BOREHOLE LOGPROJECT:92377BOREHOLE:CW72 of 2HYDRAULIC CONTROL INVESTIGATIONDATE:30 September 1993TARO-WEST QUARRYGEOLOGISTTWWLFOR:TARO AGGREGATES LTD.ELEVATION201.9 m ASL

DEPTH (m) STRATIGRAPHIC DESCRIPTION STRATEGRAPHIC DESCRIPTION STRATEGR		M. TARO NOOKBONTES STD.													***				
Borehole terminated at 14.78 m in dolostone. NOTE: Statigraphy inferred from adjacent borehole P7-I. Borehole drilled using a water well rig (air rotary).		УНЧ		K O III		П	S	AM	PLI	E I	1								7
Borehole terminated at 14.78 m in dolostone. NOTE: Statigraphy inferred from adjacent borehole P7-I. Borehole drilled using a water well rig (air rotary).		IGR	STRATIGRAPHIC DESCRIPTION	TAIL	2	RUAL		LUE	TER	o		RE			RY		_		
Borehole terminated at 14.78 m in dolostone. NOTE: Statigraphy inferred from adjacent borehole P7-I. Borehole drilled using a water well rig (air rotary).	(m)	TRAT		30 °	Ω MBI		YPE		i	1 :	ł	ļ.,			_			·	4
NOTE: Statigraphy inferred from adjacent borehole P7-1. Borehole drilled using a water well rig (air rotary).		S	Borehole terminated at 14.78 m in dolostone		-	A	-		,×	.×	~	2	5 50	75 10	00	25	50 7	5 100	닉
			NOTE: Statigraphy inferred from adjacent borehole P7-I. Borehole drilled using a water well rig (air																

BOREHOLE LOGPROJECT:92377BOREHOLE:CW101 of 1HYDRAULIC CONTROL INVESTIGATIONDATE:6 October 1992GEOLOGISTBJFOR:TARO AGGREGATES LTD.

	È		Ī	œ			S	AM	PLI	3		Γ							
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	TOLINO	DETAILS & NUMBER	NUMBER	INTERUAL	TYPE	UALUE	WATER	REC	RQD	RI		OV %)	ER)	RY		QI (%)	
	STR				₹	F	7	z	×	×	*	-	25 5	0 7	5 10	0	25 5	0 75	100
0.5 0.8 1 - 2 - 3 - 4 -		TOPSOIL Dark brown, mottled light brown, clayey silt, rootlets, DTPL, firm. CLAYEY SILT Brown, mottled grey and rust brown, clayey silt, DTPL, firm. 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.			-						-								
7.8 8.2 8 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 from about 7.8 to 8.2 m, moderate shale content locally.			-							A							
11.9 12 12.7		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to thick bedded dolostone, minor shale content locally, occasional shale stringers. Borehole terminated at 12.68 m in dolostone. NOTE: Borehole drilled with a water well rig, stratigraphy inferred from adjacent Borehole P10-I.	 																

Printed: 4 OCT 93

BOREHOLE LOGPROJECT:92377BOREHOLE:CW131 of 1HYDRAULIC CONTROL INVESTIGATIONDATE:16 February 1993TARO-WEST QUARRYGEOLOGISTTWWLFOR:TARO AGGREGATES LTD.ELEVATION199.8 m ASL

DEPTH (m) Fild STRATIGRAPHIC DESCRIPTION Fild Dark grey and brown clayses slit, some sand, gravel and organic matter, moist to saturated, loose to dense. -Yellowish brown clay seam from 1.8 to 1.9 m. ERAMOSA DOLOSTONE Grey brown to grey, fine crystalline, thin bedded dolostone, weathered, moderate to high shale content occurred. VINEMOUNT SHALE Dark brownish grey, aphantic to very fine crystalline, thin to medium bedded with dolostone, trace fossilsGreyish brown dolostone bed encountered from about 6.3 to 6.9 m. GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, weathered, not medium bedded dolostone, trace fossils. GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small wags. Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, wags and the fine occasional small wags.	Dark grey and brown claysy silt, some sand, gravel and organic matter, moist to saturated, loose to dense. -Yellowish brown clay seam from 1.8 to 1.9 m. -Yellowish brown clay seam from 1.8 to 1.9 m. ERAMOSA DOLOSTONE Grey brown to grey, fine crystalline, thin bedded dolostone, weathered, moderate to high shale content. VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace foesils. -Greyish brown dolostone bed encountered from about 6.3 to 6.9 m. GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small vugs. Borehole terminated at 11.69 m in dolostone. NOTE: Borehole drilled with water well rig, stratigraphy inferred from adjacent borehole		7		T				 				T			 		
PLL Dark grey and brown clayey silt, some sand, gravel and organic matter, moist to saturated, loose to dense.	PLIA Dark grey and brown claysy silt, some sand, gravel and organic matter, moist to saturated, loose to dense.	i	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR	DETAILS & NUMBER	NUMBER	INTERUAL	UALUE	WATER	REC	J		(%	6)		(%)	
		3 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4		Dark grey and brown clayey silt, some sand, gravel and organic matter, moist to saturated, loose to dense. -Yellowish brown clay seam from 1.8 to 1.9 m. ERAMOSA DOLOSTONE Grey brown to grey, fine crystalline, thin bedded dolostone, weathered, moderate to high shale content. VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to interbedded with dolostone, trace fossils. -Greyish brown dolostone bed encountered from about 6.3 to 6.9 m. GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content occasional small vugs. Borehole terminated at 11.69 m in dolostone. NOTE: Borehole drilled with water well rig, stratigraphy inferred from adjacent borehole														

BOREHOLE LOG PROJECT: 92377

HYDRAULIC CONTROL INVESTIGATION

TARO-WEST QUARRY

FOR: TARO AGGREGATES LTD.

BOREHOLE: CW15 1 of 1

DATE: 4 February 1993

GEOLOGIST TWWL

ELEVATION 197.7 m ASL

DEPTH (m) STRATIGRAPHIC DESCRIPTION The street of the st		È		~			S	AM	PLI	2								1
PILL Dark brown to black mixture of clay, silt, sand, gravel and rock fill, Moist, compact. 2 3 4.0 4 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 contactBrownish grey to greysh brown dolostone, moderate shale content locally, from about 4.0 to 5.0 m. 8 8.4 GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers. Borehole terminated at 9.45 m in dolostone. NOTE: Borehole drilled with a water well rig,	1	STRATIGRAP	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS NUMBER	NUMBER	INTERUAL	TYPE				RQD	<u> </u>	(%	b)	_	(%)	00
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. 8 8.4 GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers. Borehole terminated at 9.45 m in dolostone. NOTE: Borehole drilled with a water well rig,	2 -		Dark brown to black mixture of clay, silt, sand,		-						-							
9.5 GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers. Borehole terminated at 9.45 m in dolostone. NOTE: Borehole drilled with a water well rig,	5.0 5 -		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								-							
	8.4		Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stringers. Borehole terminated at 9.45 m in dolostone. NOTE: Borehole drilled with a water well rig,															

Printed: 4 OCT 93

BOREHOLE LOG PROJECT: 92377

BOREHOLE: CW16 1 of 1

HYDRAULIC CONTROL INVESTIGATION

TARO-WEST QUARRY

FOR: TARO AGGREGATES LTD.

BOREHOLE: CW16 1 of 1

DATE: 4 February 1993

GEOLOGIST TWWL

ELEVATION 196.8 m ASL

		¥		Τ	~	Ţ		S	AM	PL	E		Γ				T				$\overline{1}$
DEPT	Н	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION		DETAILS L NUMBER	0	Į d		Ä	æ			R)	EC	ΟV	ÆF	RY		RQ	D	
(m)		RAT.		Š		NUMBER	INTERUA	TYPE	VALUE	WATER	REC	P. C.			(%)				(%		
		STE		Ĺ		₹	Z	¥	z	×	×	×	:	25 5	0 7	5 10	0	25	50 7	5 10	0
			FILL Grey clayey silt, some sand and gravel, moist.																		
1.1	1	▩																			
			Brownish grow to growish brown for a growth line this																		
	2 -		Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, weathered to about 1.4 m.																		
2.5	-																				
3.2	3 -		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine																		1
		Z	crystalline, thin to medium bedded shale, locally																		
4.2	4.		interlaminated to interbedded with dolostone, trace fossils.									_									
			-Greyish brown dolostone bed encountered from about 3.2 to 4.2 m, transitional.			Ì										l					-
	5 -		,			Ļ						_									
6	6 -					-						-									-
7	7 -					-						-									
7.6			GOAT ISLAND DOLOSTONE																		Ì
8	3 -		Brownish grey to grey, fine crystalline, thin to			-															
8.7			medium bedded dolostone, moderate shale content, occasional shale stringers, open fractures below about				Ш														
			8.0 m. Borehole terminated at 8.72 m in dolostone.					ł													
			NOTE: Borehole drilled with a water well rig,																		
			stratigraphy inferred from adjacent borehole P16-I.											İ		1					
													i								
																	\perp				

BOREHOLE LOGPROJECT:92377BOREHOLE:CW351 of 1HYDRAULIC CONTROL INVESTIGATIONDATE:5 October 1992TARO-WEST QUARRYGEOLOGISTBJFOR:TARO AGGREGATES LTD.ELEVATION200.9 m ASL

	눋			T		5	SAM	PLI	E						
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS	& NUMBER	TNYEDIA	TYPE	N UALUE	% WATER	% REC	% RQD		(%	VERY	R()	
1 - 1.5	=======================================	SANDY SILT TILL Light brown sandy silt, some topsoil at surface, moist, loose to compact.								_					
2 -		ERAMOSA DOLOSTONE Greyish brown to brownish grey, fine crystalline, thin bedded dolostone, locally weathered and porous to about 3.0 m, minor shale content locally.								-					
4 -										-					
5 -										-					
7.6		-Transitional below about 7.2 m.													
8.8		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to thinly interbedded with dolostone,													
9.3 9		dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone from about 8.8 to 9.3 m, locally minor shale content.													
11											-				
12.7		-Transitional below about 12.4 m. GOAT ISLAND DOLOSTONE													
13.3 13		Brownish grey to grey, fine crystalline, thin to thick bedded dolostone, minor shale content locally, occasional shale stringers. Borehole terminated at 12.29 m in dolostone. NOTE: Borehole drilled with a water well rig, stratigraphy inferred from adjacent Borehole 35-I.													

BOREHOLE LOGPROJECT:92377BOREHOLE:CW361 of 2HYDRAULIC CONTROL INVESTIGATIONDATE:5 October 1992GEOLOGISTBJFOR:TARO AGGREGATES LTD.

	¥		Π	α		_	S	AM	PLI	Ξ										\neg
DEPTH	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	TOR	L NUMBER	~	NE SE		크	2			RI	E C (ΟV	'ER	X		RQ	D	İ
(m)	ME		S I	Ž	NUMBER	INTERVA	TYPE	VALUE	WATER	REC	RQD			%				(%		
	STR				₹	F	7	z	×	×	×	:	5 5	0 7	5 10	0	25	50 7	5 100	
	▓	FILL Light to medium greyish brown sandy silt, some clay,																		
1 .	▓	compact, moist.			-															
	▓																			
2 -	▓										_									
	▓																			
3 -	▓										-									
	▓																			
4.0 4 -	₩	ERAMOSA DOLOSTONE			-						-									
		Brownish grey, fine crystalline, thin to medium					İ									l				
5 -		bedded dolostone, occasional shale stringers and thin gypsum seams, locally porous, minor occurrences of			-						-					İ				
		vugs and sphalerite mineralization.																		
6 -					_						-									
7 -		-Minor shale content locally below about 6.4 m.			-		İ	,			-									
8 -					-						1									
9 -					_															
Í																				
10 -					_															
				-																
11 -				}	-															
12 -				ŀ	-						4									
		-Becoming thinly interbedded with shale below about																		
13 -	7	12.5 mTransitional below about 13.2 m.		ŀ	-						_									
14.0		Transferioral Delow about 13.2 m.																		
14.0 14 -	==	VINEMOUNT SHALE		ŀ							_									
14.9		Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale,																		
14.5						Ш						ш					1	1		

BOREHOLE LOGPROJECT:92377BOREHOLE:CW362 of 2HYDRAULIC CONTROL INVESTIGATIONDATE:5 October 1992TARO-WEST QUARRYGEOLOGISTBJFOR:TARO AGGREGATES LTD.ELEVATION205.1 m ASL

	높		n			S	AM	PLE	Ē.									
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS NUMBER	NUMBER	INTERUAL	TYPE	UALUE	WATER	REC	RQD	RE		V) %)	ERY			QD %)	
	STF			ž	Ħ	۲	z	×	×	×	2	5 50	75	100	2	5 50	75 :	100
16 -		interlaminated to locally interbedded with dolostone, dolostone beds usually associated with bioturbation at lower contact and fossils at upper contact. -Grey dolostone from about 15.0 to 15.5 m,		-														
17 -		locally with moderate shale content.		-														
18 -				-														
18.8		Borehole termoinated at 18.78 m in shale. NOTE: CW36 was drilled using a water well rig, stratigraphy inferred from adjacent location 36-I. A 58 cm differance in elevation occurs between the locations.																
	<u> </u>		<u> </u>	<u> </u>	Ц		<u> </u>											Ш

BOREHOLE LOGPROJECT:94-428BOREHOLE:M11 of 2HYDROGEOLOGICAL INVESTIGATIONDATE:27 October 1993TARO QUARRIES - STONEY CREEKGEOLOGISTPWFOR:TARO AGGREGATES LTD.ELEVATION193.5 m ASL

	È		~	Π		S	AM	PLI	E			T
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	TYPE	VALUE	WATER	REC	RQD	N VALUE	WATER CONTENT (%)
	ST		<i>a</i> - v	Z	Д	_	z	*	×	×	15 30 45 60	10 20 30 40
	臣	VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline			Ш							
	\equiv	shale, occasionally interbedded with dolostone.										
1	亖	•		1						-		
					П							
2												
3	邑			-								
4												
					Ш							
5 -				L	$\ \ $					4		
5.7												
5.7		GOAT ISLAND DOLOSTONE					ĺ					
6		Brownish grey to grey, fine crystalline dolostone with		ŀ						-		
		some shale layers.										
7.1 7					Ш		1					
7.4	=	SHALE			Ш							
		Dark brownish grey, aphanitic to very fine crystalline										
8 -		Shale.		ŀ						-		
					$\ \ $							
9.							ļ					
,										7		
							į					
10 -				-	П					4		
				l	Ш		ļ					
11				l	П							
11 -					Ш					1		
					Ш							
12 -				}								
							.					
4-												
13 -				Ī						1		
14.0 ₁₄ -				<u> </u>	\coprod							
		Borehole terminated at 14.0 m in dolostone. NOTE: No samples were collected from this										
		borehole. Borehole stratigraphy inferred from										
	Ц				11							

BOREHOLE LOG	PROJECT: 94-428	BOREHOLE: M1 2 of 2
HYDROGEOLOGICAL INVESTIGAT	TION	DATE: 27 October 1993
TARO QUARRIES - STONEY CREE	EK	GEOLOGIST PW
FOR TARO AGGREGATES LTD		ELEVATION 193.5 m ASL

	÷			Γ		S	AM	PLI	<u> </u>			
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL		N VALUE	WATER	REC	RQD	N VALUE	(%)
	ST			Z	Н	۲	Z	*	×	*	15 30 45 60	10 20 30 40
	.81	cuttings and Borehole 40-I.				F	2	X X	X .	X	15 30 45 60	10 20 30 40
												- 1:!a - d

BOREHOLE LOG	PROJECT: 94-428	BOREHOLE: M2 1 of 3
HYDROGEOLOGICAL INVESTIGAT	ION	DATE: 29 October 1993
TARO QUARRIES - STONEY CREE	K	GEOLOGIST PW
FOR: TARO AGGREGATES LTD.		ELEVATION 205.4 m ASL

	<u>}</u>					S	AM	PLI	<u></u>			
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL		VALUE	WATER	REC	RQD	N VALUE	WATER CONTENT (%)
	ST			ž	F	í-	z	×	×	×	15 30 45 60	10 20 30 40
1 -		CLAYEY SILT Brown to grey brown clayey silt.								1		
3 -										-		
4.1 4 -		ERAMOSA DOLOSTONE Brownish grey, fine crystalline dolostone with		-						-		
5		occasional shale layers		-						_		
6 -				Ē								
7 -												
8 -												
9 -				-						-		
10 -												
11 -												
12 -				•				i				
13 -				-				-		-	,	
14 -				-								

BOREHOLE LOGPROJECT:94-428BOREHOLE:M22 of 3HYDROGEOLOGICAL INVESTIGATIONDATE:29 October 1993TARO QUARRIES - STONEY CREEKGEOLOGIST PWFOR:TARO AGGREGATES LTD.ELEVATION 205.4 m ASL

	ΣΤ						S	AM	PLI	<u> </u>						
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR	& NUMBER	NUMBER	INTERUAL	турЕ	UALUE	WATER	REC	RQD	N	VA	LUE	CO	ATER NTENT (%)
	STR				ž	Ħ	۲	z	×	*	*	15	30	45 60	10 2	0 30 40
16 -		ERAMOSA DOLOSTONE (continued)														
17.0						Ш										
18		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline shale, interbedded with dolostone.									-					
19											_					
20 -					-						-					
21																
22 22.4																
23		GOAT ISLAND DOLOSTONE Brownish grey, fine crystalline dolostone, occasional shale stringers.			-						-					
24.2 24											-					
24 .6		SHALE Dark brownish grey, aphanitic to very fine crystalline is shale.		-	-						-					
26																
27																
28																
29																

BOREHOLE LOGPROJECT:94-428BOREHOLE:M23 of 3HYDROGEOLOGICAL INVESTIGATIONDATE:29 October 1993TARO QUARRIES - STONEY CREEKGEOLOGISTPWFOR:TARO AGGREGATES LTD.ELEVATION205.4 m ASL

	È					S	AM	PLI	3			
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS NUMBER	NUMBER	INTERVAL	TYPE	VALUE	WATER	REC	RQD	N VALUE	(%)
	STI			ž	Ħ	F	z	*	×	*	15 30 45 60	10 20 30 40
3 0.5 3 0.9		ANCASTER CHERT BEDS Brownish-grey, very fine crystalline siliceous /										
30.9												

Printed: 1 SEP 94

BOREHOLE LOG BOREHOLE: M3 1 of 2 **PROJECT: 94-428** HYDROGEOLOGICAL INVESTIGATION **DATE:** 29 October 1993 GEOLOGIST PW TARO QUARRIES - STONEY CREEK **ELEVATION** 191.8 m ASL FOR: TARO AGGREGATES LTD.

	È		~			S	AM	PLI	3			
DEPTH	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	E.	TUBL		UALUE	WATER	٥	a	N VALUE	WATER CONTENT
(m)	RAT		5 H 4	NUMBER	INTERUA	TYPE		i	REC	RQD	1 1 1 1	(%)
	ST			z	П	_	z	×	*	*	15 30 45 60	10 20 30 40
0.3	-	ROAD BASE Brown gravelly sand.										
		VINEMOUNT SHALE			П							
1 -		Dark brownish grey, aphanitic to very fine crystalline		ł						-		
	==	shale, occasionally interbedded with dolostone.										
2 -				t						-		
_					П							
3 -												
4 .	==									-		
"												
5.2 5 -				1						_		
0.2		GOAT ISLAND DOLOSTONE										
		Brownish grey to grey, fine crystalline dolostone,										
, 6	\overline{Z}	moderate shale content.		-						-		
6.4					Н							
6.9		SHALE	r "	1	П							
7		Dark brownish grey, aphanitic to very fine crystalline is shale.	1	ŀ						-		
		Sitate.		١	П							
								Ì		ļ		
8				1						-		
1				1	П							
_			Ì		Ш		İ	}				
9				Ī						-		
10 -				L						۱ -		
10 -												
	\subseteq							•	1			
11				ŀ								
		•								l		
				1								
12				ŀ						-		
13.2 13	\Box		1	ŀ						'	1	
13.4		ANCASTER CHERT BEDS	 	╀	+		-	┼	├	┼		
1		Light brownish-grey, very fine crystalline siliceous										
		dolostone with numerous chert nodules and layers.										
1		Borehole terminated at 13.4 m in siliceous dolostone.								1		
		NOTE: No samples were collected from this										
Prints	d. 1	SEP 94							F	-	artner le	e Limited
E. TUCE	u. 1	JEI UT							_		, EC	

BOREHOLE LOGPROJECT:94-428BOREHOLE:M32 of 2HYDROGEOLOGICAL INVESTIGATIONDATE:29 October 1993TARO QUARRIES - STONEY CREEKGEOLOGIST PWFOR:TARO AGGREGATES LTD.ELEVATION 191.8 m ASL

	눛		α			S	AM	PLI	3				WATER
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERVAL	TYPE	N UALUE	. WATER	REC	RQD		ALUE	(%)
	8	horehole. Borehole stratigraphy inferred from		Z	Ħ	-	Z	*	",	×	15 30	45 60	10 20 30 40
	ST	borehole. Borehole stratigraphy inferred from cuttings and Borehole 40-I.		N	2	(T	Z	*	×	×	15 30	45 60	10 20 30 40
										l			

BOREHOLE LOGPROJECT:94-428BOREHOLE:M41 of 1HYDROGEOLOGICAL INVESTIGATIONDATE:18 April 1994TARO QUARRIES - STONEY CREEKGEOLOGISTBMHFOR:TARO AGGREGATES LTD.ELEVATION192.1 m ASL

	¥		Ω.			S	AM	PL	E							
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS L NUMBER	NUMBER	INTERUAL	TYPE	VALUE	WATER	REC	RQD			LUI	CO	AT) NTI (%)	ENT
	STI			ž	F	L	z	×	×	×	1	5 30	4 5 60	10 2	0 30	40
1 - 2 - 3 - 3.7 4 - 4 - 5 - 6 - 7 - 6 - 10.8 11 - 12 - 12 - 12 - 12 - 12 - 12 - 12		COMPACTED CLAY FILL Brown clayey silt, APL. QUARRY RUBBLE Grey fine crystalline shaley dolostone quarry rubble, loose, saturatedConcrete tile encountered during drilling.				GS										
12.8		Recovery well terminated at about 12.8 m in dolostone.														

Printed: 1 SEP 94

BOREHOLE LOGPROJECT:94-428BOREHOLE:M4R1 of 1HYDROGEOLOGICAL INVESTIGATIONDATE:28 July 1994TARO QUARRIES - STONEY CREEKGEOLOGISTPWFOR:TARO AGGREGATES LTD.ELEVATION192.6 m ASL

TOK.		RO AGORDATES ETD.	1	_			~								
	臣		0	片		:	SAN	IPL:	E T	Ι	ł			WA	TER
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR		NUMBER	TYPE	VALUE	WATER	REC	RQD	N	VAL	UE	CON	FENT 6)
	STR			٦	Ž	₹ }	z		*	×	15	30 45	60	10 20	30 40
		COMPACTED CLAY FILL						1							
	₩	Brown clayey silt, APL.			l										
1 -										-	1				
	₩														
2 -	▓							i		-					
	₩														
3 -	₩									_					
3.7	₩				1	Ì									
4		QUARRY RUBBLE								_					
,	$\overset{**}{ imes}$	Grey fine crystalline shaley dolostone quarry rubble, loose, saturated.													
	***				-										
5 -	▓														
	▓														
6 -	₩														

7 -	***				١					-					
	▓														
8 -	₩									-					
	₩				-										
9	₩				-			ļ							
	₩				1										
10 -	***		Ē			İ									
	▓														
10.8	₩	GOAT ISLAND DOLOSTONE													
''		Brownish grey to grey fine crystalline dolostone.	II												
			‡												
12				t											
12.8	\subseteq														
		Recovery well terminated at 12.8 m in dolostone.													
				\perp	\perp		<u> </u>								

BOREHOLE LOG	PROJECT: 93-378	BOREHOLE: G1 1 of 1
METHANE GAS INVESTIGATION		DATE: 11 November 1992
TARO - WEST QUARRY		GEOLOGIST PW
FOR: TARO AGGREGATES LTD.		ELEVATION 202.9 m ASL

FOR:		O AGGREGATES ETD.										7		
	¥		~			SAM	PLI	3						
	STRATIGRAPHY		MONITOR DETAILS & NUMBER											_
DEPTH	뜅	STRATIGRAPHIC DESCRIPTION	HES	ıκ	INTERVAL	VALUE	WATER				OVERY	1	RÇ	
(m)				196	אַ שַּ	ı ₹	⊈	REC	RQD	(%)	l	(%	b)
()			204	NUMBER		z	× ×	×	×	25.5	0 75 100	1	5 50	75 100
	io	INDUSTRIAL FILL		1			<u> </u>	20		433	75100	l " i	1	15 100
	₩	Black foundry sand intermixed with gravel, brick		1		1.0		•						
	▓	fragments and slag, moist, loose to compact.		2	S	S 13		50			.			
1 -	₩			- 1	3	5 13		30	-					
	₩	-Occasional clayey silt nodules between about 0.8 and 3.0 m.									.			
	₩	and 5.0 m.		3	S	S 7		50						
2 -	₩		l L		蓋									
	₩			4	S	S 5		40						
_	₩								_	_				
3 -	₩			5	S	S 12		40			1 1			
	₩													
4.	₩		#	- 6	S	S 32		40	-					
,	₩		E	ľ		_		"						
	₩	-Becoming silty below about 4.5 m.		7	s	S 10		40		=				
5 -	₩		#	F					-					
l .	₩		ΙΞ		П									
	₩		1 1				1							
, 6.	₩	-Grey clayey silt from about 6.1 to 6.7 m.	1 #	١.				65	•					
	₩	-Gley Clayey and from about 0.1 to 0.1 iii.		8	S	S 15		65						
	₩		#											
7 -	₩		1 #						•	1				
	₩	D 11.1 hout #0.00	1 🕸		Ц									11
	₩	-Becoming saturated below about 7.0 m.		9	s	S 32		60	١.					
8.2 8	₩		33	-		+	├—	-		\vdash	\vdash	╁		++-
		Borehole terminated at 8.23 m in industrial fill.										ı		
												l		
					Ш									
						ŀ						1		
				1	Ш			İ						
			1				İ	ļ						
					Ш									
			1		Ш	- 1								
				1										
						ļ								
												ĺ		
												1		
				1										
1									1					
1														
			ــــــــــــــــــــــــــــــــــــــ	1	Ц.			<u></u>	<u> </u>		للللل			

BOREHOLE LOGPROJECT: 93-378BOREHOLE: G2 1 of 1METHANE GAS INVESTIGATIONDATE: 12 November 1992TARO - WEST QUARRYGEOLOGIST PWFOR: TARO AGGREGATES LTD.ELEVATION 203.3 m ASL

															111		
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL		NALUE WA	WATER	REC	RQD	RE(CO'	VER	RY		RQ]	
	STR/		ĮŽ ⊡̃ •¥	5	H	TYPE	5 z	3	22	× ×				+		-	
	*	INDUSTRIAL FILL Dark brown to black, mottled greenish grey to light brown, clayey silt, intermixed with wood and gravel,		1	SHEET ALTES	SS	26	-	50	•``	25	50	75 10	0	25 8	0 7	5 100
1		moist, compact to dense. -Becoming black foundry sand intermixed with some	***************************************				9		40	-							
2 -	***	gravel, brick fragments and slag below about 1.5 m.		-	The state of the s	SS SS	73		30 60	_		=					
3 -			HHHH		靈	ss	18		50	-		-					
4		-Increasing silt content below about 3.7 m.		6		ss	13		50								
4.9	₩		1	7		SSR	efus	ıl	0		•						
		Borehole terminated at 4.88 m due to refusal.															

BOREHOLE LOG	PROJECT: 93-378	BOREHOLE: G3 1 of 1
METHANE GAS INVESTIGATION TARO - WEST QUARRY		DATE: 13 November 1992 GEOLOGIST PW/BMH
FOR: TARO AGGREGATES LTD.		ELEVATION 204.8 m ASL

		ICONDO.TIZO DID.				-	AM	PLE	1									$ar{\exists}$
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	TYPE	N VALUE	% WATER	% REC	% RQD		CO (%	6)	RY	25	RQ (%	·)	00
	Dar with	NUSTRIAL FILL k brown, mottled black, clayey silt intermixed in gravel and brick fragments, moist loose to apact.		3		SS SS SS SS	3 2 5 9 9	×	65 50 85	×	255	5 50	751	00	25	50 1	75 10	0
7.3	Bor	rehole terminated at 7.32 m in fill.																

BOREHOLE LOGPROJECT: 93-378BOREHOLE: G4 1 of 1METHANE GAS INVESTIGATIONDATE: 12 January 1993TARO - WEST QUARRYGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION 205.1 m ASL

FUR:	I W	RU AGGREGATES LTD.					1 -	·II	4 W	101	`	203.1	111 /	יטר	
	¥		~			SAM	PLI	E							
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	TYPE	N VALUE	% WATER	% REC	% RQD		COV (%)		(RQD (%)	
1 -		CLAYEY SILT FILL Grey brown clayey silt fill, some sand and gravel, moist, stiff to hard.		2	ss	6		75 40 65	_						
2 -				3 - 4 5		12		100	_						
4.0 4.3 4 -	**	SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin to medium		- 6 1		70		89 90	73 10 <u>0</u>			=			
5 -		bedded dolostone, shale content locally. Measured water level on January 31, 1993 was about 6.2 m.		3	но			100	92			•	4		A
7.0 ₇ -		Borehole terminated at 7.03 m in dolostone.													

BOREHOLE LOGPROJECT: 93-378BOREHOLE: G5 1 of 1METHANE GAS INVESTIGATIONDATE: 14 January 1993TARO - WEST QUARRYGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION 202.9 m ASL

DEPTH (m) STRATIGRAPHIC DESCRIPTION STRATIGUE DESCRIPTION STRATIGUE DESCRIPTION	FUR: 1	<u> </u>	O AGGREGATES LTD.			_						101					
TOPSOIL Grey brown clayey silt topsoil, some rootlets, trace fine gravel, moist, loose. CLAYEY SILT FILL Grey brown clayey silt fill, trace fine gravel, moist, soft to hard. 2 -Rust staining observed below about 2.3 m. SS 31 60 4 SS 100 Brownish grey, fine crystalline, thin bedded dolostone, minor occurrences of shale stringers and vugs. HQ 100 100 Measured water level on January 31, 1993 was about 4.9 m.		ξΪ		~			S	ΑM	PLI	3							
TOPSOIL Grey brown clayey silt topsoil, some rootlets, trace fine gravel, moist, loose. CLAYEY SILT FILL Grey brown clayey silt fill, trace fine gravel, moist, soft to hard. 2 -Rust staining observed below about 2.3 m. SS 31 60 4 SS 100 Brownish grey, fine crystalline, thin bedded dolostone, minor occurrences of shale stringers and vugs. HQ 100 100 Measured water level on January 31, 1993 was about 4.9 m.	DEPTH (m)	RATIGRAP	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	JMBER	TERUAL	YPE				ROD		(%)			(%	b)
Grey brown clayey silt topsoil, some rootlets, trace fine gravel, moist, loose. CLAYEY SILT FILL Grey brown clayey silt fill, trace fine gravel, moist, soft to hard. 3 SS 31 60 -Rust staining observed below about 2.3 m. ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin bedded dolostone, minor occurrences of shale stringers and vugs. HQ 100 100 Measured water level on January 31, 1993 was about 4.9 m.		ST			Ž	1.1			×		*	25	50 7	100	25	50	75 100
Grey brown clayey silt fill, trace fine gravel, moist, soft to hard. -Rust staining observed below about 2.3 m. SS 31 60 -Rust staining observed below about 2.3 m. Brownish grey, fine crystalline, thin bedded dolostone, minor occurrences of shale stringers and vugs. HQ 91 52 HQ 100 100 Measured water level on January 31, 1993 was about 4.9 m.			Grey brown clayey silt topsoil, some rootlets, trace fine gravel, moist, loose.								-						
3.0 3 ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin bedded dolostone, minor occurrences of shale stringers and vugs. HQ 100 100 Measured water level on January 31, 1993 was about 4.9 m.	2				}		SS	31		60	-		=				
5.7 1993 was about 4.9 m.	3.0																
5.7 1993 was about 4.9 m.			Brownish grey, fine crystalline, thin bedded dolostone, minor occurrences of shale stringers and	HHHHH			НQ			91	52						
5.7 1993 was about 4.9 m.				HHHHH			НQ			100	100						
	F			±													
	3.7	4	Borehole terminated at 5.71 m in dolostone.		-	M						\vdash	T	1	\Box	十	++

BOREHOLE LOGPROJECT:93-378BOREHOLE:G61 of 1METHANE GAS INVESTIGATION
TARO - WEST QUARRY
FOR:DATE:14 December 1993
GEOLOGISTFOR:TARO AGGREGATES LTD.ELEVATION201.2 m ASL

		NO MOORDOMED DID.											
	ΗY		~			SAM	PL	E					
DEPTH (m)	ткаттакарну	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	4 UALUE	% WATER	% REC	S G	(OVERY	(9	QD %)
(m) 1 - 2.3 2 - 2.7 3 - 4 - 5.3 5 -	STRAT	CLAYEY SILT FILL Light to medium grey brown clayey silt fill, some fine gravel and rootlets, moist, very stiff to hard. SANDY SILT TILL Light to medium grey brown sandy silt, trace gravel, moist, very dense. Rust staining observed below about 2.7 m. ERAMOSA DOLOSTONE Greyish brown, fine crystalline, thin to medium bedded dolostone, minor occurrences of shale stringers and vugs. Measured water level on January 28, 1993 was about 3.0 m. -0.17 m vertical fracture encountered at about 4.1 m. Borehole terminated at 5.30 m in dolostone.		2 3 1 2 - 3	SS SS SS HC	Z 25 26 56	*	80 75 100 100	90 95 0_	25 5	0 75 100	25 50	75 100

BOREHOLE LOGPROJECT: 93-378BOREHOLE: G7 1 of 1METHANE GAS INVESTIGATION
TARO - WEST QUARRYDATE: 30 January 1993
GEOLOGIST SMA
ELEVATION 199.6 m ASL

FOR:	TAI	RO AGGREGATES LTD.						E	LE	VAI	ION	199.0	o m	10L	
	\					S	AM	PLE	3						
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	TYPE	N VALUE	% WATER	% REC	% RQD	(OVERY %) 75 100		RQI (%)	
1.3 1 - 2 - 3 - 4 -		SILTY SAND TILL Dark yellow brown silty sand, some sub-angular to sub-rounded gravel, trace clay, moist. ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone. Measured water level on January 31, 1993 was about 2.5 m.		1 2					100 100	49-		-			
5 - 6.3			#######################################	4					100	61				•	
		Borehole terminated at 6.30 m in dolostone. NOTE: Borehole augered directly to 1.3 m statigraphy inferred from cuttings.													

BOREHOLE LOG	PROJECT: 93-378	BOREHOLE: G8 1 of 1
METHANE GAS INVESTIGATION		DATE: 29 January 1993
TARO - WEST QUARRY		GEOLOGIST SMA
FOR: TARO AGGREGATES LTD.		ELEVATION 200.1 m ASL

FOR:	IA.	RO AGGREGATES LTD.						1 1	LE	VA.	110	N	20	0.1	m	AS	L
	¥					S	AM	PLI	<u> </u>								
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS NUMBER	NUMBER	INTERUAL	TYPE	N VALUE	% WATER	% REC	% RQD	L.,	(%	VEI 6) 75 10		25	RQ (% 50 7	
(m) 1 - 1.8 2 - 5 - 6 - 6.9	NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN	SILTY SAND TILL Dark yellow brown silty fine sand, trace gravel, moist. ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone. Measured water level on January 31, 1993 was about 3.4 m. Borehole terminated at 6.89 m in dolostone. NOTE: Borehole augered directly to 1.8 m statigraphy inferred from cuttings.	HITHITITITITITITITITITITITITITITITITITI	BUNN 2		TYPE				20_	2		•	1	25		-

BOREHOLE LOG	PROJECT: 93-378	BOREHOLE: G9 1 of 1
METHANE GAS INVESTIGATION		DATE: 3 February 1993
TARO - WEST QUARRY		GEOLOGIST SMA
FOR: TARO AGGREGATES LTD.		ELEVATION 202.1 m ASL

STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	ror ILS 18ER		Т	SA	4M	PLE	: 1								
TRATIGRAPH	STRATIGRAPHIC DESCRIPTION	FI S H		T	Т											
U) I		MONITOR DETAILS & NUMBER	NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD		(%	ER'			QD 6) 75 10	0
	CLAYEY SILT FILL Grey brown clayey silt, trace fine sand and gravel, rootlets, moist, hard. SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale. -Calcite on fracture at about 4.2 m. Borehole terminated at 7.82 m in dolostone.	HITHER HEALTH HE HEALTH HE HEALTH HE HEALTH HEALTH HEALTH HEALTH HEALTH HEALTH HEALTH HEALTH HEALTH	2 3 1 2	FINANCE SERVIC	SSS SS SS HQ HQ	18 51	16.8 17.7	95 55 100 100 100	00H × 64 79 92		(%)		25 50	75 10	0
		SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale. -Calcite on fracture at about 4.2 m.	SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale. -Calcite on fracture at about 4.2 m.	SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale. -Calcite on fracture at about 4.2 m.	SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale. -Calcite on fracture at about 4.2 m.	rootlets, moist, hard. 1 SS 2 SS 2 SS 3 SS HQ Provided dolostone, localized shale. -Calcite on fracture at about 4.2 m.	rootlets, moist, hard. 1 SS 18 2 SS 51 SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale. -Calcite on fracture at about 4.2 m. 3 HQ 4 HQ	rootlets, moist, hard. 1 SS 18 16.8 2 SS 51 17.7 SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale. -Calcite on fracture at about 4.2 m. 3 NHQ 4 HQ	1 SS 18 16.8 95	rootlets, moist, hard. SS 18 16.8 95 17.7 55	SANDY SILT TILL	rootlets, moist, hard. 1	SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale. -Calcite on fracture at about 4.2 m. Borehole terminated at 7.82 m in dolostone.	SANDY SILT TILL ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, localized shale. -Calcite on fracture at about 4.2 m. Borehole terminated at 7.82 m in dolostone.	Toollets, moist, hard. 1 SS 18 16.8 95 2 SS 51 17.7 55 3 SS 58 51 17.7 55 3 SS 58 51 10.9 100 64 1 RQ 100 79 1 HQ 100 79 1 HQ 100 92 1 HQ 100 92 1 HQ 100 92 1 HQ 100 92 1 HQ 100 92	SS 18 16.8 95

BOREHOLE LOGPROJECT: 93-378BOREHOLE: G10 1 of 1METHANE GAS INVESTIGATION
TARO - WEST QUARRY
FOR: TARO AGGREGATES LTD.DATE: 4 February 1993
GEOLOGIST SMA
ELEVATION 203.0 m ASL

FOR:	17	RO AGGREGATES LTD.						LIL	Y A	HON	203.0) m A51	
	¥		_~		5	SAM	PLI	E					
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUBL	N VALUE	% WATER	% REC	א תמם	RECO (%		RQ (%))
1 -		CLAYEY SILT FILL Brown with grey mottling clayey silt, trace sand and roots, moist, compact.		2	SS	18		100 50	-				
1.9 2.1 2 -		SILTY SAND TILL Brown silty sand trace clay and gravel. ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin		-	HQ		cm	100 100	59 -			A	
4 -		bedded dolostone, localized shale content. Porous from about 4.0 to 7.7 m.	***************************************	2				100	ı				
6 -		Borehole terminated at 6.38 m in dolostone.		- 3	ng			100	,				

BOREHOLE LOG	PROJECT: 93-378	BOREHOLE: G11 1 of 1
METHANE GAS INVESTIGATION TARO - WEST QUARRY		DATE: 3 February 1993 GEOLOGIST SMA
FOR: TARO AGGREGATES LTD.		ELEVATION 203.3 m ASL

	左		C			SAM	PLE	C							
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	TYPE	UALUE	WATER	REC	Rão		(%			RQ (%)
	ST		Apidat, t. non silak	Z	1-	Z	×	×	*	25	50	75 100	25	50 7	75 100
1 -		CLAYEY SILT FILL Mottled grey and brown clayey silt, some gravel, moist to wet, hard.		1 - 2	SS		24.6 13.7								
2.3		ERAMOSA DOLOSTONE		- 3 1	SS HO	} 2 2	29.7	100 100	24			‡			
3 -		Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, some shale stringers and vugs.		2	н	5		98	62					•	
4 -		-Porous from about 3.8 to 4.1 m.	***************************************	-	SS HO HO HO				_						
5 -				_ 3	Н	5		100	88						
6		-Porous from about 4.6 to 4.8 m.	##	4	н	5		100	72						4
7.3		Borehole terminated at 7.33 m in dolostone.		-					-						

BOREHOLE LOGPROJECT: 93-378BOREHOLE: G12 1 of 1METHANE GAS INVESTIGATIONDATE: 30 January 1993TARO - WEST QUARRYGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION 203.0 m ASL

					_											
	STRATIGRAPHY		成 公 開		IJ	S	AM	PLI	Ξ							
DEPTH	IGR	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	ER	RUBL		VALUE	WATER	o	0	RE		VERY	1	RQ	
(m)	TRAI		₽ 3	NUMBER	INTERUA	TYPE	2	WW %	% REC	% RQD	<u>_</u>	(%	-	-	(%	
	φ 	CLAYEY SILT FILL			f	_		<u>`</u>	•		2	5 50	75 100	25	50 7	5 100
		Mottled grey and brown clayey silt, some gravel, moist.														
1	▓			-						-						
2	▩									_						
	▓															
3.3	▩		#	Ĺ				:		-						
	×××	ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin		1		НQ			100	71			•		4	
4		bedded dolostone.	#							_						
_		Measured water level on January 31, 1993 was about 4.7 m.	#	2		нQ			100	89						•
5 -										-						
6 -			#													
		-Calcite on fracture at about 6.7 m.	***************************************	3		НQ			100	95			•			4
7 -				-												
			#													
8 - 8.5			7	4		HQ			100	100						Ī
		Borehole terminated at 8.46 m in dolostone. NOTE: Borehole augered directly to 3.3 m.													\prod	
		Statigraphy infered from adjacent borehole G11 and auger cuttings.														
		•														
			L.,		Щ											

BOREHOLE LOGPROJECT:93-378BOREHOLE:G131 of 1METHANE GAS INVESTIGATIONDATE:31 January 1993TARO - WEST QUARRYGEOLOGISTSMAFOR:TARO AGGREGATES LTD.ELEVATION201.9 m ASL

	λΗ		<u>n</u>			S	AM	PLI	E									
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERVAL	TYPE	UALUE	WATER	REC	RQD		(%)			(9	QD %)	
	STF			ž	Ħ	Ť	z	*	*	*	2	5 5	0 75	100	2	5 50	75 1	00
1 -		CLAYEY SILT FILL Mottled grey and brown clayey silt, trace sand and gravel, moist.								-								
2.1 2	▓	ERAMOSA DOLOSTONE		1	2	НQ			100	47				-				
3		Brownish grey to greyish brown, fine crystalline, thin bedded dolostone.	HANAMAN							_								
4				2		HQ HQ			100	76								
5 -			***************************************	- 3		НQ			100	78-				-				
6				-						<u>-</u>								
7.1 7		Borehole terminated at 7.14 m in dolostone.		4		HQ			100	82								
		NOTE: Borehole augered directly to 2.1 m. satigraphy inferred from adjacent borehole G11 and auger cuttings.												; ;				
										=								
.																		

BOREHOLE LOG	PROJECT: 93-378	BOREHOLE: G14 1 of 1
METHANE GAS INVESTIGATION		DATE: 5 February 1993
TARO - WEST QUARRY		GEOLOGIST SMA / HM
FOR: TARO AGGREGATES LTD.		ELEVATION 203.1 m ASL

FOR	:	TΑ	RO AGGREGATES LTD.						F	ELE	VA.	LIO	<u>N</u>	203.	l m	AS	L
DEPT	Н	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	a:	ZUAL.		AM B	MATER			RE	CO.	VERY		RÇ)D
(m))	STRAT		MON DET	NUMBER	INTERUA	TYPE	N VALUE	MA %	% REC	% RQD	25	50	75 100	25	(% 50	75 100
	1 -		CLAYEY SILT FILL Medium grey brown clayey silt, some grey mottling and rust staining, moist, firm.								-						
3.1	2 -			HHHHH							-						
	4 -		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, heavily fractured to about 4.7 m, occasional shale stringers and gypsum infilling.	***************************************	1		HQ			100	21						
	5 - 6 -			************	- ²		HQ			100	99						
7.3	7 -		Borehole terminated at 7.3 m in dolostone.	#	3		HQ			100	70						
			NOTE: Borehole augered directly to 3.1 m statigraphy inferred from adjacent borehole P9-I.														

BOREHOLE LOG PROJECT: 93-379 BOREHOLE: G18 1 of 1

METHANE GAS INVESTIGATION TARO AGGREGATES STONEY CREEK ONTARIO

FOR: TARO AGGREGATES LTD.

DATE: 16 July 1993 GEOLOGIST SMA

ELEVATION m ASL

FOR:		O AGGREGATES ETD.			=		434	DII	7			
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL		N VALUE	% WATER 74	% REC	א מפס	N VALUE 15 30 45 60	WATER CONTENT (%) 10 20 30 40
	•	INDUSTRIAL FILL Black clayey silt, some fine sand and trace organic material, moist, loose to compact.										
1 -		-Strong odour detected in samples 1 and 2.		1		SS	2		100	-		
2 -			######################################	2		SS	5		80	•		
2 .6		-Becoming grey below about 2.4 m.		3		SS	17		50			
		Borehole terminated at 2.59 m in industrial fill.										

BOREHOLE LOGPROJECT: 93-379BOREHOLE: G19 1 of 1METHANE GAS INVESTIGATIONDATE: 16 July 1993TARO AGGREGATES STONEY CREEK ONTARIOGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION m ASL

	<u> </u>	Π			S	AM	PLI	E			
DEPTH (m)	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL		N VALUE	% WATER	% REC	% RQD	N VALUE 15 30 45 60	WATER CONTENT (%)
1 -	INDUSTRIAL FILL Black silty sand, some clay and gravel, moist, compact.		1		ss	4		60			
2	-Strong odours detected in all samples.		2		SS	19		30	•		
3.0	-Becoming grey below about 2.9 m. Borehole terminated at 2.95 m in industrial fill.		3		SS	10		100			

BOREHOLE LOGPROJECT: 93-379BOREHOLE: G20 1 of 1METHANE GAS INVESTIGATIONDATE: 16 July 1993TARO AGGREGATES STONEY CREEK ONTARIOGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION m ASL

FUR:	171	RO AGGREGATES LTD.										
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL		A NOTOE N	% WATER T	% REC	% RQD	N VALUE	WATER CONTENT (%) 10 20 30 40
		INDUSTRIAL FILL Dark grey silty sand, some clay and trace gravel, moist, dense.										
1 -		-Slight odour detected in sample 1 and 3.		1		SS	10		75			
- 2 -		Paraming block below about 2.4 m	HHHHH			ss /	0.15		100			
2.9		-Becoming black below about 2.4 m. Borehole terminated at 2.94 m in industrial fill.										

BOREHOLE LOGPROJECT: 93-379BOREHOLE: G21 1 of 1METHANE GAS INVESTIGATIONDATE: 16 July 1993TARO AGGREGATES STONEY CREEK ONTARIOGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION m ASL

DEPTH (m) E STRATIGRAPHIC DESCRIPTION C E E E E E E E E E	È		n			SA	M	PLI	3		
INDUSTIAL PILL Greyish brown sand, some silt and clay loose, moist. 1 SS 3 60 -Black staining from about 1 m to about 1.4 mSlight odour detected in sample 1. 2 SS 4 45 Borehole terminated at 2.59 m in industrial fill.	DEPTH GH	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBE	NUMBER	INTERVAL	TYPE	N UALUE				(%)
-Black staining from about 1 m to about 1.4 mSlight odour detected in sample 1. 2 SS 4 45 2 SS 3 75 Borehole terminated at 2.59 m in industrial fill.		INDUSTIAL FILL Greyish brown sand, some silt and clay loose, moist.									
2 - 3 SS 3 75 - 3 SS 3 FS 3 SS 3 FS 3 SS 3 FS 3 FS 3	1 -			-	S	SS	3		60		
Borehole terminated at 2.59 m in industrial fill.				2		SS .	4		45		
			***************************************	3	S	SS	3		75		
		Borehole terminated at 2.59 m in industrial fill.									

BOREHOLE: G22 **BOREHOLE LOG PROJECT:** 93-379

1 of 1 **DATE:** 16 July 1993

METHANE GAS INVESTIGATION TARO AGGREGATES STONEY CREEK ONTARIO

GEOLOGIST SMA

FOR: TARO AGGREGATES LTD.

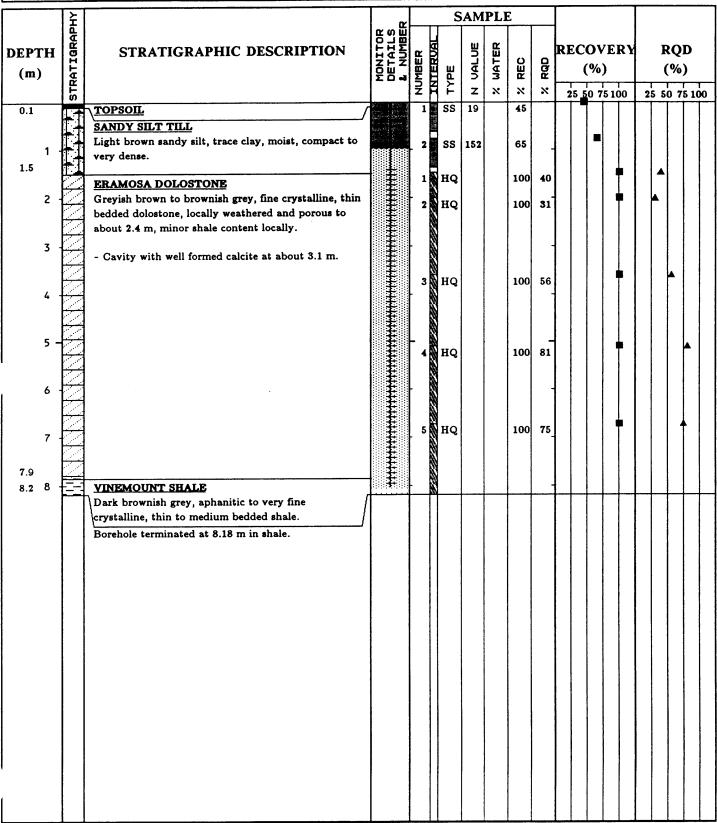
 $m\ ASL$ **ELEVATION**

		n n			S	AM	PLI	Ē			
DEPTH (m)	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	TYPE	N VALUE	% WATER	% REC	% RQD	N VALUE	WATER CONTENT (%) 10 20 30 40
	INDUSTRIAL FILL Dark grey brown sandy silt, some clay and gravel, moist, loose.		1		ss	7		90			
- 2 -			2		SS	5		85			
3.0 -	-Becomes grey with increased sand content below about 2.9 m.		3	THE REPORT OF THE PROPERTY OF THE PARTY OF T	SS	15		100			
3.0 3	Borehole terminated at 3.00 m in industrial fill.										

BOREHOLE LOGPROJECT: TAROBOREHOLE: G23 1 of 1HYDROGEOLOGICAL INVESTIGATIONDATE: 27 June 1994TARO QUARRIES - STONEY CREEKGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION 199.2 m ASL

TOX.	===	RO AGGREGATES ETD.							7 2 3			199.			~ _	_
	₽H≺		۵ ۵	_		SA	MPL	E								٦
DEPTH	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS	i 5 œ	O'BIL	ū	1 2		_	REC	COV	/ERY		RC)D	l
(m)	RAT		N H A	NUMBER	INTEROA	u 1	WATER	REC	200		(%)		(%	6)	
	ST	TODGOT.		ž	Ш.			×	×	25	50 7	5 100	2	5 50	75 100	<u>ا</u>
0.5	1555	TOPSOIL Dark brown, mottled light brown, clayey silt,	A Company	1	S	S 22		40								
0.8	222	rootlets, DTPL, firm. CLAYEY SILT		1	Н	Q		100	49.			•		1		
		Brown, mottled grey and rust brown, clayey silt,	#													
2 -		DTPL, firm. ERAMOSA DOLOSTONE	‡	2	Н	Q		100	14			•	^			
		Greyish brown to brownish grey, fine crystalline, thin bedded dolostone, locally weathered and porous to	#													
3 -		about 3.4 m.	#	-					-							
		-Locally interlaminated to thinly interbedded with		3	Н	8		100	48			1		1		
4 -		shale below about 3.4 m.	ŧ	-					-							
4.9			#													
		Borehole terminated at 4.85 m in dolostone.											П		11	1
														İ		İ
				ĺ												
																i
																-
Li	1					1	1	l l			.1 [

BOREHOLE LOGPROJECT: TAROBOREHOLE: G24 1 of 1HYDROGEOLOGICAL INVESTIGATIONDATE: 28 June 1994TARO QUARRIES - STONEY CREEKGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION 200.5 m ASL



Printed: 9 AUG 94

BOREHOLE LOG PROJECT: 94-428 BOREHOLE: G25 1 of 1

HYDROGEOLOGICAL INVESTIGATION TARO QUARRIES - STONEY CREEK FOR: TARO AGGREGATES LTD. **DATE:** 17 October 1994

GEOLOGIST PW

ELEVATION m ASL

rox.		to Addition to	~		()	S	AM	PLI	<u> </u>							1
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	TYPE	N VALUE	% WATER	% REC	% RQD		%)	ERY	RQ (%		
1 -		FILL Brown to dark brown clayey silt, some gravel, moist, compactMottled reddish brown to about 3 m.		1		SS	12			_						
3 -		-Mottled reddish and yollowish brown below about 3 m.		2		ss	15			-						
5 -		-Horizontal and vertical fracturing observed between about 6.1 and 6.7 m.		_		SS	18 35			-						
8		ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin bedded dolostone, minor occurrences of shale stringers and yugs.				нQ			98	15						
10 -			***************************************	-		HQ HQ HQ				41 81 83				A	A A	
12.3 12		Borehole terminated at 12.31 m in dolostone.		_												
, 30 See															nite	

BOREHOLE LOG PROJECT: 94-428

BOREHOLE: G26 1 of 1

HYDROGEOLOGICAL INVESTIGATION

TARO QUARRIES - STONEY CREEK

FOR: TARO AGGREGATES LTD.

BOREHOLE: G26 1 of 1

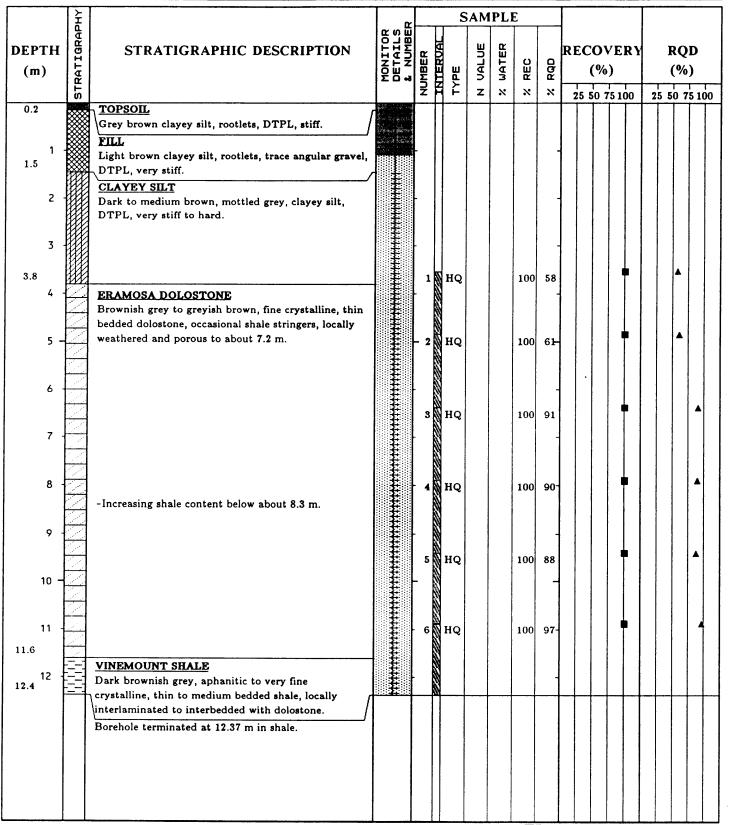
DATE: 18 October 1994

GEOLOGIST PW

ELEVATION m ASL

노 노		D'			S	AM	PLI	3						
(m) FARTORDITAGRADITAGR	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	TYPE	N VALUE	% WATER	% REC	א אמס	(%	VERY) 75 100		RQ (%	b)
1 -	FILL Light to medium greyish brown sandy silt, some clay, compact, moist.		-						-					
4 4.5	-Changing to a light brownish grey clayey silt, hard, DTPL, below about 2.9 m.		- 1		нQ			100	17			•		93
6	ERAMOSA DOLOSTONE Brownish grey, fine crystalline, thin to medium bedded dolostone, occasional shale stringers and thin gypsum seams, locally porous, minor occurrences of vugs and sphalerite mineralization.	***************************************			HQ HQ			98 100	68_ 46					
6.9	Borehole terminated at 6.88 m in dolostone.													

BOREHOLE LOG PROJECT: **TARO BOREHOLE: G27** 1 of 1 HYDROGEOLOGICAL INVESTIGATION DATE: 29 June 1994 TARO QUARRIES - STONEY CREEK **GEOLOGIST SMA** FOR: TARO AGGREGATES LTD. **ELEVATION** 204.3 m ASL



BOREHOLE LOGPROJECT: TAROBOREHOLE: G28 1 of 1HYDROGEOLOGICAL INVESTIGATIONDATE: 27 June 1994TARO QUARRIES - STONEY CREEKGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION 199.6 m ASL

		TO THE CALL OF THE									IIUN	199.0		102
	۲			~		S	AM	(PL)	E		T			
OEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS	NUMBER	INTERUAL	TYPE	VALUE	WATER	REC	8		OVERY	l .	RQD (%)
	ι S	DATE T	Province Const	- 1		' '	z	×	×	×	25 5	0 75 1 <u>0</u> 0	25 8	0 75 1
0.4		FILL Medium to dark brown silty sand with gravel and clay, moist. ERAMOSA DOLOSTONE				HQ			100	0				
2 -		Brownish grey to grey, fine crystalline, thin bedded dolostone, locally fracture and weathered to about 4.9 m, occasional shale stringers, locally vuggy.		-		НQ			100	0				
3 -				- :		НQ			100	60-				•
4 -				4		НQ			100	40			•	
5 - 6.1 6 -				_										
		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin bedded shale, locally interlaminated		5		НQ			100	66		•		•
1.1 7		to interbedded with dolostone, trace fossils. Borehole terminated at 7.09 m in shale.	1	-						-				
ļ			t	ı	1 1	- 1	- 1	- 1	- 1	- 1	11		11	- 1 1

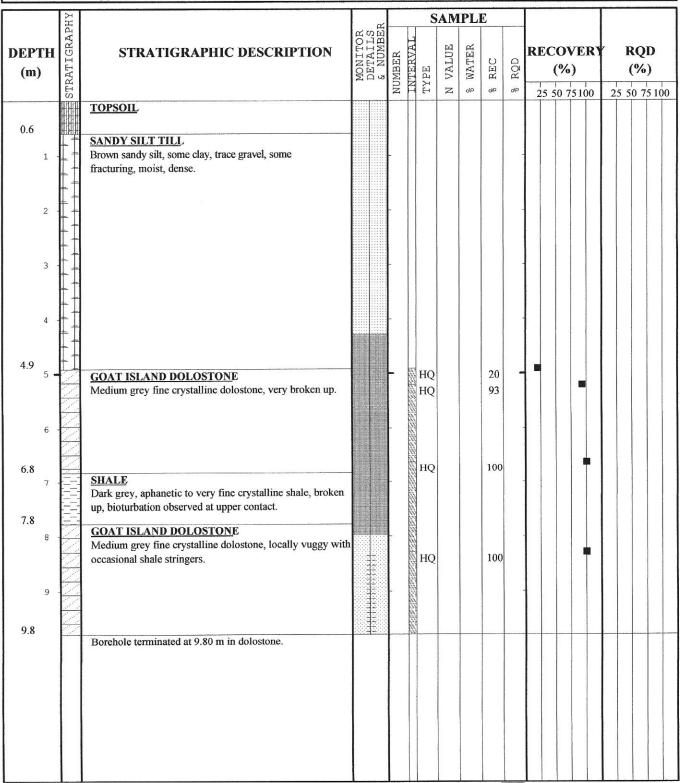
BOREHOLE LOGPROJECT: TAROBOREHOLE: G351 of 1HYDROGEOLOGICAL INVESTIGATIONDATE: 20 January 1994TARO QUARRIES - STONEY CREEKGEOLOGIST SMAFOR: TARO AGGREGATES LTD.ELEVATION 200.4 m ASL

	¥		n n			S	AM	PLI	3						Τ			
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	TYPE	VALUE	WATER	REC	RQD	RI		OV (%)	ER	Y		RQI (%)	
	ST			ž	Ħ	F	z	*	×	×	2	5 5	0 7	5 100	1:	25 5	0 75	100
0.5	! 5i	TOPSOIL Dark brown sandy silt, rootlets, firm. SANDY SILT TILL																
1.7		Medium brown sandy silt with clay, trace gravel, dense to very dense, moist.	¥	-						-								
2 - 2.6		ERAMOSA DOLOSTONE Medium brownish-grey, fine crystalline, thin to medium bedded dolostone.	***************************************	-						-								
		Borehole terminated at 2.58 m in dolostone. NOTE:Borehole drilled directly to 2.58 m. Stratigraphy inferred from adjacent borehole 35-III.																
							-											

1 of 1 **BOREHOLE: ST 1 BOREHOLE LOG** PROJECT: Taro Hydrogeological and Geological Investigations DATE: 08 December 1997 LOGGED BY YS Taro Quarries **GROUND ELEV** 194.91 m ASL FOR: Taro Aggregates Limited

TOK:	Taio Aggregates Emitted		_							 	 	
	YHY.	œ		,	S	AM	PL	E				
DEPTH (m)	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	COVE (%) 50 751	(QD %) 75 100
0.6	TOPSOIL Brown sandy silt with some clay and rootlets, moist. SANDY SILT TILL Brown sandy silt, some clay, trace gravel, some fracturing,											
2 -	moist, dense.		-									
3 - 4.0 ₄ .									-			
5.0 ₅ _	-Becoming grey with increasing silt below about 4.0 m.								_			
6 -	GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stingers and vugs infilled with calcite.	100	1		HQ			100	85			
6.8	SHALE Dark brownish grey, aphanitic to very fine crystalline, thin	72 72 72 72 72 72	2		HQ			100	100			
7.6	bedded shale, locally interlaminated to interbedded with dolostone, trace fossils. GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stingers and vugs infilled with calcite.	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3		HQ			100	70			
9.6	-Fractured from about 8.3 to 8.8 m (UMFZ) Borehole terminated at 9.6 m. in dolostone.		4		НQ			100	100			

BOREHOLE LOG	PROJECT: Taro	BOREHOLE: ST 1-I 1 of 1
Hydrogeological and Geological Inv	estigations	DATE: 14 July 2000
Taro Quarries		LOGGED BY MEW
FOR: Taro Aggregates Limited		GROUND ELEV 194.90 m ASL



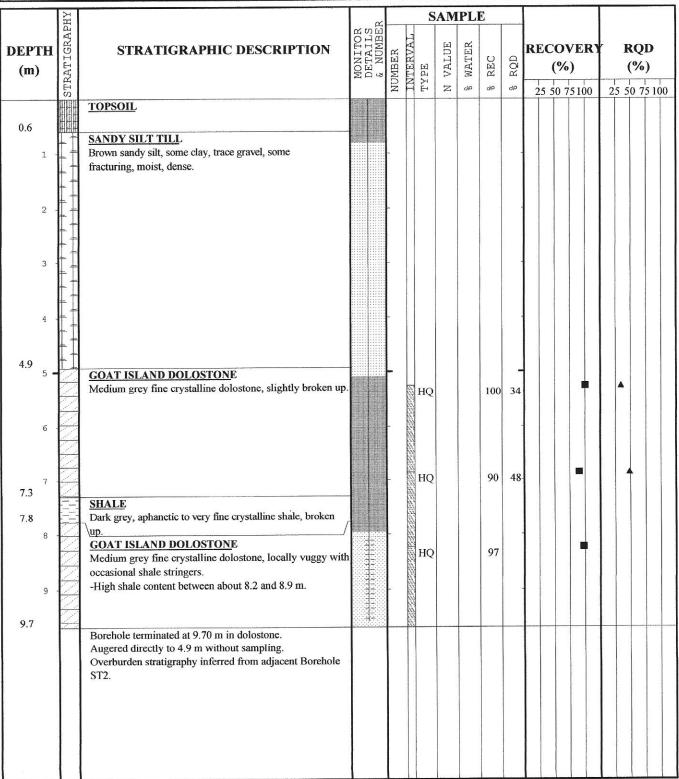
1 of 1 **BOREHOLE LOG BOREHOLE: ST 1-II** PROJECT: Taro Hydrogeological and Geological Investigations **DATE:** 14 July 2000 LOGGED BY Taro Quarries **GROUND ELEV** 194.90 m ASL FOR: Taro Aggregates Limited

ZI	I		Π		S	AM	PL	E		T	
(m) HLAAA STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERVAL		VALUE	WATER	REC	RQD	RECOVERY (%)	RQD (%)
STF			NC	F	F	z	9/0	9/0	0/0	25 50 75 100	25 50 75 100
0.6	SANDY SILT TILL Brown sandy silt, some clay, trace gravel, some fracturing, moist, dense.		_								
3											
6.6	GOAT ISLAND DOLOSTONE Medium grey fine crystalline dolostone, very broken up. SHALE	100 mm mm mm mm mm mm mm mm mm mm mm mm m									
7.0	Dark grey, aphanetic to very fine crystalline shale, broken up. Borehole terminated at 6.99 m in shale. Stratigraphy inferred from adjacent Borehole ST 1-1										

BOREHOLE LOG 1 of 1 **BOREHOLE:** ST 2 PROJECT: Taro Hydrogeological and Geological Investigations DATE: 09 December 1997 Taro Quarries LOGGED BY FOR: Taro Aggregates Limited **GROUND ELEV** 195.07 m ASL

	PHY		~	Γ		S	AM	PL	E					
DEPTH (m)	STRATIGRAP	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERVAL	TYPE	N VALUE	% WATER	% REC	% RQD	 (%	VERY (6) 75100	RQI (%))
0.6		TOPSOIL Brown sandy silt with some clay and rootlets, moist. SANDY SILT TILL Brown sandy silt, some clay, trace gravel, some fracturing, moist, dense.									A CONTRACTOR OF THE PROPERTY O			
4.0 ₄ 5 •		-Becoming grey with increasing silt below about 4.0 m.								_				
5.7 6 7.1 7		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale stingers and vugs infilled with calcite.		_		HQ			100					A
7.9		SHALE Dark brownish grey, aphanitic to very fine crystalline, thin bedded shale, locally interlaminated to interbedded with dolostone, trace fossils. GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, occasional shale				НQ			100	65.			A	
10.0		stingers and vugs infilled with calciteFractured from about 8.5 to 9.0 m (UMFZ) Borehole terminated at 9.95 m. in dolostone.		4	1	HQ			100	100				

1 of 1 **BOREHOLE: ST 2-I BOREHOLE LOG** PROJECT: Taro **DATE:** 13 July 2000 Hydrogeological and Geological Investigations **LOGGED BY MEW** Taro Quarries **GROUND ELEV 195.10 m ASL** FOR: Taro Aggregates Limited



BOREHOLE LOG	PROJECT: Taro	BOREHOLE: ST 2-II 1 of 1
Hydrogeological and Geological Inv	estigations	DATE: 13 July 2000
Taro Quarries		LOGGED BY MEW
FOR: Taro Aggregates Limited		GROUND ELEV 195.10 m ASL

K		T	Г		- 5	AM	PL.	E.			
(m) STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERVAL		N VALUE	% WATER	% REC	% RQD	RECOVERY (%) 25 50 75100	RQD (%) 25 50 75 100
0.6	SANDY SILT TILL Brown sandy silt, some clay, trace gravel, some fracturing, moist, dense.		-								
6.9	GOAT ISLAND DOLOSTONE Medium grey fine crystalline dolostone, slightly broken up. Borehole terminated at 6.88 m in Dolostone. Stratigraphy inferred from adjacent Borehole ST 2-1.		_						-		

GRAPHICS, SYMBOLS AND ABBREVIATIONS ON LOGS

SAMPLE TYPES and TESTS

SOIL DESCRIPTIONS

	SS	Split Spoon Sample		Cohesionless Soils			
\boxtimes	SN	Non-Standard Split Sp	oon Sample				
Ι	ST	Shelby Tube Sample: (unconfined compress	ion or - •	Relative Density	N	l Va	lue
		unconsolidated undrai	ned test)	Very loose	0	to	4
T	DS	Denision Type Sample)	Loose	4	to	10
0	PS	Piston Type Sample		Compact Dense	10 30	to to	30 50
Ξ	CS	Continuous Sample		Very Dense	T 9	ver	
X	GS	Grab Sample		Ť			
<u>~</u>	WS	Wash Sample					
W.	BQ	BQ Core Sample		Cohesive Soils			

Consistency	C _U (kPa)	N Value
Very soft	0 to 12	0 to 2
Soft	12 to 25	2 to 4
Firm	25 to 50	4 to 8
Stiff	50 to 100	8 to 15
Very Stiff	100 to 200	15 to 30
Hard	over 200	over 30

HQ HQ Core Sample NQ NQ Core Sample **Dynamic Penetration Test** Field Vane Test (undisturbed) -Field Vane Test (remoulded) -

PENETRATION RESISTANCES

Standard Penetration Resistance(N Value)

The number of blows by a 63.6 kg (140 lb) hammer MONITOR DETAILS dropped 760 mm (30 in.) required to drive a 50 mm (2 in.) Split Spoon Sampler for a distance of 300

mm (12 in.).

ABBREVIATIONS

DTPL: Drier Than Plastic Limit APL: About Plastic Limit WTPL: Wetter Than Plasic Limit K: Hydraulic Conductivity (m/s) Cu: Undrained Shear Strength (kPa) % REC: Percentage of Sample Recovered % RQD: Indirect Measure of the Number of Fractures and Soundness of Rock Mass Approximate Water Table

Protective Casing
Backfill or Caved Material
Seal
Fine Filter Pack (2mm silica sand)
Coarse Filter Pack
Screened Interval

GRAIN SIZE CLASSIFICATION

trace, "eg. trace sand"	1 - 10
some, "eg. some sand"	10 - 20
adjective, "eg. sandy"	20 - 35
and, "eg. and sand"	35 - 50
noun, "eg. sand"	>50

Note: Classification Divisions Based on Modified M.I.T. Grain Size Scale

PD TEST HOLES
GROWTED UP AFTER GEOPHISIC

BOREHOLE LOG PROJECT: 94-428 BOREHOLE: TH 1 1 of 2

HYDROGEOLOGICAL INVESTIGATION TARO QUARRIES - STONEY CREEK FOR: TARO AGGREGATES LTD. **DATE:** 19 October 1994

GEOLOGIST PW

ELEVATION 205.3 m ASL

					_									
	<u>}</u>	A STATE OF THE STA			S	AM	PLF	E	\neg					
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	TYPE	N VALUE	% WATER	% REC	x RQD	(6	VERY %) 75 100	(RQD (%)) 00
1		CLAYEY SILT Brownish grey, clayey silt, vertical fracturing, moist.		-					-					
2.4		ERAMOSA DOLOSTONE		- 1 2	HQ HQ			100 93	36			_		
3 -		Brownish grey to greyish brown, fine crystalline, thin to medium bedded dolostone, locally weathered and porous to about 10.0 m, occasional shale stringers.		3	НQ			100	68				•	
5 -			e transcription	_ 4	HQ			100	57.				A	
6				- 5	HQ			100	88					
7		,		- - 6	HQ			98	88-					
9					HQ			07	74					
10 ·		a a		- 1	E F	1		97	74					
11				- 8				100	82				•	
12		-Ocassional gypsum seams below about 12.5 m.		9	HQ			97	93					4
14.2 14		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine		10	HQ	2		98	81					

Printed: 14 NOV 94

Gartner Lee Limited

BOREHOLE LOG PROJECT: 94-428

HYDROGEOLOGICAL INVESTIGATION

TARO QUARRIES - STONEY CREEK

FOR: TARO AGGREGATES LTD.

BOREHOLE: TH 1 2 of 2

DATE: 19 October 1994

GEOLOGIST PW

ELEVATION 205.3 m ASL

DEPTH (m) STRATIGRAPHIC DESCRIPTION STRATIGRAPHIC DESCRIPTION 15.3 15.9 16 Crystalline, thin to medium bedded shale, locally interlaminated to thinly interbedded with dolortone. Photostone bed from about 15.3 to 15.9 m, moderate shale content locally. 17 18 19.3 19.3 19.3 10.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.0 11.0 10.	1	표		DZ.		1	SAM	PLI	<u>:</u>							
15.3 15.9 16 17 18 19 19 20 20 20.6 20.8 20.8 20.8 20.8 20.8 20.8 20.8 20.8		TRATIGRAF	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBE	NUMBER	TYPE	N VALUE		1	ROD		(%))		(%)
interlaminated to thinly interbedded with dolostone. Dolostone bed from about 15.3 to 15.9 m, moderate shale content locally. 17 18 19 19 19 19 19 19 19 19 19	15.3		crystalline, thin to medium bedded shale, locally				\dagger				1		1	H	Ť.	
19.3 19 GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, trace fossils, minor occurrence of sphalerite mineralization. Borehole terminated at 20.78 m in dolostone.			-Dolostone bed from about 15.3 to 15.9 m, moderate	e depend de	- 1	N			100	82						A
GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, moderate shale content, trace fossils, minor occurrence of sphalerite mineralization. Borehole terminated at 20.78 m in dolostone.					-		8		97	76						
medium bedded dolostone, moderate shale content, trace fossils, minor occurrence of sphalerite mineralization. Borehole terminated at 20.78 m in dolostone.	19.3 19 -			12 M 12 M	13	H(5		100	61			*		•	
	20.6		medium bedded dolostone, moderate shale content, trace fossils, minor occurrence of sphalerite mineralization.		14	HO	5		92	67						

BOREHOLE LOG PROJECT: 94-428 BOREHOLE: TH 2 1 of 2

HYDROGEOLOGICAL INVESTIGATION
TARO QUARRIES - STONEY CREEK
FOR: TARO AGGREGATES LTD.

BOREHOLE: TH 2 1 of 2

DATE: 20 October 1994

GEOLOGIST PW
ELEVATION 203.8 m ASL

	숲		~		S	AM	PLI	E						
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	TYPE	VALUE	WATER	REC	RQD	RECO	VERY 6)		RQD (%)	
	ST			z	F	z	×	×	×	25 50	75 100	25	50 75	100
1 -		ERAMOSA DOLOSTONE Brownish grey to greyish brown, fine crystalline, medium to thick bedded dolostone, locally weathered and porous, occasional shale stringers.		1	HQ HQ			100	54					
2 -				2	HQ			100	23			1		
3 -				3	HQ			100	60				•	
4 -				4	HQ	×		92	52					
5 -									_					
7 -				5	HQ			100	66				A	
8 -				6	HQ			100	79_		+			
9 -				7	HQ			100	85					
10 -		4 .		-					-					
11 -		-Occasional gypsum seams below about 10.8 m.		- 8	HQ HQ			100	95-					1
12.2 12 - 12.9		YINEMOUNT SHALE Dark brownish grey, aphanitic to very fine		9	НQ	L.		100	77					
13.6		crystalline, thin to medium bedded shale, locally interlaminated to thinly interbedded with dolostone. -Dolostone bed from about 12.9 to 13.8 m, moderate							-					
14 -		shale content locally. -Occasional clay and silt seams below about 14.0 m.		10	НQ			100	88					A
	吕													

BOREHOLE LOG PROJECT: 94-428

HYDROGEOLOGICAL INVESTIGATION

TARO QUARRIES - STONEY CREEK
FOR: TARO AGGREGATES LTD.

BOREHOLE: TH 2 2 of 2

DATE: 20 October 1994

GEOLOGIST PW

ELEVATION 203.8 m ASL

7 0 10.		NO MOCKEDATES ETD.						خالالكالات	VA.	110		203.0	3 111 2	ASL	
	¥		O.			SA	MPL	E							
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS NUMBER	NUMBER	INTEROBL	בו ה	1	% REC	2 RQD		(%	VERY) 75 100		RQD (%)	00
16 - 17.2 17 - 18.4 18.4		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostoneGypsum seam at about 17.9 m. Borehole terminated at 18.44 m in dolostone.			が 日本 日本 日本 日本 日本 日本 日本 日本 日本 日本 日本 日本 日本			100							

BOREHOLE LOG PROJECT: 94-428

HYDROGEOLOGICAL INVESTIGATION
TARO QUARRIES - STONEY CREEK
FOR: TARO AGGREGATES LTD.

BOREHOLE: TH 3 1 of 1

DATE: 21 October 1994

GEOLOGIST PW

ELEVATION 191.8 m ASL

		œ		S	AM	PLI	3				* 10.10	
DEPTH (m)	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS NUMBE	NUMBER	TYPE	N VALUE	% WATER	% REC	2 RQD	(OVERY %)	RQI (%) 25 50 75)
0.7	VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally interlaminated to thinly interbedded with dolostone. -Heavily fractured at surface. -Grey dolostone bed from about 0.7 to 1.2 m, locally moderate shale content.	TOTAL TOTAL	2 3	HQ HQ			100		20 30			A
4.8 5 - 6.0 6.3 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone.		_ 4	HQ			99	63_			A	
	Borehole terminated at 6.30 m in dolostone.											

BOREHOLE LOG

PROJECT: 94-428

BOREHOLE: TH 4 1 of 1

HYDROGEOLOGICAL INVESTIGATION

TARO QUARRIES - STONEY CREEK

FOR: TARO AGGREGATES LTD.

BOREHOLE: TH 4 1 of 1

DATE: 21 October 1994

GEOLOGIST PW

ELEVATION 192.2 m ASL

FUK:		TO AGGREGATES LTD.				C	A NA	PLE	7		 	*******	Ŧ	 	
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	TYPE	N VALUE	% WATER	% REC	% RQD	(%	VER) 75 100		(QE)	
0.6		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine		1	September 1	нQ			98	58				•	
1 - 1.4 2 -		crystalline, thin to medium bedded shale, occasionally interlaminated to interbedded with dolostone, moderate dolostone content and fossiliferous locally. -Grey dolostone bed from about 0.6 to 1.2 m.		1 - - 2		НQ			100	89_					•
3 -				3		нQ			100	87					•
4 - 4.8 5 -		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone.	10 1 10 10 10 10 10 10 10 10 10 10 10 10	_ 4		нQ		úΤ		_					
6.1 6 -		Borehole terminated at 6.10 m in dolostone.		-	E										
							entralement of the production of the contract								
			ļ.												

BOREHOLE LOG	PROJECT: 94-428	BOREHOLE: TH 5 1 of 1
HYDROGEOLOGICAL INVESTIG	ATION	DATE: 24 October 1994
TARO QUARRIES - STONEY CR	EEK	GEOLOGIST PW
FOR: TARO AGGREGATES LT	D.	ELEVATION 192.0 m ASL

	÷		~			SAM	(PL)	E					司
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERVAL	N UALUE	% WATER	% REC	x RQD	. (OVERY (%)	RQD (%)	0
0.3 0.8 1 -		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, occasionally interlaminated to interbedded with dolostone, moderate dolostone content and fossiliferous locally. -Grey dolostone bed from about 0.3 to 0.8 m.		-	HQ HQ			100 100	74 - 95_				
3 - 4 - 4.5					HQ			100	83		-		
5 - 5.7 5.8		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone. -Gypsum seam and calcite nodules between about 4.9 and 5.6 m. Borehole terminated at 5.79 m in dolostone.	13 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	- 4	はは、一般の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の			96	96				

BOREHOLE LOG PROJECT: 94-428

HYDROGEOLOGICAL INVESTIGATION

TARO QUARRIES - STONEY CREEK
FOR: TARO AGGREGATES LTD.

BOREHOLE: TH 6 1 of 1

DATE: 24 October 1994

GEOLOGIST PW

ELEVATION 192.8 m ASL

FOR:	IAR	O AGGREGATES LTD.						LIC V	MI	ION	172.0	S III A	(1) L
			Œ			SAM	PLI	E					
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	N UALUE	% WATER	% REC	% RQD	(VERY %)		QD %)
0.6 1.2 1 -		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, occasionally interlaminated to interbedded with		1	a3			100	57				A
2 -		dolostone, moderate dolostone content and fossiliferous locally. -Grey dolostone bed from about 0.6 to 1.2 m.		_ 2				100	91_				A
3 -	喜喜			3	HQ			100	85				A
4.8		GOAT ISLAND DOLOSTONE	on programme and the	_ 4	開発を	1		100	94				
6.1 6 6.2		Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, occasional gypsum seams and nodules. Borehole terminated at 6.2 m in dolostone.		- 5	HC HC	<u>.</u>	-	100	-100				

BOREHOLE LOG

PROJECT: 94-428

BOREHOLE: TH 7 1 of 1

HYDROGEOLOGICAL INVESTIGATION

TARO QUARRIES - STONEY CREEK
FOR: TARO AGGREGATES LTD.

BOREHOLE: TH 7 1 of 1

DATE: 24 October 1994

GEOLOGIST PW

ELEVATION 193.0 m ASL

		NO AGGREGATES LTD.						<u> </u>	LL	VA.	LIOI	193.	0 1	m AS	SL
	개		n			S	AM	PLI	E				T		
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	ТҮРЕ	N VALUE	% WATER	% REC	% RQD		COVERY (%)		R((%	6)
0.5	===	VINEMOUNT SHALE			H	\dashv			-		1	111	+	13 30	75100
1.3		Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally laminated with dolostone.		1	E H	IQ			100	4 5				4	
2 -		-Dolostone bed from about 0.5 to 1.3 m, moderate shale content locally.		_ 2	開発 H	ιQ			100	90_	-				•
3 -				_						_					A
4				3	H	Q			100	89					
5.0	3	GOAT ISLAND DOLOSTONE		- 4	H	Q			100	100		+			
6.2 6 6.2	4	Brownish grey to grey, fine crystalline, thin to medium bedded dolostone. -Gypsum seam and nodule from about 5.6 to 5.7 m. Borehole terminated at 6.22 m in dolostone.		-											
								And the second s							
														And the second s	
				And the Personal Property lies and the Personal Property lies											

BOREHOLE LOG

PROJECT: 94-428

BOREHOLE: TH 8 1 of 1

HYDROGEOLOGICAL INVESTIGATION

TARO QUARRIES - STONEY CREEK

FOR: TARO AGGREGATES LTD.

BOREHOLE: TH 8 1 of 1

DATE: 24 October 1994

GEOLOGIST PW

ELEVATION 192.9 m ASL

	노		ez		S	AM.	PLE		\dashv					
EPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER INTERUAL	ТҮРЕ	N UALUE	% WATER	% REC	% RQD	REC(%)		RQI (%))
0.8	s	VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally		1	HQ			97	40					
1 -		laminated with dolostone. -Dolostone bed from about surface to 0.8 m, moderate shale content locally.		2	нQ			100	89_			•		A
3														
4				3	HQ			98	86					•
4.5		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone.		- 4	HQ			100	88-			-		•
5.7 6.1 ₆		Borehole terminated at 6.07 m in dolostone.							<u>-</u>					

BOREHOLE: TH 9 1 of 1 **BOREHOLE LOG PROJECT:** 94-428 DATE: 25 October 1994 HYDROGEOLOGICAL INVESTIGATION **GEOLOGIST** PW TARO QUARRIES - STONEY CREEK 199.6 m ASL **ELEVATION** FOR: TARO AGGREGATES LTD.

	È		D'		S	AM	PLI	3							
EPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER INTERUAL	TYPE	VALUE	WATER	REC	ROD		(%)		(RQD (%)	
	ST		neelkeelteeleelkeelkeelke	ž Á	ŕ	z	*	*	×	25	50 7	5 100	25 5	0 75 10	00
1 -	97	FILL Brown clayey silt, moist.		-				e ".	-						
4 - 5 - 6 -			2004 SAF LUC		HQ				_						
6.4 6.5 7 - 7.5		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, locally laminated with dolostone. -Dolostone bed from about 6.5 to 7.5 m, moderate shale content locally.		-	НQ			90	32 86					•	
10 -		u v		-	но			100	98						4
11.1 ₁₁ 12.1 _{12.1}		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone. -Gypsum seam and nodule at about 11.9 m. Borehole terminated at 12.14 m in dolostone.	441 441 541 541 541 541 541 541 541 541	4											
	1	4 NOV 94						1 P		_	4:-			imit	

BOREHOLE LOG PROJECT: 94-428

HYDROGEOLOGICAL INVESTIGATION
TARO QUARRIES - STONEY CREEK
FOR: TARO AGGREGATES LTD.

BOREHOLE: TH 10 1 of 1

DATE: 26 October 1994

GEOLOGIST PW
ELEVATION 196.5 m ASL

	÷		n			SAM	PL	E						
DEPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	N UALUE	% WATER	% REC	% RQD	(1	VERY %)		RQ (%)
0.2	***	FILL (Road Base) Sandy gravel. ERAMOSA DOLOSTONE	enge	1	H	5		100	16		İ	•		
1.7		Brownish grey to greyish brown, fine crystalline, thin bedded dolostone, heavily fractured and weathered. -Transitional below about 1.6 m.	er er be	2	H	5		100	51	-			 	
3.0 _		VINEMOUNT SHALE Dark brownish grey, aphanitic to very fine crystalline, thin to medium bedded shale, moderate												
3 -		dolostone content, occasional mud seams, locally interlaminated to interbedded with dolostone. -Very weathered between about 2.1 and 2.6 m. -Dark grey dolostone bed from about 3.1 to 4.1 m,				5		100	42				•	
4.1 4 -		locally moderate to high shale content.	And Annual Control	4		5		100	94					•
6 -		-Decreasing dolostone content below about 5.8 m.	Terresona Terresona	- 5	A H	5		100	94					A
7 -		-Transitional below about 7.4 m.		-					-					
8 -		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone, minor occurrences of			H H			100						
8.9 9.0		gypsum infilling and sphalerite mineralization. -7 cm clay seam at about 8.0 m. -2 cm gypsum seam at about 8.4 m. Borehole terminated at 8.99 m in dolostone.												

BOREHOLE LOG PROJECT: 94-428 BOREHOLE: TH 11 1 of 1 DATE: 26 October 1994 HYDROGEOLOGICAL INVESTIGATION GEOLOGIST TARO QUARRIES - STONEY CREEK ELEVATION 196.1 m ASL FOR: TARO AGGREGATES LTD.

	≽∣				-	S	AM	PLE	3						Τ		
EPTH (m)	STRATIGRAPHY	STRATIGRAPHIC DESCRIPTION	MONITOR DETAILS & NUMBER	NUMBER	INTERUAL	ТҮРЕ	N UALUE	% WATER	% REC	% RQD		(%)	ER'		RQI (%))
		FILL. Brown fine sandy silt, moist, loose.															
2.1 2 -				1		SS			29								
3 -		FILL Brown clayey silt, trace fine sand, laminated with white oxidation, moist, compact to dense.															
1.0 4 -			2.48	2		SS			17								
5.2 5 -		CLAYEY SILT Grey clayey silt, some pebbles, moist, soft. -Sand content increasing below about 5.0 m.		3		SS			54	_							
6 - 3.9		SANDY SILT TILL Reddish brown sandy silt, some clay, occasional pebbles, moist, dense. -Occassional grey silt till beds with silt content increasing below about 6.6 m, becoming very dense.		4		SS HQ			100 100								
8 - 8 - 8.5		GOAT ISLAND DOLOSTONE Brownish grey to grey, fine crystalline, thin to medium bedded dolostone. -8 cm broken zone at about 8.9 m.				нQ нQ			79 100	75				-		,	
8.7		Borehole terminated at 8.69 m in dolostone.			英												
											-						
													-				
	1	4 NOV 94	<u> </u>	<u> </u>			1	<u></u>			<u></u>					Lim	100