.																
6		-Fractured zone between about 5.8 and 6.2 m																
7.0		Borehole terminated at 6.96 m in dolostone. Stratigraphy inferred from adjacent borehole 71-1																

Jackman Geoscience Inc.

96 Newcombe Road. Dundas ON

Monitor Completion Date: October 10, 2008

Drilling method - Mud Rotary



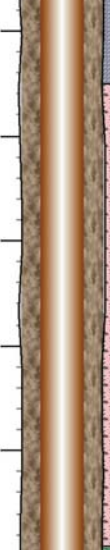


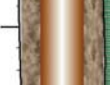



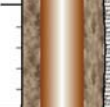

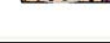
Borehole Log Report

Project: Newalta Corporation

Location: Newalta Hamilton (Stoney Creek) Landfills

Log of Monitor - 72-I

Drilling Contractor - Lantech Drilling Services Inc.

Depth [m]	Depth [ft]	Monitor details	Geologic Unit	Unit Description
0	0		clayey silt	Brown clayey silt, trace sand, fractures with oxidation, APL, stiff
10	10		clayey silt till	Brown to grey brown clayey silt, occasional fine gravel, trace fine sand, fractured with orange and black oxidation, APL, very stiff to hard
20	20		Eramosa Dolostone	Brownish grey, fine crystalline, thin to medium bedded dolostone, occasional shale stringers, locally porous, minor occurrence of small vugs
60	60		vinemount shale	Vinemount Shale: Brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale.
65	65		VFZ	Dolostone: Dolostone bed with moderate shale content locally.
70	70		vinemount2	Vinemount Shale continued: Brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, interlamintated to interbedded with dolostone below about 20.5m. Bioturbation at lower contact.
80	80		UFZ	Goat Island Dolostone - Brownish grey to grey, fine crystalline, thick bedded dolostone. Two fractures at about 24.1m. Both contain weathered gypsum and varied in aperture up to 3.8cm.
85	85		Shale	Dark brownish grey, medium bedded shale, slightly laminated with dolostone, bioturbation at upper contact.
90	90		UMFZ	Goat Island Dolostone: Two gypsum filled fractures at about 25.4m. Brownish grey to grey, fine crystalline dolostone.
100	100		goat island 2	Goat Island Dolostone continued: Brownish grey to grey, fine crystalline, thick bedded dolostone, occasional shale stringers to about 24.5m, trace fossils.
105	105		ancaster chert beds	Ancaster Chert Beds: Brownish grey to light brown, fine to very fine crystalline, medium bedded siliceous dolostone with numerous chert nodules and layers, minor occurrence of sphalerite mineralization usually associated with chert
108	108		LFZ	Ancaster Chert Beds: Fractured encountered at about 32.9m

Ground Surface Elevation - 207.90 asl.

Top of Casing/Measuring Point - 208.90 asl.

Prepared by W. Jackman, P.Geo.

Borehole Diameter - 10.16 cm

Casing Diameter - 5.08 cm

Screen Slot Size - N/A

Jackman Geoscience Inc.

96 Newcombe Road. Dundas ON

Monitor Completion Date: October 10, 2008

Drilling method - Mud Rotary

Borehole Log Report

Project: Newalta Corporation

Location: Newalta Hamilton (Stoney Creek) Landfills

Log of Monitor - 72-II

Drilling Contractor - Lantech Drilling Services Inc.

Depth [m]	Depth [ft]	Monitor details	Geologic Unit	Unit Description
0	0		clayey silt	Brown clayey silt, trace sand, fractures with oxidation, APL, stiff
2	10		clayey silt till	Brown to grey brown clayey silt, occasional fine gravel, trace fine sand, fractured with orange and black oxidation, APL, very stiff to hard
6	20		Eramosa Dolostone	Brownish grey, fine crystalline, thin to medium bedded dolostone, occasional shale stringers, locally porous, minor occurrence of small vugs
18	60		vinemount shale	Vinemount Shale: Brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale.
20	70		VFZ	Dolostone: Dolostone bed with moderate shale content locally.
22	70		vinemount2	Vinemount Shale continued: Brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, interlamintated to interbedded with dolostone below about 20.5m. Bioturbation at lower contact.
24	80		UFZ	Goat Island Dolostone - Brownish grey to grey, fine crystalline, thick bedded dolostone. Two fractures at about 24.1m . Both contain weathered gypsum and varied in aperture up to 3.8cm.
26	80		Shale	Dark brownish grey, medium bedded shale, slightly laminated with dolostone, bioturbation at upper contact.
26	80		UMFZ	Goat Island Dolostone: Two gypsum filled fractures at about 25.4m. Brownish grey to grey, fine crystalline dolostone.

Ground Surface Elevation - 207.72 asl.

Top of Casing/Measuring Point - 208.72

Prepared by W. Jackman, P.Geo.

Borehole Diameter - 10.16 cm

Casing Diameter - 5.08 cm

Screen Slot Size - N/A

Jackman Geoscience Inc.

96 Newcombe Road. Dundas ON

Monitor Completion Date: October 10, 2008

Drilling method - Mud Rotary

Borehole Log Report

Project: Newalta Corporation

Location: Newalta Hamilton (Stoney Creek) Landfills

Log of Monitor - 72-III

Drilling Contractor - Lantech Drilling Services Inc.

Depth (ft)	Depth (m)	Monitor details	Geologic Unit	Unit Description
0	0		clayey silt	Brown clayey silt, trace sand, fractures with oxidation, APL, stiff
2	2		clayey silt till	Brown to grey brown clayey silt, occasional fine gravel, trace fine sand, fractured with orange and black oxidation, APL, very stiff to hard
4	4		Eramosa Dolostone	Brownish grey, fine crystalline, thin to medium bedded dolostone, occasional shale stringers, locally porous, minor occurrence of small vugs
6	6			
8	8			
10	10			
12	12			
14	14			
16	16			
18	18		vinemount shale	Vinemount Shale: Brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale.
20	20		VFZ	Dolostone: Dolostone bed with moderate shale content locally.
22	22		vinemount2	Vinemount Shale continued: Brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, interlaminated to interbedded with dolostone below about 20.5m. Bioturbation at lower contact.
24	24		UFZ	Goat Island Dolostone - Brownish grey to grey, fine crystalline, thick bedded dolostone. Two fractures at about 24.1m. Both contain weathered gypsum and

Ground Surface Elevation - 207.74 asl.

Top of Casing/Measuring Point - 208.74

Prepared by W. Jackman, P.Geo.

Borehole Diameter - 10.16 cm

Casing Diameter - 5.08 cm

Screen Slot Size - N/A

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 73-I	2 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 12 September 2001	GEOLOGIST YS ELEVATION 205.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
13		DOLOSTONE (Continued) -A thin shale bed at about 13.4 m		9	HQ				100	76										
14				10	HQ				100	91										
15		-Dolostone becomes medium grey in color below about 14.5 m -Gypsum stringers/nodules frequently occur along bedding planes below about 15.0 m.		11	HQ				100	91										
16				12	HQ				100	93										
18.0		VINEMOUNT SHALE Medium to dark grey aphanitic, thin bedded shale, with occasional dolostone beds and fossiliferous layers.		13	HQ				100	99										
19		-Medium grey dolostone bed between about 18.9 and 19.6 m -Fractured zone between about 19.3 and 19.6 m along dolostone bed.		14	HQ				100	97										
20				15	HQ				100	97										
21				16	HQ				100	100										
23.1		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone, some shale stringers.																		
24.1		-Large vugs infilled with gypsum encountered at about 23.3 and 23.7 m																		
24.7		SHALE Dark grey, aphanitic, thin bedded shale, bioturbation																		

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 73-I 3 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 12 September 2001 GEOLOGIST YS ELEVATION 205.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
25.1		<u>occurs at upper contact.</u> GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone. Borehole terminated at 25.1 m in dolostone.																

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 73-II 1 of 2
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 13 September 2001 GEOLOGIST YS ELEVATION 205.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.5		TOPSOIL Dark brown silt with some clay and rootlets, trace fine sand, moist																
1		CLAYEY SILT Greyish brown clayey silt, trace very fine sand, DTPL, very stiff																
2																		
3																		
4		-Becoming silt and clay, brownish grey, APL and stiff below about 3.1 m																
5		-Becoming silty clay, medium grey and WTPL below about 4.5 m																
6																		
7.1		ERAMOSIA DOLOSTONE Brownish grey, fine crystalline, thin to medium bedded dolostone, slightly weathered to 10.9 m with rust staining on fractures, occasional shale stringers, rare fossils.																
8		-Numerous small vugs occur locally between about 7.3 and 12.5 m																
9		-Calcite infilling in a large vug at about 8.3 m																
10																		
11		-Fractured zone between about 9.2 and 9.4 m																
12																		

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 73-II 2 of 2
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 13 September 2001 GEOLOGIST YS ELEVATION 205.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
13		DOLOSTONE (Continued) -A thin shale bed at about 13.4 m																
14																		
15		-Dolostone becomes medium grey in color below about 14.5 m -Gypsum stringers/nodules frequently occur along bedding planes below about 15.0 m.																
16																		
17																		
18.0		VINEMOUNT SHALE Medium to dark grey aphanitic, thin bedded shale, with occasional dolostone beds and fossiliferous layers.																
19		-Medium grey dolostone bed between about 18.9 and 19.6 m -Fractured zone between about 19.3 and 19.6 m along dolostone bed.																
20.0		Borehole terminated at 20.04 m in shale. Stratigraphy inferred from adjacent borehole 73-I.																

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-I	1 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 14 September 2001	GEOLOGIST YS ELEVATION 206.3 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.5		TOPSOIL Dark brown silt with some clay and rootlets, trace fine sand, moist.																
1		CLAYEY SILT Medium brown clayey silt, trace very fine sand, DTPL, hard.																
2				1	SS	34			100									
3		-Becoming silt and clay, brownish grey, APL and very stiff below about 3.1 m. Rust stained vertical fractures extend to about 3.4 m.		2	SS	20			100									
4																		
5		-Becoming silty clay, medium grey, WTPL and firm to stiff below about 4.6 m.		3	SS	6			100									
6																		
7		-A fine sand seam at about 6.4 m.		4	SS	17			100									
7.6																		
8		ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin to medium bedded dolostone, with occasional shale stringers, rare fossils. -Fractured zone between about 8.0 and 8.8 m.		5	HQ				90	34								
9																		
10		-Numerous small vugs occur between about 10.0 and 10.7 m -Calcite infilled in two large vugs at about 10.6 m.		6	HQ				100	66								
11		-A fractured zone with gypsum infilling between about 10.7 and 10.9 m below the above vuggy zone.																
12		-Numerous small vugs between about 11.9 and 12.5 m.		7	HQ				100	89								

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-I	2 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 14 September 2001 GEOLOGIST YS ELEVATION 206.3 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
13		DOLOSTONE (Continued) -Dolostone becomes medium grey in color below about 12.5 m. -Calcite infilled in a large vug at about 13.3 m.		8	HQ			100	87											
14		-A vuggy zone likely bearing water between about 14.0 and 14.1 m. -Numerous small vugs between about 14.2 and 14.5 m.		9	HQ			100	91											
15		-Gypsum stringers / nodules frequently occur below about 15.2 m. -Shale stringers frequently occur below about 15.5 m.		10	HQ			100	93											
16		-Large vugs infilled with calcite at about 16.6 m.		11	HQ			100	100											
17				12	HQ			100	93											
18.3				13	HQ			100	100											
19		VINEMOUNT SHALE Medium to dark grey, aphanitic, thin bedded shale, occasional dolostone beds and fossiliferous layers. -Medium grey dolostone bed between about 18.7 and 19.8 m. -2 cm mudstone bed at 19.7 m.		14	HQ			100	100											
20				15	HQ			100	100											
21				16	HQ			100	100											
22		-Fossiliferous layer from 21.7 to 21.8 m.		17	HQ			100	100											
23.1				18	HQ			100	100											
23		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone, some shale stringers. -Large vugs infilled with gypsum occur at 23.3 and 23.7 m.		19	HQ			100	100											
24.1		SHALE Dark grey, aphanitic, thin bedded shale, bioturbation occurs at upper contact		20	HQ			100	100											
24.6				21	HQ			100	100											

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-I	3 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 14 September 2001	GEOLOGIST YS ELEVATION 206.3 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)								
				NUMBER	INTERVAL TYPE	N VALUE	% WATER	% REC	% RQD											
										25	50	75	100	25	50	75	100			
26		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone, some shale stringers. DOLOSTONE (Continued) -Dolostone becomes siliceous below about 26.0 m.		16	HQ				100	100										
27				17	HQ				100	100										
28				18	HQ				100	97										
29				19	HQ				100	91										
29.9		ANCASTER CHERT BEDS Brownish light grey fine crystalline, thick bedded siliceous dolostone, numerous large chert nodules.																		
31.0		Borehole terminated at 31.0 m in siliceous dolostone.																		

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-II 1 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.	DATE: 17 September 2001 GEOLOGIST YS ELEVATION 206.3 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.5		TOPSOIL Dark brown silt with some clay and rootlets, trace fine sand, moist.																
1		CLAYEY SILT Medium brown clayey silt, trace very fine sand, DTPL, hard.																
2																		
3																		
4		-Becoming silt and clay, brownish grey, APL and very stiff below about 3.1 m. Rust stained vertical fractures extend to about 3.4 m.																
5		-Becoming silty clay, medium grey, WTPL and firm to stiff below about 4.6 m.																
6																		
7		-A fine sand seam at about 6.4 m.																
7.6		ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin to medium bedded dolostone, with occasional shale stringers, rare fossils. -Fractured zone between about 8.0 and 8.8 m.																
8																		
9																		
10		-Numerous small vugs occur between about 10.0 and 10.7 m -Calcite infilled in two large vugs at about 10.6 m.																
11		-A fractured zone with gypsum infilling between about 10.7 and 10.9 m below the above vuggy zone.																
12		-Numerous small vugs between about 11.9 and 12.5 m.																

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-II	2 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 17 September 2001	GEOLOGIST YS ELEVATION 206.3 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
13		DOLOSTONE (Continued) -Dolostone becomes medium grey in color below about 12.5 m. -Calcite infilled in a large vug at about 13.3 m.																
14		-A vuggy zone likely bearing water between about 14.0 and 14.1 m. -Numerous small vugs between about 14.2 and 14.5 m.																
15		-Gypsum stringers / nodules frequently occur below about 15.2 m. -Shale stringers frequently occur below about 15.5 m.																
16		-Large vugs infilled with calcite at about 16.6 m.																
17																		
18																		
18.3		VINEMOUNT SHALE Medium to dark grey, aphanitic, thin bedded shale, occasional dolostone beds and fossiliferous layers.																
19		-Medium grey dolostone bed between about 18.7 and 19.8 m. -2 cm mudstone bed at 19.7 m.																
20																		
21																		
22		-Fossiliferous layer from 21.7 to 21.8 m.																
23.1		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone, some shale stringers.																
24.1		-Large vugs infilled with gypsum occur at 23.3 and 23.7 m.																
24.6		SHALE Dark grey, aphanitic, thin bedded shale, bioturbation occurs at upper contact																

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-II	3 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 17 September 2001	GEOLOGIST YS ELEVATION 206.3 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25 50		75 100		25 50		75 100			
26		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone, some shale stringers. DOLOSTONE (Continued) -Dolostone becomes siliceous below about 26.0 m.																		
27 27.3		Borehole terminated at 27.31 m in dolostone. Stratigraphy inferred from adjacent borehole 74-I.																		

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-III 1 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.	DATE: 18 September 2001 GEOLOGIST YS ELEVATION 206.2 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.5		TOPSOIL Dark brown silt with some clay and rootlets, trace fine sand, moist.																
1		CLAYEY SILT Medium brown clayey silt, trace very fine sand, DTPL, hard.																
2																		
3																		
4		-Becoming silt and clay, brownish grey, APL and very stiff below about 3.1 m. Rust stained vertical fractures extend to about 3.4 m.																
5		-Becoming silty clay, medium grey, WTPL and firm to stiff below about 4.6 m.																
6																		
7		-A fine sand seam at about 6.4 m.																
7.6																		
8		ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin to medium bedded dolostone, with occasional shale stringers, rare fossils. -Fractured zone between about 8.0 and 8.8 m.																
9																		
10		-Numerous small vugs occur between about 10.0 and 10.7 m																
11		-Calcite infilled in two large vugs at about 10.6 m. -A fractured zone with gypsum infilling between about 10.7 and 10.9 m below the above vuggy zone.																
12		-Numerous small vugs between about 11.9 and 12.5 m.																

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-III 2 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.	DATE: 18 September 2001 GEOLOGIST YS ELEVATION 206.2 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
13		DOLOSTONE (Continued) -Dolostone becomes medium grey in color below about 12.5 m. -Calcite infilled in a large vug at about 13.3 m.																	
14		-A vuggy zone likely bearing water between about 14.0 and 14.1 m. -Numerous small vugs between about 14.2 and 14.5 m.																	
15		-Gypsum stringers / nodules frequently occur below about 15.2 m. -Shale stringers frequently occur below about 15.5 m.																	
16		-Large vugs infilled with calcite at about 16.6 m.																	
17																			
18																			
18.3																			
19		VINEMOUNT SHALE Medium to dark grey, aphanitic, thin bedded shale, occasional dolostone beds and fossiliferous layers. -Medium grey dolostone bed between about 18.7 and 19.8 m. -2 cm mudstone bed at 19.7 m.																	
20																			
21																			
22		-Fossiliferous layer from 21.7 to 21.8 m.																	
23.1																			
23		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone, some shale stringers. -Large vugs infilled with gypsum occur at 23.3 and 23.7 m.																	
24.1																			
24		SHALE Dark grey, aphanitic, thin bedded shale, bioturbation occurs at upper contact																	
24.6																			
24.9																			

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-III 3 of 3
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.	DATE: 18 September 2001 GEOLOGIST YS ELEVATION 206.2 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, medium bedded dolostone, some shale stringers. Borehole terminated at 24.92 m in dolostone. Stratigraphy inferred from adjacent borehole 74-I.																

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-IV 1 of 2
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 19 September 2001 GEOLOGIST YS ELEVATION 206.2 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.5		TOPSOIL Dark brown silt with some clay and rootlets, trace fine sand, moist.																
1		CLAYEY SILT Medium brown clayey silt, trace very fine sand, DTPL, hard.																
2																		
3																		
4		-Becoming silt and clay, brownish grey, APL and very stiff below about 3.1 m. Rust stained vertical fractures extend to about 3.4 m.																
5		-Becoming silty clay, medium grey, WTPL and firm to stiff below about 4.6 m.																
6																		
7		-A fine sand seam at about 6.4 m.																
7.6		ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin to medium bedded dolostone, with occasional shale stringers, rare fossils. -Fractured zone between about 8.0 and 8.8 m.																
8																		
9																		
10		-Numerous small vugs occur between about 10.0 and 10.7 m																
11		-Calcite infilled in two large vugs at about 10.6 m. -A fractured zone with gypsum infilling between about 10.7 and 10.9 m below the above vuggy zone.																
12		-Numerous small vugs between about 11.9 and 12.5 m.																

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-IV 2 of 2
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.	DATE: 19 September 2001 GEOLOGIST YS ELEVATION 206.2 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
13		DOLOSTONE (Continued) -Dolostone becomes medium grey in color below about 12.5 m. -Calcite infilled in a large vug at about 13.3 m.																
14		-A vuggy zone likely bearing water between about 14.0 and 14.1 m. -Numerous small vugs between about 14.2 and 14.5 m.																
15		-Gypsum stringers / nodules frequently occur below about 15.2 m. -Shale stringers frequently occur below about 15.5 m.																
16		-Large vugs infilled with calcite at about 16.6 m.																
17																		
18																		
18.3		VINEMOUNT SHALE Medium to dark grey, aphanitic, thin bedded shale, occasional dolostone beds and fossiliferous layers.																
19		-Medium grey dolostone bed between about 18.7 and 19.8 m. -2 cm mudstone bed at 19.7 m.																
20																		
20.4		Borehole terminated at 20.35 m in shale. Stratigraphy inferred from adjacent borehole 74-I.																

BOREHOLE LOG	PROJECT: GLL 21-654	BOREHOLE: 74-V 1 of 1
Hydrogeological Investigations Stoney Creek, Ontario FOR: Philip Services Inc.		DATE: 19 September 2001 GEOLOGIST YS ELEVATION 206.2 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.5		TOPSOIL Dark brown silt with some clay and rootlets, trace fine sand, moist.																
1		CLAYEY SILT Medium brown clayey silt, trace very fine sand, DTPL, hard.																
2																		
3																		
4		-Becoming silt and clay, brownish grey, APL and very stiff below about 3.1 m. Rust stained vertical fractures extend to about 3.4 m.																
5		-Becoming silty clay, medium grey, WTPL and firm to stiff below about 4.6 m.																
6																		
7		-A fine sand seam at about 6.4 m.																
7.6																		
8		ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin to medium bedded dolostone, with occasional shale stringers, rare fossils. -Fractured zone between about 8.0 and 8.8 m.																
9																		
10																		
10.3		-Numerous small vugs occur between about 10.0 and 10.7 m Borehole terminated at 10.34 m in dolostone. Stratigraphy inferred from adjacent borehole 74-I.																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P1-1	1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 9 April 1992 GEOLOGIST PW ELEVATION 196.6 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD									
											25	50	75	100	25	50	75	100	
1		FILL Brown silty sand with brick fragments.		1		HQ				93	0								
1.8				2		HQ				100	32								
2.4		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, weathered.		3		HQ				100	53								
3.1		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, occasional clay seams, trace fossils. -Very weathered to about 4.6 m. -Dolostone bed from about 3.1 to 4.0 m.		4		HQ				100	77								
4.0				5		HQ				100	88								
5				6		HQ				100	97								
6				7		HQ				100	78								
7				8		HQ				100	88								
7.5		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers, locally vuggy with some vugs infilled with calcite. -Fractures observed between about 7.5 and 7.9 m.		9		HQ				93	89								
8				10		HQ				100	97								
8.8		SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale interlaminated with dolostone.																	
9																			
9.5																			
10																			
11																			
12																			
13																			
14		-Minor occurrences of chert nodules below about 13.1 m.																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P1-II 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 13 May 1992 GEOLOGIST PW ELEVATION 196.8 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100		
16 16.5		GOAT ISLAND DOLOSTONE (continued)																		
		Borehole terminated at 16.50 m in dolostone. NOTE: BOREHOLE DRILLED DIRECTLY BY AIRTRACK, STRATIGRAPHY INFERRED FROM ADJACENT P1-I.																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P1-III 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 13 May 1992 GEOLOGIST PW ELEVATION 196.5 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
1		FILL Brown silty sand with brick fragments.																
1.8																		
2		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, weathered.																
2.4																		
3.1		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, occasional clay seams, trace fossils. -Very weathered to about 4.6 m. -Dolostone bed from about 3.1 to 4.0 m.																
3																		
4.0																		
4																		
5																		
6																		
7																		
7.5																		
8		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers, locally vuggy with some vugs infilled with calcite. Borehole terminated at 8.59 m in dolostone. NOTE: BOREHOLE DRILLED DIRECTLY BY AIRTRACK, STRATIGRAPHY INFERRED FROM ADJACENT P1-I.																
8.6																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P2-OW1 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 10 April 1992 GEOLOGIST PW ELEVATION 200.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
				<p>INDUSTRIAL FILL Dark brown to black heterogeneous mix of sand, silt and clay and fine gravel, moist, loose to compact.</p> <p>-Wet below about 6.6 m.</p>														
1				1		SS	8	14.3										
2																		
3				2		SS	5	19.3										
4																		
5				3		SS	8	18.4										
6				4		SS	17	17.5										
7																		
7.5				1		HQ			66	0								
8.2				2		HQ			100	83								
9																		
10				3		HQ			100	78								
11																		
11.6				4		HQ			100	100								
12																		
12.8				5		HQ			100	100								
13																		
13.4																		
14				6		HQ			100	77								

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P2-OW1 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 10 April 1992 GEOLOGIST PW ELEVATION 200.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD								
											25	50	75	100	25	50	75	100
16		GOAT ISLAND DOLOSTONE (continued)	7		HQ			100	95									
17			8		HQ			100	98									
18			9		HQ			100	87									
19.2			10		HQ			100	87									
20		ANCASTER CHERT BEDS Light brownish grey, very fine crystalline, medium bedded siliceous dolostone with numerous chert nodules and beds, minor occurrences of shale stringers.	11		HQ			100	100									
21		-Large fracture encountered at about 19.5 m.	12		HQ			100	92									
22			13		HQ			95	88									
23			14		HQ			100	100									
24.0		GASPORT DOLOSTONE Grey, coarse crystalline, massive bedded dolostone, porous, minor occurrence of shale stringers.	15		HQ			100										
25																		
26.0		DECEW DOLOSTONE Medium to dark grey, fine crystalline, thin to medium bedded dolostone interlaminated to interbedded with shale, occasional shale stringers. -Shale content increasing with depth.																
27																		
28.1		Borehole terminated at 28.09 m in shaly dolostone.																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P2-TW1A1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 19 May 1992 GEOLOGIST PW ELEVATION 201.1 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER							SAMPLE				RECOVERY (%)				RQD (%)			
			NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100				
1		INDUSTRIAL FILL Dark brown to black heterogeneous mix of sand, silt and clay and fine gravel, moist, loose to compact.																			
2																					
3																					
4																					
5																					
6																					
7		-Wet below about 6.6 m.																			
7.5																					
8.2		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally inter laminated to interbedded with dolostone, trace fossils.																			
9		-Medium grey heavily fractured dolostone from about 7.5 to 8.2 m.																			
10																					
11																					
11.6																					
12		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers and vugs.																			
12.8		Borehole terminated at 12.80 m in dolostone. NOTE: Borehole drilled directly to 12.80 m with a water well rig, stratigraphy inferred from adjacent borehole P2-OW1. Borehole was cased and redrilled to become P2-TW1B.																			

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P2-TW1B1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 8 June 1992 GEOLOGIST PW ELEVATION 201.1 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY				RQD					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	%				%					
											25	50	75	100	25	50	75	100		
1	[Cross-hatched pattern]	INDUSTRIAL FILL Dark brown to black heterogeneous mix of sand, silt and clay and fine gravel, moist, loose to compact.																		
2																				
3																				
4																				
5																				
6																				
7			-Wet below about 6.6 m.																	
7.5																				
8.2	[Dotted pattern]	VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils.																		
9		-Medium grey heavily fractured dolostone from about 7.5 to 8.2 m.																		
10																				
11																				
11.6																				
12	[Diagonal lines]	GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers and vugs.																		
12.8																				
13																				
13.4	[Diagonal lines]	SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale interlaminated with dolostone, trace fossils.																		
14																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P2-TW1B2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 8 June 1992 GEOLOGIST PW ELEVATION 201.1 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
16		GOAT ISLAND DOLOSTONE (continued)																
17																		
18																		
19.2																		
19		ANCASTER CHERT BEDS																
20		Light brownish grey, very fine crystalline, medium bedded siliceous dolostone with numerous chert nodules and beds, minor occurrences of shale stringers.																
21		-Large fracture encountered at about 19.5 m.																
22																		
23.2																		
23		Borehole terminated at 23.16 m in siliceous dolostone. NOTE: Borehole P2-TW1B drilled directly from 12.80 to 23.16 m with a water well rig, stratigraphy inferred from adjacent borehole P2-OW1.																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P3-I	1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 20 April 1992 GEOLOGIST PW ELEVATION 200.2 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
0.3		FILL Medium to dark brown silty sand with clay and gravel, metal fragments, moist.		1		HQ				91	0									
1		ERAMOSIA DOLOSTONE Brownish grey to grey, fine crystalline, thin bedded dolostone, weathered and very fractured, locally vuggy, minor occurrence of clay infilled fractures and shale stringers.		2		HQ				100	23									
2				3		HQ				100	75									
3				4		HQ				100	32									
4				5		HQ				100	17									
5.8		-Less fractured below about 4.8 m.		6		HQ				100	85									
6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils, minor occurrence of clay seams.		7		HQ				100	78									
6.7				8		HQ				100	95									
7		-Dolostone bed from about 6.7 to 7.3 m.		9		HQ				100	75									
7.3				10		HQ				100	80									
8		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content locally, occasional shale stringers and calcite nodules, minor occurrences of sphalerite mineralization.		11		HQ														
10.9				12		HQ														
12.0				13		HQ														
12.7		-Fracture encountered at about 11.5 m.		14		HQ														
13		SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale interlaminated with dolostone.																		
14																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P3-1 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 20 April 1992 GEOLOGIST PW ELEVATION 200.2 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)								
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
16		GOAT ISLAND DOLOSTONE (continued) -Minor occurrence of chert and becoming more siliceous below about 16.1 m.		11	HQ			98	88											
17				12	HQ			100	92											
18.3		-Fracture encountered at about 18.3 m.																		
19		ANCASTER CHERT BEDS Light brownish grey, very fine crystalline, medium bedded siliceous dolostone with numerous chert nodules and beds, occasional calcite nodules, some shale stringers, minor occurrences of sphalerite mineralization usually associated with chert.		13	HQ			100	85											
20		-Fractures encountered between 18.5 and 19.8 m.		14	HQ			100	100											
21				15	HQ			96	96											
22				16	HQ			100	98											
23				17	HQ			100	100											
24.2		GASPORT DOLOSTONE Grey to bluish grey, coarse crystalline, thick bedded dolostone, porous, fossiliferous.		18	HQ			100	100											
25				19	HQ			100	100											
25.4		DECEW DOLOSTONE Brownish grey to grey, fine crystalline, medium bedded dolostone interbedded to interlaminated with shale.																		
26																				
27.1		ROCHESTER SHALE Dark grey to grey, aphanitic to very fine crystalline, thick bedded shaly dolostone.																		
28																				
29.1		Borehole terminated at 29.14 m in shaly dolostone.																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P3-II 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 13 May 1992 GEOLOGIST PW ELEVATION 200.2 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
0.3		FILL Medium to dark brown silty sand with clay and gravel, metal fragments, moist.																		
1		ERAMOSA DOLOSTONE Brownish grey to grey, fine crystalline, thin bedded dolostone, weathered and very fractured, locally vuggy, minor occurrence of clay infilled fractures and shale stringers.																		
2																				
3																				
4																				
5																				
5.8																				
6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils, minor occurrence of clay seams. -Dolostone bed from about 6.7 to 7.3 m.																		
6.7																				
7																				
7.3																				
8																				
9																				
10																				
10.9																				
11		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content locally, occasional shale stringers and calcite nodules, minor occurrences of sphalerite mineralization. Borehole terminated at 12.00 m in dolostone. NOTE: BOREHOLE DRILLED DIRECTLY BY AIRTRACK, STRATIGRAPHY INFERRED FROM ADJACENT P3-I.																		
12.0																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P3-III 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 6 November 1992 GEOLOGIST SMA ELEVATION 200.2 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
0.3		FILL Medium to dark brown silty sand with clay and gravel, metal fragments, moist.																		
1		ERAMOSIA DOLOSTONE Brownish grey to grey, fine crystalline, thin bedded dolostone, weathered and very fractured, locally vuggy, minor occurrence of clay infilled fractures and shale stringers.																		
2																				
3																				
4																				
5		-Less fractured below about 4.8 m.																		
5.8																				
6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils, minor occurrence of clay seams.																		
6.7																				
7.3		-Dolostone bed from about 6.7 to 7.3 m.																		
8																				
9																				
10																				
10.9																				
11		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content locally, occasional shale stringers and calcite nodules, minor occurrences of sphalerite mineralization.																		
12.0																				
12.7		-Fracture encountered at about 11.5 m.																		
13		SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale interlaminated with dolostone.																		
14																				
14.8																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P3-III 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 6 November 1992 GEOLOGIST SMA ELEVATION 200.2 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N	U	A	L	U	E	%	R	E	C	%	R	Q	D
		Borehole terminated at 14.80 m in dolostone.																		

BOREHOLE LOG

PROJECT: 92377

BOREHOLE: P4-I 1 of 2

HYDRAULIC CONTROL INVESTIGATION
TARO-WEST QUARRY
FOR: TARO AGGREGATES LTD.

DATE: 16 April 1992
GEOLOGIST PW
ELEVATION 199.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD									
											25	50	75	100	25	50	75	100	
0.5		FILL Medium to dark brown silty sand with gravel and clay, moist.		1		HQ				100	0								
1		ERAMOSA DOLOSTONE Brownish grey to grey, fine crystalline, thin bedded dolostone, numerous fractures, occasional shale stringers, locally vuggy, minor occurrence of calcite nodules.		2		HQ				100	25								
2				3		HQ				100	35								
3				4		HQ				100	52								
4		-Vertical fracture encountered from about 4.0 to 4.4 m.		5		HQ				98	64								
5				6		HQ				100	58								
6.3		-Becoming shaly below about 6.1 m.		7		HQ				98	85								
7.3		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin bedded shale, locally interlaminated to interbedded with dolostone, trace fossils.		8		HQ				97	92								
7.9		-Dolostone bed from about 7.3 to 7.9 m, moderate shale content locally.		9		HQ				100	85								
8				10		HQ				100	70								
9																			
10																			
11.2		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers and calcite nodules.																	
12																			
12.7		-Fracture encountered at about 12.5 m.																	
13		SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale interlaminated with dolostone, bioturbation at upper contact.																	
13.3																			
14		-Minor occurrence of shale stringers below about 13.3 m.																	

BOREHOLE LOG		PROJECT: 92377	BOREHOLE: P4-I	2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.			DATE: 16 April 1992 GEOLOGIST PW ELEVATION 199.6 m ASL	

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY				RQD				
				NUMBER	INTERVAL TYPE	N VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)				
										25	50	75	100	25	50	75	100	
16		GOAT ISLAND DOLOSTONE (continued) -Chert nodules observed below about 15.7 m.		11	HQ				98	98								
17				12	HQ				100	97								
18.1				13	HQ				88	88								
19		ANCASTER CHERT BEDS Light brownish grey to dark grey, very fine crystalline, medium to thick bedded siliceous dolostone with numerous chert nodules and beds, minor occurrences of shale stringers.		14	HQ				100	68								
20		-Fracture encountered at about 18.4 m. -Increasing appearance of chert nodules and beds below about 19.8 m. -Fractured zone encountered between about 20 and 21.3 m.		15	HQ				98	95								
21				16	HQ				84	66								
22				17	HQ				100	100								
23				18	HQ				95	93								
24.2		GASPORT DOLOSTONE Bluish grey to dark grey, coarse crystalline, massive bedded dolostone, porous, occasional fossils.		19	HQ				100	100								
25				20	HQ				98	98								
25.7		DECEW DOLOSTONE Brownish grey, fine crystalline, medium to thick bedded dolostone interlaminated to interbedded with shale, occasional shale stringers.																
26																		
27		ROCHESTER SHALE Medium to dark grey, aphanitic to very fine crystalline, thin bedded shaly dolostone.																
27.3																		
28																		
28.9		Borehole terminated at 28.96 m in shaly dolostone.																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P4-II 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 13 May 1992 GEOLOGIST PW ELEVATION 199.7 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
0.5		FILL Medium to dark brown silty sand with gravel and clay, moist.																		
1		ERAMOSA DOLOSTONE Brownish grey to grey, fine crystalline, thin bedded dolostone, numerous fractures, occasional shale stringers, locally vuggy, minor occurrence of calcite nodules.																		
2																				
3																				
4																				
5																				
6.3		-Becoming shaly below about 6.1 m.																		
7		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin bedded shale, locally interlaminated to interbedded with dolostone, trace fossils.																		
7.3																				
7.9		-Dolostone bed from about 7.3 to 7.9 m, moderate shale content locally.																		
8																				
9																				
10																				
11.2																				
11		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers and calcite nodules.																		
12																				
12.7																				
12.9		SHALE Borehole terminated at 12.90 m in shale. NOTE: BOREHOLE DRILLED DIRECTLY BY AIRTRACK, STRATIGRAPHY INFERRED FROM ADJACENT P4-I.																		













BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P4-III 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 2 November 1992 GEOLOGIST SMA ELEVATION 199.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD								
											25	50	75	100	25	50	75	100
0.5		FILL Medium to dark brown silty sand with gravel and clay, moist.		1	HQ			59	0		■	▲						
1		ERAMOSA DOLOSTONE Brownish grey to grey, fine crystalline, thin bedded dolostone, locally fracture and weathered to about 4.9 m, occasional shale stringers, locally vuggy.		2	HQ			95	25		■	▲						
3				3	HQ			99	59		■	▲						
6.2		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin bedded shale, locally interlaminated to interbedded with dolostone, trace fossils. -Moderate dolostone content from about 6.2 to 7.9 m.		4	HQ			99	81		■	▲						
7.3																		
7.9																		
8																		
9																		
10																		
11.2																		
11		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, medium bedded dolostone, moderate shale content, occasional shale stringers and calcite nodules. -Open fracture with partial gypsum infilling at about 11.9 m.		5	HQ			100	76		■	▲						
12																		
12.5																		
13		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact. -Minor occurrence of shale stringers below about 13.3 m.		6	HQ			87	83		■	▲						

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P4-III 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 2 November 1992 GEOLOGIST SMA ELEVATION 199.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY				RQD						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)				
											25	50	75	100	25	50	75	100	
16		GOAT ISLAND DOLOSTONE (continued) -4 cm cavity with well formed calcite crystals observed at about 15.0 m.																	
17.1 17		Borehole terminated at 17.12 m in dolostone.																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P4-IV 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 2 November 1992 GEOLOGIST SMA ELEVATION 199.7 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
0.5		FILL Medium to dark brown silty sand with gravel and clay, moist.																		
1		ERAMOSA DOLOSTONE Brownish grey to grey, fine crystalline, thin bedded dolostone, locally fracture and weathered to about 4.9 m, occasional shale stringers, locally vuggy.																		
2																				
3																				
4																				
4.9																				
		Borehole terminated at 4.90 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P4-I. Borehole cored directly to 4.90 m, logged to confirm contacts and monitor for placement.																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P5-I 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 16 September 1992 GEOLOGIST PW ELEVATION 197.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
		<u>GOAT ISLAND DOLOSTONE</u> (continued)																
16				14	HQ				100	93				■				▲
17																		
17.8		-Becoming siliceous below about 17.6 m.		15	HQ				98	70				■				▲
18		<u>ANCASTER CHERT BEDS</u> Light brownish grey, very fine crystalline, thin to thick bedded siliceous dolostone with numerous chert nodules and seams, minor occurrences of sphalerite mineralization usually associated with chert.																
19				16	HQ				100	60				■				▲
20.2				17	HQ				100	93				■				▲
20		Borehole terminated at 20.20 m in siliceous dolostone with chert.																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P5-I 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 16 September 1992 GEOLOGIST PW ELEVATION 197.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY				RQD								
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	%									
											25	50	75	100	25	50	75	100		
		FILL																		
1.0		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous. -Broken up from about 1.0 to 1.5 m.		1		HQ				100	0									
2		-Increasing shale content below about 2.7 m.		2		HQ				100	24									
3		-Transitional below about 3.3 m.		3		HQ				97	34									
3.7		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, occasional mud seams, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact.		4		HQ				100	50									
4.5		-Dark grey, fine to medium dolostone with moderate to high shale content observed between about 4.5 to 5.7 m.		5		HQ				100	58									
5.7		-Transitional below about 8.9 m.		6		HQ				96	45									
6		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content locally, minor occurrences of gypsum infilling and sphalerite mineralization from about 9.2 to 10.2 m.		7		HQ				100	87									
7		-3 cm open solution fracture at about 9.8 m.		8		HQ				100	91									
8		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact.		9		HQ				100	91									
9.2		-Fractured zone from about 11.1 to 13.0 m.		10		HQ				95	61									
10.2		-Occasional gypsum nodules between about 11.7 and 12.3 m.		11		HQ				100	97									
11.1		-Siliceous patches below about 14.6 m		12		HQ				92	75									
12				13		HQ				100	83									
13																				
14																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P5-II 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 17 September 1992 GEOLOGIST PW ELEVATION 197.8 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY				RQD						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	%				%					
											25	50	75	100	25	50	75	100		
1.0		FILL																		
2		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous. -Broken up from about 1.0 to 1.5 m. -Increasing shale content below about 2.7 m. -Transitional below about 3.3 m.																		
4		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, occasional mud seams, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Dark grey, fine to medium dolostone with moderate to high shale content observed between about 4.5 to 5.7 m. -Transitional below about 8.9 m.																		
10.2		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content locally, minor occurrences of gypsum infilling and sphalerite mineralization from about 9.2 to 10.2 m. -3 cm open solution fracture at about 9.8 m.																		
12		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact. -Fractured zone from about 11.1 to 13.0 m. -Occasional gypsum nodules between about 11.7 and 12.3 m.																		
13.3		Borehole terminated at 13.30 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P5-I. Borehole cored directly to 13.30 m, logged to confirm contacts and monitor for placement.																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P5-III 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 18 September 1992 GEOLOGIST PW ELEVATION 197.8 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
1.0		FILL																
1		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous. -Broken up from about 1.0 to 1.5 m.																
2		-Increasing shale content below about 2.7 m.																
3		-Transitional below about 3.3 m.																
3.7		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, occasional mud seams, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact.																
4		-Dark grey, fine to medium dolostone with moderate to high shale content observed between about 4.5 to 5.7 m.																
4.5																		
5																		
5.7																		
6																		
7																		
8																		
9.2		-Transitional below about 8.9 m.																
9		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content locally, minor occurrences of gypsum infilling and sphalerite mineralization from about 9.2 to 10.2 m. -3 cm open solution fracture at about 9.8 m.																
10.2		Borehole terminated at 10.23 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P5-I. Borehole cored directly to 10.23 m, logged to confirm contacts and for monitor placement.																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P5-IV 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 22 September 1992 GEOLOGIST PW ELEVATION 197.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
1.0		FILL																		
2		ERAMOSIA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous. -Broken up from about 1.0 to 1.5 m. -Increasing shale content below about 2.7 m. -Transitional below about 3.3 m.																		
3.7		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, occasional mud seams, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Dark grey, fine to medium dolostone with moderate to high shale content observed between about 4.5 to 5.7 m.																		
6.3		Borehole terminated at 6.30 m in shale. NOTE: Stratigraphy inferred from adjacent borehole P5-I. Borehole cored directly to 6.30 m, logged to confirm contacts and for monitor placement.																		

Jackman Geoscience Inc.

96 Newcombe Road. Dundas ON

Monitor Completion Date: October 10, 2008

Drilling method - Mud Rotary

Borehole Log Report

Project: Newalta Corporation

Location: Newalta Hamilton (Stoney Creek) Landfills

Log of Monitor - P5-IVR

Drilling Contractor - Lantech Drilling Services Inc.

Depth (ft)	Depth (m)	Monitor details	Geologic Unit	Unit Description
0	0.0			
2	0.5		clayey silt till	Overburden: clayey silt till
4	1.0		eramosa dolostone	Brownish grey, fine crystalline, thin bedded dolostone, locally weathered and porous.
6	1.5			
8	2.0			
10	2.5			
12	3.0			
14	3.5		vinemount shale	Vinemount Shale: Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, occasional mud seam, interlamination with dolostone.
16	4.0			
18	4.5		VFZ	Vinemount Flow Zone: Dark grey, fine to medium dolostone with moderate to high shale content.
20	5.0			
22	5.5			

Ground Surface Elevation - 197.59 asl.

Top of Casing/Measuring Point - 198.60 asl.

Prepared by W. Jackman, P.Geo.

Borehole Diameter - 10.16 cm

Casing Diameter - 5.08 cm

Screen Slot Size - N/A

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P6-I 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 11 September 1992 GEOLOGIST PW ELEVATION 201.2 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL TYPE	N VALUE	% WATER	% REC	% RQD										
										25	50	75	100	25	50	75	100		
0.8		FILL Dark brown sandy gravel, some clay and silt, moist to wet, dense.		1	SS	49	16												
1		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, occasional vertical fractures, locally weathered and porous. -Heavily fractured from about 0.8 to 2.3 m.		2	HQ			100	0										
2				3	HQ			100	0										
3				4	HQ			100	13										
4				5	HQ			100	24										
5				6	HQ			100	38										
6				7	HQ			100	33										
7		-Becoming thinly interbedded with shale with increasing shale content below about 7.0 m.		8	HQ			100	51										
7.9		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone bed with moderate shale content and vugs from about 9.0 to 9.5 m.		9	HQ			100	69										
9.0				10	HQ			100	75										
9.5				11	HQ			97	88										
10																			
11																			
12																			
13.1		GOAT ISLAND DOLOSTONE Medium grey, fine crystalline, thin to medium bedded dolostone, slightly weathered gypsum seam encountered. 5 cm gypsum seam at about 13.7 m, slightly weathered. Borehole terminated at 14.05 m in dolostone.																	
14.1																			

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-I 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 10 September 1992 GEOLOGIST SMA ELEVATION 201.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY			RQD							
				NUMBER	INTERVAL	TYPE	N VALUE	WATER %	REC %	RQD %	RECOVERY (%)			RQD (%)					
											25	50	75	100	25	50	75	100	
1		FILL Dark yellowish brown clayey silt, some fine sand and fine gravel, DTPL, stiff to hard. -Rootlets and fracturing to about 0.9 m. -Mottled grey and laminated below about 0.8 m.		1		SS	10	18	72										
2.3				2		SS	19	19	61										
				3		SS	32	16	78										
3		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.2 m, locally minor to moderate shale content below about 4.9 m.		1		HQ			100	7									
4				2		HQ			100	45									
5																			
6																			
7				3		HQ			99	73									
8.3																			
9		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone bed from about 9.5 to 9.8 m.		4		HQ			100	43									
9.5				5		HQ			100	97									
9.8																			
10																			
11																			
12																			
13				6		HQ			100	92									
13.7																			
14		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, locally moderate shale content, minor occurrences of gypsum and shale																	
14.8																			

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-I 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 10 September 1992 GEOLOGIST SMA ELEVATION 201.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY				RQD								
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)					
											25	50	75	100	25	50	75	100		
15.5		stringers. -Slightly weathered gypsum seam at about 14.3 m.																		
16		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact.		7	HQ				100	92										
17		GOAT ISLAND DOLOSTONE (continued) -Fractured zone from about 16.0 to 16.2 m with occasional fractures to about 17.0 m.																		
18																				
19				8	HQ				100	95										
20		- Siliceous patches below about 20.2 m.																		
21																				
22		-Becoming siliceous with minor occurrences of chert nodules and sphalerite mineralization.		9	HQ				100	100										
22.4		ANCASTER CHERT BEDS Light brownish grey, very fine crystalline, thin to medium bedded siliceous dolostone with numerous chert nodules and layers, minor occurrences of calcite infilling, shale stringers and sphalerite mineralization.																		
23																				
24																				
25				10	HQ				100	100										
26																				
26.9		-Becoming interlaminated with shale and decreasing chert below about 26.3 m.		11	HQ				100	100										
27		GASPORT DOLOSTONE Medium to dark grey, coarse crystalline, medium bedded dolostone, slightly porous.																		
27.7		Borehole terminated at 27.72 m in dolostone.																		

Jackman Geoscience Inc.

Corehole Log Report

1000 e-commerce Road Dundas ON

1000 e-commerce Road Dundas ON

Monitor Completion Date October 2011

Location e-commerce Road Dundas ON

Drilling method Mud Rotary

Log of Monitor 1000 IR

Drilling contractor Lantec Drilling Service Inc.

Depth m	Depth ft	Monitor details	Geologic Unit	Unit Description	
0	0		top soil	Soil fill - clayey silt till	
2	10		eramosa dolostone	Eramosa Dolostone - Brown to grey, aphanitic to fine crystalline, thin bedded dolostone, weathered and porous to about 3 m, local minor to moderate shale stringers below about 4m.	
4	20		vinemount shale	Vinemount Shale: Dark brown to black, aphanitic to crystalline, thin to medium bedded shale, with thin interlamination of dolostone	
6	30		VFZ	Vinemount Flow Zone - Grey Dolostone bed	
8	40		vinemount2	Vinemount Shale: Dark brown to black, aphanitic to crystalline, thin to medium bedded shale, with thin interlamination of dolostone	
10	50		goat island dolostone	Goat Island Dolostone: Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, some shale stringers, minor gypsum infilling of vugs, Weathered gypsum seam at 15.54m 0.063m wide, not visibly weathered.	
12	60		shale	Goat Island Shale: Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact.	
14	70		goat island 2	Goat Island Dolostone continued: Gypsum seam at 17.8 and 20.7. Both appear to be unweathered.	
16	80		ancaster chert beds	Ancaster Chert Beds - Light brownish grey, very fine crystalline, thin to medium bedded siliceous dolostone with numerous chert nodules and layers, minor occurrences of calcite infilling, shale stringers and sphalerite, mineralization. Shale fracture at 26.	
18			LFZ	Ancaster Chert Beds: Interlamination with shale beginning at 25.5m	
20					
22					
24					
26					

Ground Surface Elevation 1000 a.s.l.

Corehole Diameter 100 mm

Total Core Length 100 m

Core Diameter 100 mm

Prepared by Jackman Geoscience

Green Plot Size 100 mm

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-II 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 14 September 1992 GEOLOGIST SMA ELEVATION 201.7 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
1		FILL Dark yellowish brown clayey silt, some fine sand and fine gravel, DTPL, stiff to hard. -Rootlets and fracturing to about 0.9 m. -Mottled grey and laminated below about 0.8 m.																
2.3		ERAMOSIA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.2 m, locally minor to moderate shale content below about 4.9 m.																
3																		
4																		
5																		
6																		
7																		
8.3																		
9		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone bed from about 9.5 to 9.8 m.																
9.5																		
9.8																		
10																		
11																		
12																		
13																		
13.7																		
14		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, locally moderate shale content, minor occurrences of gypsum and shale																
14.8																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-II 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 14 September 1992 GEOLOGIST SMA ELEVATION 201.7 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY				RQD						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)					
											25	50	75	100	25	50	75	100		
15.5		stringers. - Slightly weathered gypsum seam at about 14.3 m.																		
16		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact.																		
17		GOAT ISLAND DOLOSTONE (continued) - Fractured zone from about 16.0 to 16.2 m with occasional fractures to about 17.0 m.																		
18																				
18.7		Borehole terminated at 18.67 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P7-I. Borehole cored directly to 18.67 m, logged to confirm contacts and for monitor placement.																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-III 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 15 September 1992 GEOLOGIST SMA ELEVATION 201.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
1		FILL Dark yellowish brown clayey silt, some fine sand and fine gravel, DTPL, stiff to hard. -Rootlets and fracturing to about 0.9 m. -Mottled grey and laminated below about 0.8 m.																
2.3		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.2 m, locally minor to moderate shale content below about 4.9 m. -Moderate shale content below about 7.3 m.																
3																		
4																		
5																		
6																		
7																		
8.3		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone bed from about 9.5 to 9.8 m.																
9																		
9.5																		
9.8																		
10																		
11																		
12																		
13																		
13.7		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, locally moderate shale content, minor occurrences of gypsum and shale																
14																		
14.8																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-III 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 15 September 1992 GEOLOGIST SMA ELEVATION 201.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N	VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
15.1		<p>stringers.</p> <p>- Slightly weathered gypsum seam at about 14.3 m.</p> <p>SHALE</p> <p>Dark brownish grey, medium bedded shale, interlaminated with dolostone, extensive bioturbation at upper contact.</p> <p>Borehole terminated at 15.13 m in shale.</p> <p>NOTE: Stratigraphy inferred from adjacent borehole P7-I. Borehole cored directly to 15.13 m, logged to confirm contacts and for monitor placement.</p>																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-IV 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 15 September 1992 GEOLOGIST SMA ELEVATION 201.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
1		FILL Dark yellowish brown clayey silt, some fine sand and fine gravel, DTPL, stiff to hard. -Rootlets and fracturing to about 0.9 m. -Mottled grey and laminated below about 0.8 m.																
2.3		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.2 m, locally minor to moderate shale content below about 4.9 m.																
3																		
4																		
5																		
6																		
7																		
8.3		-Moderate shale content below about 7.3 m.																
9		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone bed from about 9.5 to 9.8 m.																
9.5																		
9.8																		
10																		
11.0		Borehole terminated at 11.01 m in shale. NOTE: Stratigraphy inferred from adjacent borehole P7-I. Borehole cored directly to 11.01 m, logged to confirm contacts and for monitor																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-OW1 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 30 September 1992 GEOLOGIST BJ ELEVATION m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY				RQD								
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)					
											25	50	75	100	25	50	75	100		
1		FILL Dark yellowish brown clayey silt, some fine sand and fine gravel, DTPL, stiff to hard. -Rootlets and fracturing to about 0.9 m. -Mottled grey and laminated below about 0.8 m.																		
2.3		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.2 m, locally minor to moderate shale content below about 4.9 m.																		
3																				
4																				
5																				
6																				
7																				
8		-Moderate shale content below about 7.3 m.																		
8.3		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone bed from about 9.5 to 9.8 m.																		
9																				
9.5																				
9.8																				
10																				
11																				
12																				
13																				
13.7																				
14		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, locally moderate shale content, minor occurrences of gypsum and shale																		
14.5																				
15.0																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-OW1 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 30 September 1992 GEOLOGIST BJ ELEVATION m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY				RQD					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)				
											25	50	75	100	25	50	75	100	
		stringers. - Slightly weathered gypsum seam at about 14.3 m. SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, extensive bioturbation at upper contact. Borehole terminated at 15.00 m in shale. NOTE: Borehole drilled using a water well rig, stratigraphy inferred from adjacent borehole P7-I.																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-V 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 19 January 1993 GEOLOGIST SMA ELEVATION 201.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD											
											25	50	75	100	25	50	75	100			
1		FILL Dark yellowish brown clayey silt, some fine sand and fine gravel, DTPL, stiff to hard.																			
2.3		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous, locally minor to moderate shale content.																			
3																					
4																					
5																					
6																					
7																					
8		-Moderate shale content below about 7.6 m.																			
8.3																					
8.6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact																			
9																					
9.5																					
9.8																					
10																					
11																					
12																					
13																					
14.0		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, locally moderate shale																			

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-V 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 19 January 1993 GEOLOGIST SMA ELEVATION 201.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
15.1		content, minor occurrences of gypsum and shale stringers.																	
15.8		SHALE																	
16		Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact.																	
17		GOAT ISLAND DOLOSTONE (continued) -Fractured zone from about 16.0 m to 17.5 m.																	
18.0		Borehole terminated at 18.00 m in dolostone NOTE: Stratigraphy inferred from adjacent borehole P7-I. Borehole cored directly to 18.67 m, logged to confirm contacts and for monitor placement.																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-VI 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 20 January 1993 GEOLOGIST SMA ELEVATION 203.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N	U	V	A	L	%	R	Q	D	%	R	Q	D	%
1	[Cross-hatched pattern]	FILL Dark yellowish brown clayey silt, some fine sand and fine gravel, DTPL, stiff to hard.	[Solid black bar]																	
2																				
3.2																				
4	[Diagonal hatched pattern]	ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous.	[Solid black bar]																	
5																				
6																				
7																				
8																				
9																				
9.6	[Vertical hatched pattern]	VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils, bioturbation at lower contact and fossils at upper contact.	[Solid black bar]																	
10																				
11																				
12																				
13																				
14																				
14.9																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P7-VI 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 20 January 1993 GEOLOGIST SMA ELEVATION 203.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
16.2 - 16.4		<p>GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers, and gypsum nodules.</p> <p>SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact. Borehole terminated at 16.40 m in shale.</p>																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P8-I 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 16 September 1992 GEOLOGIST SMA ELEVATION 204.3 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N	VALUE	WATER %	REC %	RQD %								
												25	50	75	100	25	50	75	100
0.2		TOPSOIL Grey brown clayey silt, rootlets, DTPL, stiff.		1		SS	11	19	40										
1		FILL Light brown clayey silt, rootlets, trace angular gravel, DTPL, very stiff.		2		SS	18	15	40										
1.5		CLAYEY SILT Dark to medium brown, mottled grey, clayey silt, DTPL, very stiff to hard.		3		SS	15	20	56										
2				4		SS	36	17	50										
3				5		SS	42	19	61										
3.8				1		HQ			99	38									
4		ERAMOSIA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, occasional shale stringers, locally weathered and porous to about 7.2 m.		2		HQ			100	54									
5				3		HQ			100	60									
6				4		HQ			100	76									
7				5		HQ			100	80									
8				6		HQ			100	94									
9		-Increasing shale content below about 8.3 m.		7		HQ			100	94									
10				8		HQ			100	100									
11																			
11.6																			
12		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact.		7		HQ			100	94									
12.6																			
13		-Grey dolostone from about 12.6 to 13.3 m, moderate shale content.																	
13.3																			
14				8		HQ			100	100									

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P8-I 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 16 September 1992 GEOLOGIST SMA ELEVATION 204.3 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY				RQD											
				NUMBER	INTERVAL	TYPE	N	VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)									
												25	50	75	100	25	50	75	100						
16		VINEMOUNT SHALE(continued)		9	HQ					100	80														
16.6																									
17		GOAT ISLAND DOLOSTONE Brownish grey, fine crystalline, medium bedded dolostone, occasional shale stringers, minor shale content, minor occurrence of sphalerite mineralization and gypsum seams.		10	HQ					100	91														
17.8		-Two well formed gypsum seams(-5 cm) at about 17.4 m. Borehole terminated at 17.76 m in dolostone.																							

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P8-II 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 17 September 1992 GEOLOGIST SDMA ELEVATION 204.3 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N	VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.2		TOPSOIL Grey brown clayey silt, rootlets, DTPL, stiff.																	
1		FILL Light brown clayey silt, rootlets, trace angular gravel, DTPL, very stiff.																	
1.5																			
2		CLAYEY SILT Dark to medium brown, mottled grey, clayey silt, DTPL, very stiff to hard.																	
3																			
3.8																			
4		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, occasional shale stringers, locally weathered and porous to about 7.2 m.																	
5																			
6																			
7																			
8																			
9		-Increasing shale content below about 8.3 m.																	
10																			
11.0		Borehole terminated at 11.01 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P8-I. Borehole cored directly to 11.01 m, logged to confirm contacts and for monitor																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P9-I 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 18 September 1992 GEOLOGIST SMA ELEVATION 202.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)									
				NUMBER	INTERVAL	TYPE	N	VALUE	% WATER	% REC	% RQD											
												25	50	75	100	25	50	75	100			
1	FILL	Medium grey brown clayey silt, some grey mottling and rust staining, DTPL, firm.		1		SS	5	14	40													
2				2		SS	2	17	20													
2.4				3		SS		18	50													
3	ERAMOSIA DOLOSTONE	Brownish grey to greyish brown, fine crystalline, thin to medium bedded dolostone, locally weathered and porous to about 6.0 m. -Minor shale content and thinly interbedded with shale below about 6.9 m. -Becoming transitional below about 9.8 m.		4		SS	14	62	65													
3				1		HQ		100														
4				2		HQ		100	49													
5				3		HQ		100	40													
6				4		HQ		100	55													
7				5		HQ		100	57													
8				6		HQ		100	90													
10.3				7		HQ		100	95													
11.2				8		HQ		100	100													
11.8	9		HQ		100	89																
12	VINEMOUNT SHALE	Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale interbedded with dolostone, locally interlaminated with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Vertical fractures between about 10.8 and 11.2 m. -Grey dolostone from about 11.2 to 11.8 m, moderate shale content locally. -3 cm cavity with well formed calcite crystals at about 11.6 m.		7		HQ		100	95													
13				8		HQ		100	100													
14				9		HQ		100	89													

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P9-I 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 18 September 1992 GEOLOGIST SMA ELEVATION 202.6 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
15.2		GOAT ISLAND DOLOSTONE		10	HQ			100	100											
16.3	16	Medium grey, fine crystalline, medium bedded dolostone, minor shale content locally, gypsum seam at about 16.1 m with a weathered gypsum seam at about 16.2 m. Borehole terminated at 16.30 m in dolostone.		11	HQ			96	93											

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P9-II 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 22 September 1992 GEOLOGIST SMA ELEVATION 202.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
1		FILL Medium grey brown clayey silt, some grey mottling and rust staining, DTPL, firm.																	
2.4																			
3		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin to medium bedded dolostone, locally weathered and porous to about 6.0 m.																	
4																			
5																			
6																			
7		-Minor shale content and thinly interbedded with shale below about 6.9 m.																	
8																			
9.2		Borehole terminated at 9.22 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P9-I. Borehole cored directly to 9.22 m, logged to confirm contacts and for monitor placement.																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P10-I 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 29 September 1992 GEOLOGIST PW ELEVATION 199.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	WATER %	REC %	RQD %									
											25	50	75	100	25	50	75	100	
0.5		TOPSOIL Dark brown, mottled light brown, clayey silt, rootlets, DTPL, firm.		1	SS	7	18	60											
0.8		CLAYEY SILT Brown, mottled grey and rust brown, clayey silt, DTPL, firm.		2	SS		18	100	15										
1				1	HQ			100											
2		ERAMOSIA DOLOSTONE Greyish brown to brownish grey, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.4 m. -Locally interlaminated to thinly interbedded with shale below about 3.4 m.		2	HQ			100	14										
3				3	HQ			100	28										
4				4	HQ			100	59										
5				5	HQ			100	58										
6.6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone from about 7.8 to 8.2 m, moderate shale content locally.		6	HQ			100	72										
7				7	HQ			99	89										
7.8				8	HQ			99	96										
8.2				9	HQ			100	100										
8				10	HQ			99	63										
9																			
10																			
11																			
11.9																			
12		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to thick bedded dolostone, minor shale content locally, occasional shale stringers. -Large gypsum nodule and gypsum seams between about 12.5 to 12.6 m.																	
13.0																			
13.6																			
14		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact.																	

BOREHOLE LOG		PROJECT: 92377	BOREHOLE: P10-I 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.			DATE: 29 September 1992 GEOLOGIST PW ELEVATION 199.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
16		-Fractured zone from about 14.3 to 14.5 m. GOAT ISLAND DOLOSTONE (continued)		11	HQ					99	99									
17				12	HQ					100	100									
18																				
19		-Minor occurrence of chert below about 18.2 m.		13	HQ					100	95									
20																				
21		ANCASTER CHERT BEDS Brownish grey to grey, very fine crystalline, thin to thick bedded dolostone with numerous chert nodules and layers, occasional shale stringers, locally siliceous, minor occurrences of sphalerite mineralization usually associated with chert.		14	HQ					100	81									
22		-Solution fracture observed at about 21.6 m.		15	HQ					99	94									
23																				
24		-Fractured zone from about 23.0 to 23.1 m.		16	HQ					100	100									
24.3		Borehole terminated at 24.29 m in dolostone																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P10-II 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 30 September 1992 GEOLOGIST PW ELEVATION 199.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
0.5		TOPSOIL Dark brown, mottled light brown, clayey silt, rootlets, DTPL, firm.																	
0.8		CLAYEY SILT Brown, mottled grey and rust brown, clayey silt, DTPL, firm.																	
1		ERAMOSA DOLOSTONE Greyish brown to brownish grey, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.4 m. -Locally interlaminated to thinly interbedded with shale below about 3.4 m.																	
2																			
3																			
4																			
5																			
6																			
6.6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone from about 7.8 to 8.2 m, moderate shale content locally.																	
7																			
7.8																			
8.2																			
8																			
9																			
10																			
11																			
11.9																			
12		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to thick bedded dolostone, minor shale content locally, occasional shale stringers. -Large gypsum nodule and gypsum seams between about 12.5 to 12.6 m.																	
13.0																			
13																			
13.6																			
14		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact.																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P10-II 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 30 September 1992 GEOLOGIST PW ELEVATION 199.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)					
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
15.5		-Fractured zone from about 14.3 to 14.5 m. GOAT ISLAND DOLOSTONE (continued) Borehole terminated at 15.50 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P10-I. Borehole cored directly to 15.50 m, logged to confirm contacts and for monitor placement.																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P10-III 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 1 October 1992 GEOLOGIST PW ELEVATION 199.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY				RQD						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)						
											25	50	75	100	25	50	75	100			
0.5		TOPSOIL Dark brown, mottled light brown, clayey silt, rootlets, DTPL, firm.																			
0.8		CLAYEY SILT Brown, mottled grey and rust brown, clayey silt, DTPL, firm.																			
1		ERAMOSA DOLOSTONE Greyish brown to brownish grey, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.4 m. -Locally interlaminated to thinly interbedded with shale below about 3.4 m.																			
2																					
3																					
4																					
5																					
6																					
6.6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone from about 7.8 to 8.2 m, moderate shale content locally.																			
7																					
7.8																					
8.2																					
8																					
9																					
10																					
11																					
11.9																					
12		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to thick bedded dolostone, minor shale content locally, occasional shale stringers. -Large gypsum nodule and gypsum seams between about 12.5 to 12.6 m. Borehole terminated at 12.98 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P10-I. Borehole cored directly to 12.98 m, logged to confirm contacts and for monitor placement.																			
13.0																					

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P10-IV 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 1 October 1992 GEOLOGIST PW ELEVATION 199.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
0.5		TOPSOIL Dark brown, mottled light brown, clayey silt, rootlets, DTPL, firm.																	
0.8		CLAYEY SILT Brown, mottled grey and rust brown, clayey silt, DTPL, firm.																	
1																			
2		ERAMOSA DOLOSTONE Greyish brown to brownish grey, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.4 m. -Locally interlaminated to thinly interbedded with shale below about 3.4 m.																	
3																			
4																			
5																			
6																			
6.6																			
7		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone from about 7.8 to 8.2 m, moderate shale content locally.																	
7.8																			
8.2																			
8																			
9																			
9.6																			
		Borehole terminated at 9.55 m in shale. NOTE: Stratigraphy inferred from adjacent borehole P10-I. Borehole cored directly to 9.55 m, logged to confirm contacts and for monitor placement.																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P10-V 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 2 October 1992 GEOLOGIST PW ELEVATION 199.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY				RQD						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)					
											25	50	75	100	25	50	75	100		
0.5		TOPSOIL Dark brown, mottled light brown, clayey silt, rootlets, DTPL, firm.																		
0.8		CLAYEY SILT Brown, mottled grey and rust brown, clayey silt, DTPL, firm.																		
1																				
2		ERAMOSA DOLOSTONE Greyish brown to brownish grey, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.4 m.																		
3																				
4		-Locally interlaminated to thinly interbedded with shale below about 3.4 m.																		
4.9		Borehole terminated at 4.89 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P10-I. Borehole cored directly to 4.89 m, logged to confirm contacts and for monitor placement.																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P11-I 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 23 September 1992 GEOLOGIST PW ELEVATION 200.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N	VALUE	% WATER	% REC	% RQD									
												25	50	75	100	25	50	75	100	
1	INDUSTRIAL WASTE Black to dark brown foundry sand interlayered with clayey silt and sands, trace brick fragments and slag, moist, loose to compact. -Black cinder-like material from about 2.3 to 3.5 m. -Numerous rock fragments below about 3.8 m.			1	SS	20	12	50												
2				2	SS	19	13	50												
3					3	SS	8	23	45											
4					4	SS	2	35	50											
5					5	SS	4	30	45											
6					6	SS	23	25	30											
7					7	SS	24	4	2											
8					8	SS	53	12	3											
9					9	SS	15		2											
7.2		-Broken up dolostone from about 6.7 to 7.2 m.		1	HQ			76	24											
7.7	VINEMOUNT SHALE Dark brownish grey to grey, aphanitic to very fine crystalline, thin bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact, locally moderate dolostone content. -Grey dolostone from about 7.2 to 7.7 m, with moderate shale content. -Weathered to about 8.1 m.			2	HQ			100	0											
8				3	HQ			100	49											
9					4	HQ			87	58										
10					5	HQ			100	88										
11.6					6	HQ			100	89										
12	GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, occasional shale stringers, minor to moderate shale content locally, -Fractured zone from about 11.9 to 12.2 m.			7	HQ			100	0											
12.7				8	HQ			100	73											
13	SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact. -Highly fractured from about 13.8 to 14.0 m.			7	HQ			100	0											
13.4				8	HQ			100	73											
14																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P11-I 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 23 September 1992 GEOLOGIST PW ELEVATION 200.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
16		-Fractured zone from about 14.0 to 16.5 m. GOAT ISLAND DOLOSTONE (continued)		9	HQ				100	73									
17				10	HQ				100	98									
18				11	HQ				91	81									
19				12	HQ				100	76									
19.9				13	HQ				100	88									
20		ANCASTER CHERT BEDS Brownish grey, very fine crystalline, thin to medium bedded siliceous dolostone with numerous chert nodules and layers, minor occurrence of shale stringers.		13	HQ				100	88									
21		-Fractures encountered between about 20.7 and 21.6 m.		14	HQ				94	87									
22																			
22.3		Borehole terminated at 22.30 m in siliceous dolostone.																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P11-II 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 24 September 1992 GEOLOGIST PW ELEVATION 200.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100				
1	[Cross-hatched pattern]	INDUSTRIAL WASTE Black to dark brown foundry sand interlayered with clayey silt and sands, trace brick fragments and slag, moist, loose to compact.	[Vertical bar with texture]																			
2		-Black cinder-like material from about 2.3 to 3.5 m.																				
3																						
4		-Numerous rock fragments below about 3.8 m.																				
5																						
6																						
7.2		-Broken up dolostone from about 6.7 to 7.2 m.																				
7.7	[Horizontal line pattern]	VINEMOUNT SHALE Dark brownish grey to grey, aphanitic to very fine crystalline, thin bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact, locally moderate dolostone content.	[Vertical bar with texture]																			
8		-Grey dolostone from about 7.2 to 7.7 m, with moderate shale content.																				
9		-Weathered to about 8.1 m.																				
10																						
11.6	[Horizontal line pattern]	GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, occasional shale stringers, minor to moderate shale content locally.	[Vertical bar with texture]																			
12		-Fracture zone from about 11.9 to 12.2 m.																				
12.7																						
13.4	[Horizontal line pattern]	SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact.	[Vertical bar with texture]																			
14		-Highly fractured from about 13.8 to 14.0 m.																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P11-II 2 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 24 September 1992 GEOLOGIST PW ELEVATION 200.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
16		-Fractured zone from about 14.0 to 16.5 m. GOAT ISLAND DOLOSTONE (continued)																		
16.9		Borehole terminated at 16.90 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P11-I. Borehole cored directly to 16.90 m, logged to confirm contacts and for monitor placement.																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P11-III 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 28 September 1992 GEOLOGIST PW ELEVATION 200.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
1	[Cross-hatched pattern]	INDUSTRIAL WASTE Black to dark brown foundry sand interlayered with clayey silt and sands, trace brick fragments and slag, moist, loose to compact.																
2		-Black cinder-like material from about 2.3 to 3.5 m.																
3																		
4		-Numerous rock fragments below about 3.8 m.																
5																		
6																		
7.2		-Broken up dolostone from about 6.7 to 7.2 m.																
7.7	[Vertical line pattern]	VINEMOUNT SHALE Dark brownish grey to grey, aphanitic to very fine crystalline, thin bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact, locally moderate dolostone content.																
8		-Grey dolostone from about 7.2 to 7.7 m, with moderate shale content.																
9																		
10		-Weathered to about 8.1 m.																
11																		
11.6																		
12	[Vertical line pattern]	GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, occasional shale stringers, minor to moderate shale content locally,																
12.7		-Fracture zone from about 11.9 to 12.2 m. Borehole terminated at 12.74 m in dolostone. NOTE: Stratigraphy inferred from adjacent borehole P11-I. Borehole cored directly to 12.74 m, logged to confirm contacts and for monitor placement.																

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P12-I 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 9 February 1993 GEOLOGIST TLC ELEVATION 201.2 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N	VALUE	% WATER	% REC	% RQD										
												25	50	75	100	25	50	75	100		
1	[Cross-hatched pattern]	INDUSTRIAL FILL Black silty sand to sandy silt, trace gravel, moist to wet, very loose to compact.	[Vertical bar with dots]	1	SS	2			100												
2		2		SS	34			75													
3		3		SS	3			41													
4		4		SS	8			59													
4.9		5		SS	5			82													
5	[Diagonal lines pattern]	CLAYEY SILT TILL Brownish grey to grey, clayey silt, some sub-rounded gravel minor rust staining, APL, firm.	[Vertical bar with dots]	1	HQ			79	28												
8.1		8																			
8.8		9																			
9	[Horizontal lines pattern]	VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils. -Brownish grey dolostone encountered from about 8.1 to 8.8 m.	[Vertical bar with dots]	1	HQ			100	88												
9.9		2		HQ																	
10.2		3		HQ																	
11		4		HQ																	
12.1	[Vertical lines pattern]	GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers, and calcite nodules. -Bioturbation observed at bottom of core. Borehole terminated at 13.20 m. in dolostone.	[Vertical bar with dots]	1	HQ			100	58												
13.2		2		HQ																	
13		3		HQ																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P13-I 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 13 February 1993 GEOLOGIST SMA, TLC ELEVATION 199.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD									
											25	50	75	100	25	50	75	100	
1		FILL Dark grey and brown clayey silt, some sand, gravel and organic matter, moist to saturated, loose to dense.		1	SS	8	18.5	75											
2		-Yellowish brown clay seam from 1.8 to 1.9 m.		2	SS	6	20.4	65											
3				3	SS	42	11.8	65											
4				4	SS	14	24.6	70											
4.4				5	SS	4	21.9	10											
5		ERAMOSA DOLOSTONE Grey brown to grey, fine crystalline, thin bedded dolostone, weathered, moderate to high shale content.		1	HQ				0										
5.5				2	HQ				88										
6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils.		3	HQ				100										
6.3				4	HQ				100										
6.9		-Greyish brown dolostone bed encountered from about 6.3 to 6.9 m.		5	HQ				100										
7				6	HQ				100										
8				7	HQ				100										
9				8	HQ				100										
10				9	HQ				100										
10.7				10	HQ				100										
11		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small vugs.		11	HQ				100										
11.9		-Bioturbation observed at bottom of core. Borehole terminated at 11.89 m in dolostone.		12	HQ				100										

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P14-I 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 27 January 1993 GEOLOGIST SMA ELEVATION 196.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
1	[Cross-hatched pattern]	INDUSTRIAL FILL Brown mixture of sandy silt with clay, gravel, brick and black fine foundry sand, moist, loose.	[Solid grey pattern]	1	SS	28	15.4	60												
2		2		SS	4	17.9	70													
3		3		SS	6	22.6	55													
3.2		4		SS	>30	17.9	100													
3.8	[Vertical line pattern]	VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils and vugs. -Greyish brown dolostone bed encountered from about 3.8 to 4.4 m.	[Solid grey pattern]	1	HQ	.15 m			92	39										
4		2		HQ			100	96												
4.4		3		HQ			100	92												
5		4		HQ			100	96												
6	[Vertical line pattern]	GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers. -Large open fracture encountered at about 8.4 m. -Bioturbation observed at bottom of core. Borehole terminated at 8.80 m in dolostone.	[Vertical line pattern]	1	HQ				100	96										
7		2		HQ					100	96										
7.7		3		HQ						100	96									
8		4		HQ						100	96									
8.8																				

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P15-I 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 26 January 1993 GEOLOGIST SMA ELEVATION 197.4 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)									
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD											
											25	50	75	100	25	50	75	100			
1	[Cross-hatched pattern]	CLEAN FILL Dark brown to black mixture of clay, silt, sand, gravel and rock fill, Moist, compact.	[Solid grey pattern]	1	SS	24	14	60													
2				SS		21.7	70														
3				SS		20.9	75														
4				SS		13.4	40														
4.0	[Diagonal lines pattern]	VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone bed usually associated with bioturbation on lower contacts and fossils at upper contact. -Brownish grey to greyish brown dolostone, moderate shale content locally, from about 4.0 to 5.0 m.	[Solid grey pattern]	1	HQ			55	19												
5.0				2	HQ			100	51												
6				3	HQ			100	88												
7																					
8				4	HQ			100	92												
8.4	[Diagonal lines pattern]	GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers. -Bioturbation observed at bottom of core. Borehole terminated at 9.50 m in dolostone.	[Solid grey pattern]																		
9				5	HQ			100	89												
9.5																					

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P16-I 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 25 January 1993 GEOLOGIST SMA ELEVATION 196.8 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
1.1		FILL Grey clayey silt, some sand and gravel, moist.																		
2		ERAMOSIA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, weathered to about 1.4 m.		1	HQ			60	0											
2.5				2	HQ			100	31											
3.2		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils. Large dolostone bed from about 1.1 - 1.4 m.		3	HQ			90	49											
4.2		-Vertical fracture at about 2.2 m to 2.4 m -Greyish brown dolostone bed encountered from about 3.2 to 4.2 m, transitional.		4	HQ			100	75											
5				5	HQ			100	97											
7.6				6	HQ			97	96											
8		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers, open fractures below about 8.0 m.																		
8.7																				
9.4		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact. Borehole terminated at 9.35 m in shale.																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: P17-1 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 22 January 1993 GEOLOGIST SMA ELEVATION 197.2 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE				RECOVERY (%)				RQD (%)							
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD									
											25	50	75	100	25	50	75	100	
1.2		FILL Greyish brown clayey silt, some sand and gravel, DTPL, very stiff to hard.		1	SS	>30		52											
		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale content, numerous clay partings, some fossils and vugs.		1	HQ	.15 m		79	0										
2				2	HQ			97	23										
3.2		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact.		3	HQ			100	52										
4.0				4	HQ			93	48										
4.9		-Greyish brown dolostone bed encountered from about 4.0 to 4.9 m.		5	HQ			100	82										
6				6	HQ			100	88										
7				7	HQ			100	100										
8.2		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, locally moderate shale content, minor occurrences of gypsum and shale stringers.																	
9																			
9.7		-Large fracture encountered at about 9.2 m.																	
10.1		-Large vug with calcite crystals encountered at about 9.3 m.																	
10		SHALE Dark brownish grey, medium bedded shale, interlaminated with dolostone, bioturbation at upper contact. Borehole terminated at 10.06 m in shale																	
















BOREHOLE LOG	PROJECT: 92377	BOREHOLE: CW2 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 1 October 1992 GEOLOGIST BJ ELEVATION 201.1 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE					RECOVERY				RQD										
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	RECOVERY (%)				RQD (%)								
											25	50	75	100	25	50	75	100					
1		INDUSTRIAL FILL Dark brown to black heterogeneous mix of sand, silt and clay and fine gravel, moist, loose to compact.																					
2																							
3																							
4																							
5																							
6																							
7				-Wet below about 6.6 m.																			
7.5		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils.																					
8																							
8.2																							
9		-Medium grey heavily fractured dolostone from about 7.5 to 8.2 m.																					
10																							
11																							
11.6		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers and vugs.																					
11.9																							
		Borehole terminated at 11.89 m in dolostone. NOTE: Borehole drilled directly to 11.89 m with a water well rig, stratigraphy inferred from adjacent borehole P2-OW1.																					

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: CW3 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 2 October 1992 GEOLOGIST BJ ELEVATION 200.3 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)			
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100
0.3		FILL Medium to dark brown silty sand with clay and gravel, metal fragments, moist.																
1		ERAMOSA DOLOSTONE Brownish grey to grey, fine crystalline, thin bedded dolostone, weathered and very fractured, locally vuggy, minor occurrence of clay infilled fractures and shale stringers.																
2																		
3																		
4																		
5																		
5.8																		
6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils, minor occurrence of clay seams.																
6.7																		
7																		
7.3																		
8																		
9																		
10																		
10.9																		
11		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content locally, occasional shale stringers and calcite nodules, minor occurrences of sphalerite mineralization.																
12.0																		
12.2		SHALE Borehole terminated at 12.19 m in shale. NOTE: Borehole drilled with a water well rig, stratigraphy inferred from adjacent borehole P3-1.																

















BOREHOLE LOG	PROJECT: 92377	BOREHOLE: CW4 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 5 February 1993 GEOLOGIST TWWL ELEVATION 199.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY				RQD						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	%				%					
											25	50	75	100	25	50	75	100		
0.5		FILL Medium to dark brown silty sand with gravel and clay, moist.																		
1		ERAMOSIA DOLOSTONE Brownish grey to grey, fine crystalline, thin bedded dolostone, numerous fractures, occasional shale stringers, locally vuggy, minor occurrence of calcite nodules.																		
2																				
3																				
4																				
5																				
6.3		-Becoming shaly below about 6.1 m.																		
7		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin bedded shale, locally interlaminated to interbedded with dolostone, trace fossils.																		
7.9		-Dolostone bed from about 7.3 to 7.9 m, moderate shale content locally.																		
8																				
9																				
10																				
11.2																				
12		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers and calcite nodules.																		
12.7		Borehole terminated at 12.68 m in dolostone. NOTE: Borehole drilled with a water well rig, stratigraphy inferred from adjacent borehole P4-I.																		

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: CW5 1 of 1
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 1 October 1992 GEOLOGIST BJ ELEVATION 197.3 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE							RECOVERY (%)				RQD (%)				
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	25	50	75	100	25	50	75	100	
1.0		FILL																	
2		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous.																	
3.1		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, occasional mud seams, locally interlaminated to interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact.																	
3.9																			
5.1																			
6		-Dark grey, fine to medium dolostone with moderate to high shale content between about 3.9 to 5.1 m.																	
7																			
8																			
8.6																			
9		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content locally, minor occurrences of gypsum infilling and sphalerite mineralization from about 9.2 to 10.2 m.																	
9.6		-Large fracture at about 8.9 m. Borehole terminated at 9.63 m in shale. NOTE : CW5 was drilled using a water well rig, stratigraphy inferred from adjacent location P5. A 0.6 m difference in elevation occurs between the locations.																	

BOREHOLE LOG	PROJECT: 92377	BOREHOLE: CW7 1 of 2
HYDRAULIC CONTROL INVESTIGATION TARO-WEST QUARRY FOR: TARO AGGREGATES LTD.		DATE: 30 September 1993 GEOLOGIST TWWL ELEVATION 201.9 m ASL

DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	SAMPLE						RECOVERY (%)				RQD (%)						
				NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD										
											25	50	75	100	25	50	75	100		
1		FILL Dark yellowish brown clayey silt, some fine sand and fine gravel.																		
2.3		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, locally weathered and porous.																		
3																				
4																				
5																				
6																				
7																				
8																				
8.3																				
9		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils.																		
10																				
11																				
12																				
13																				
13.7																				
14		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers.																		
14.8	