

APPENDIX 4-F
Construction Equipment Peak Analysis

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**Container Capacity Improvement Program -
Roberts Bank Terminal 2
Construction Equipment Peak Analysis**

**2015-03-10-01-20000-TAB-0025-Rev0-PMV-
RBT2 Construction Equipment-Peak Analysis**

March 10, 2015

Technical Report/Technical Data Report Disclaimer

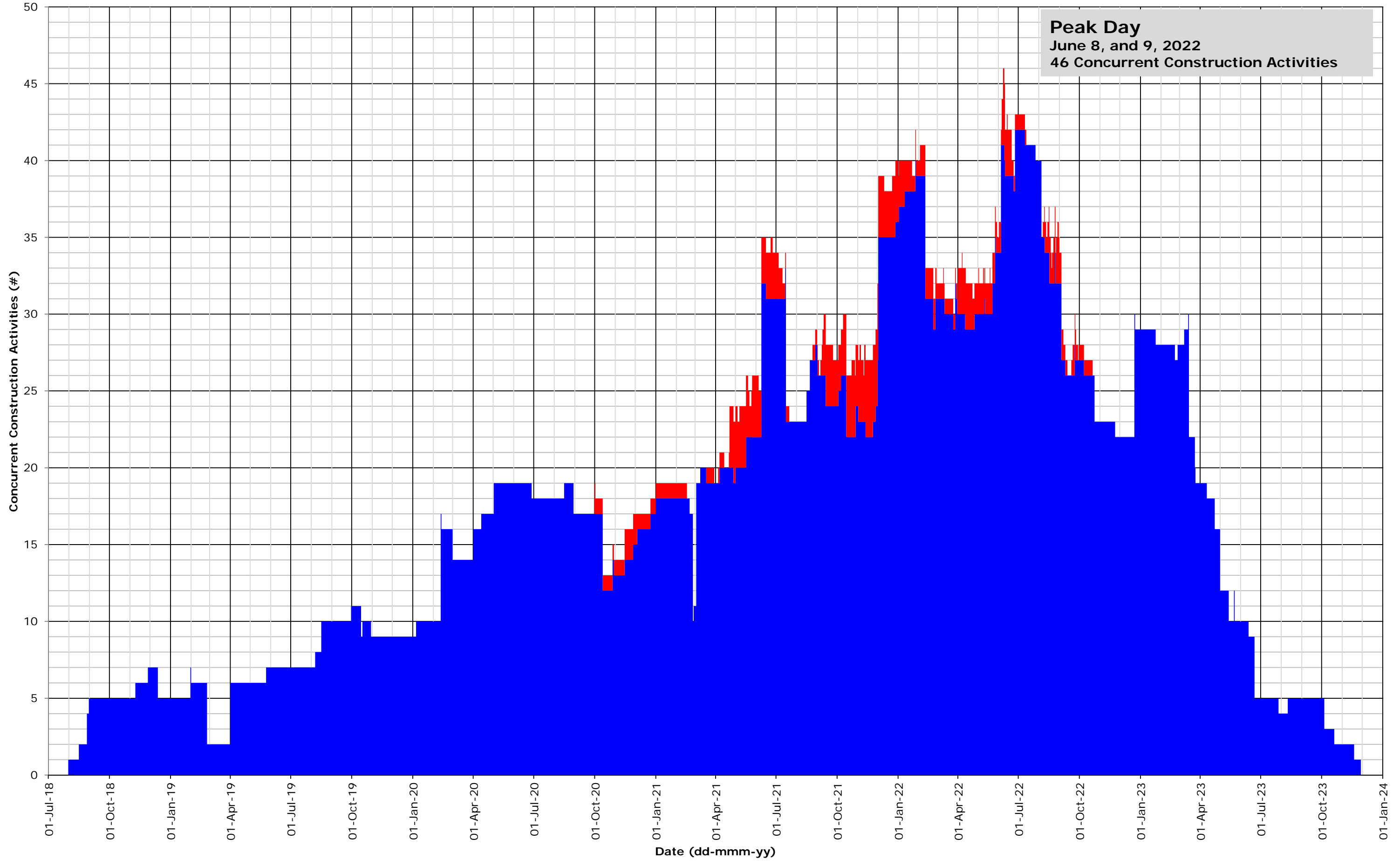
The Canadian Environmental Assessment Agency determined the scope of the proposed Roberts Bank Terminal 2 Project (RBT2 or the Project) and the scope of the assessment in the [Final Environmental Impact Statement Guidelines](#) (EISG) issued January 7, 2014. The scope of the Project includes the project components and physical activities to be considered in the environmental assessment. The scope of the assessment includes the factors to be considered and the scope of those factors. The Environmental Impact Statement (EIS) has been prepared in accordance with the scope of the Project and the scope of the assessment specified in the EISG. For each component of the natural or human environment considered in the EIS, the geographic scope of the assessment depends on the extent of potential effects.

At the time supporting technical studies were initiated in 2011, with the objective of ensuring adequate information would be available to inform the environmental assessment of the Project, neither the scope of the Project nor the scope of the assessment had been determined.

Therefore, the scope of supporting studies may include physical activities that are not included in the scope of the Project as determined by the Agency. Similarly, the scope of supporting studies may also include spatial areas that are not expected to be affected by the Project.

This out-of-scope information is included in the Technical Report (TR)/Technical Data Report (TDR) for each study, but may not be considered in the assessment of potential effects of the Project unless relevant for understanding the context of those effects or to assessing potential cumulative effects.

■ KCB / AECOM Equipment Activities ■ Delcan Equipment Activities



Peak Day
June 8, and 9, 2022
46 Concurrent Construction Activities

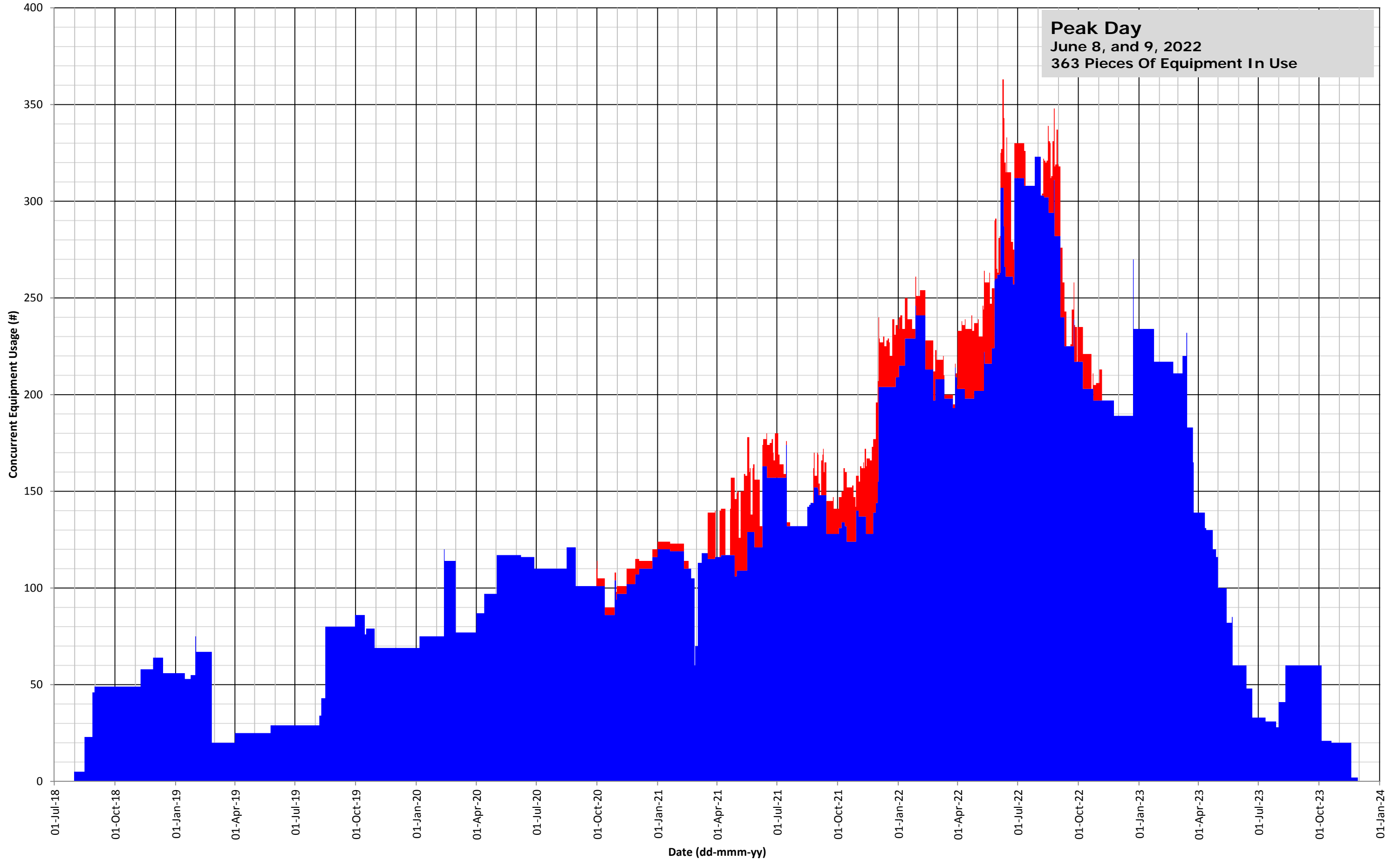
Area/WBS	Sub Area/WBS	Description	Description of Major Construction Equipment For Each Activity (For Acronym definition Refer to Table 2)										
Marine Terminal/ 1100													
	Dredging and Reclamation/ 1102												
		Native Soil Improvement (below dykes, land based, 3.0m c/c)	TUG	DB	PROBE-Lx3	FEL-C x 3	TRUCK	CRANE x 3					
		Preload 5 Relocation (to Preload 7)	FEL-C x 3	ORT x 6									
		Preload 5 Relocation (to Apron Fill)	FEL-C x 3	ORT x 6									
		Preload 6 Relocation (to Preload 8)	FEL-C x 3	ORT x 6									
		Preload 6 Relocation (to Apron Fill)	FEL-C x 3	ORT x 6									
		Apron Preload Stage 7 (relocated from Preload 5)	EXC-B	DOZER-B									
		Apron Preload 7 Relocation (to Preload 8)	FEL-C x 3	ORT x 6									
		Apron Preload Stage 8 (relocated from Preload 6)	EXC-B	DOZER-B									
		Apron Preload Stage 8 (relocated from Preload 7)	EXC-B	DOZER-B									
		Apron Preload 8 Relocation (to Apron Fill)	FEL-C x 3	ORT x 6									
		Apron Preload Stage 9 (imported granular base)	DBC	TUG	FEL-B	ORT x 2	DOZER-B						
		Apron Preload 9 Relocation (to Stockpile of Terminal Granular Base)	FEL-C x 3	TRUCK x 6	DOZER-B								
		Mattress Rock for End Caissons (includes supply, install, and relocate temporary overbuild)-	DB	CLAM	TUG								
		Mattress Rock Densification (under end caissons)- West Basin	DER	PROBE-M	DB	FEL-B	TUG						
		Levelling Course (supply and install at end caissons)- West Basin	DB	FEL-B	CLAM	SCREED	TUG						
		Toe Scour Protection - Test Panel (tremie concrete)	CD	CP	TREMIE	TENDER							
		Berth Scour Protection Rock	DB	CLAM	SCREED	TUG							
		Rock Berm (behind caissons)	DB	CLAM	TUG	BDB							
		Berm Filter (behind caissons)	DB	CLAM	TUG								
		General Fill at Apron (sand from Preloads 2-5-6-8)	FEL-C x 2	ORT x 5	DOZER-B	EXC-B							
		General Fill and Berm Densification (behind caissons)	CRANE x 2	PROBE-Lx2	FEL-B	TRUCK							
		Steel Sheet Piling (behind Caissons 1A)	DB	DER	PD	TUG							
		Geotextiles (behind precast keys)	TRUCK										
		Geotextiles (at cover slabs and connecting slabs)	TRUCK										
		Precast Concrete Keys (at main caissons)	CD	CP	CV	CRANE	TRUCK						
		In-situ Concrete Crane Power Pits (adjacent to rear crane beam)	CD x 2	CP	CRANE	CV	EXC-A						
		In-situ Concrete Fender Support Pads (at marine fenders)	CD	CP	CRANE	CV							
Causeway Widening/													
	Dredging and Reclamation/ 1202												
		Preload Area 2 Relocation (to Apron Fill)	ORT x 8	DOZER-B	FEL-C x 2								
Marine Terminal/ 1100	Container Yard Structures/1105												
		ASC Rail and Foundation	CD	CRANE	CP								
		Bollards	TRUCK x 4										
Marine Terminal/ 1100	Intermodal Yard Structures/1106												
		RMG Rail and Foundation	CD	CRANE	CP								
Marine Terminal/ 1100	Civil Utilities/1108												
		Container Yard West (incl. pipe, manholes, chambers, hydrants)		EXC-A x 4	FEL-C x 8	TRUCK x 8	DDRx1						
		Causeway Area	CRANE	EXC-A x 2; EXC-B x 1	FEL-C x 4	TRUCK x 4	DDRx2						
Marine Terminal/ 1100	Trackworks/ 1110												
		Causeway Rail Trackage	FEL-C x 2	EXC-A x 2	TRUCK x 2	TAMP x 2	DOZER-A x 2	ROLLER x 2	W-TRUCK x 2	FLAT DECK x 4	SPEED SWING x 2		
Marine Terminal/ 1100	Terminal Buildings/1112												
					CP x 2	CRANE	BOOM-LIFT x 4	POWER-F x 4	GEN x 6	FLAT DECK x 6			
		Maintenance and Repair Building											
			EXC-A x 2	TRUCK x 6	CP x 2							FLAT DECK x 6	
		Main Substation											
			EXC-A x 2	TRUCK x 6	CRANE x 2	CP x 2	BOOM-LIFT x 4	POWER-F x 4	GEN x 6	FLAT DECK x 6			
		Reefer Service Access Platform(Steel St.+Foundations)	EXC-A	TRUCKS x 4	CRANE	CP	BOOM-LIFT						
Phase 4 – T-Yard and Repair Yard Construction (Earliest Start Date 2022-04-01)													
1	Lay Track – Lay Proposed Track Including Associated Turnouts, Crossovers and maintenance roads, Connecting to Head Land:												
	b1	Aggregate supply train	AGG TRAIN										
	b	Lay Track – T-Yard T2	FEL-C (2)	TRUCK (2)	TAMP (2)	DOZER-A (2)	ROLLER (2)	W-TRUCK (2)	FLAT DECK (4)	SPEED SWING (2)			
	c	Lay Track – T-Yard T3	FEL-C (2)	TRUCK (2)	TAMP (2)	DOZER-A (2)	ROLLER (2)	W-TRUCK (2)	FLAT DECK (4)	SPEED SWING (2)			
	d1	Aggregate supply train	AGG TRAIN										
	d	Lay Track – T-Yard T4	FEL-C (2)	TRUCK (2)	TAMP (2)	DOZER-A (2)	ROLLER (2)	W-TRUCK (2)	FLAT DECK (4)	SPEED SWING (2)			

TUG	DB	PROBE-Lx3	FEL-C x 3	TRUCK	CRANE x 3			
FEL-C x 3	ORT x 6							
FEL-C x 3	ORT x 6							
FEL-C x 3	ORT x 6							
FEL-C x 3	ORT x 6							
EXC-B	DOZER-B							
FEL-C x 3	ORT x 6							
EXC-B	DOZER-B							
EXC-B	DOZER-B							
FEL-C x 3	ORT x 6							
DBC	TUG	FEL-B	ORT x 2	DOZER-B				
FEL-C x 3	TRUCK x 6	DOZER-B						
DB	CLAM	TUG						
DER	PROBE-M	DB	FEL-B	TUG				
DB	FEL-B	CLAM	SCREED	TUG				
CD	CP	TREMIE	TENDER					
DB	CLAM	SCREED	TUG					
DB	CLAM	TUG	BDB					
DB	CLAM	TUG						
FEL-C x 2	ORT x 5	DOZER-B	EXC-B					
CRANE x 2	PROBE-Lx2	FEL-B	TRUCK					
DB	DER	PD	TUG					
TRUCK								
TRUCK								
CD	CP	CV	CRANE	TRUCK				
CD x 2	CP	CRANE	CV	EXC-A				
CD	CP	CRANE	CV					
ORT x 8	DOZER-B	FEL-C x 2						
CD	CRANE	CP						
TRUCK x 4								
CD	CRANE	CP						
	EXC-A x 4	FEL-C x 8	TRUCK x 8	DDRx1				
CRANE	EXC-A x 2; EXC-B x 1	FEL-C x 4	TRUCK x 4	DDRx2				
FEL-C x 2	EXC-A x 2	TRUCK x 2	TAMP x 2	DOZER-A x 2	ROLLER x 2	W-TRUCK x 2	FLAT DECK x 4	SPEED SWING x 2
		CP x 2	CRANE	BOOM-LIFT x 4	POWER-F x 4	GEN x 6		
							FLAT DECK x 6	
EXC-A x 2	TRUCK x 6	CP x 2						
								FLAT DECK x 6
EXC-A x 2	TRUCK x 6	CRANE x 2	CP x 2	BOOM-LIFT x 4	POWER-F x 4	GEN x 6		
							FLAT DECK x 6	
EXC-A	TRUCKS x 4	CRANE	CP	BOOM-LIFT				
AGG TRAIN								
FEL-C (2)	TRUCK (2)	TAMP (2)	DOZER-A (2)	ROLLER (2)	W-TRUCK (2)	FLAT DECK (4)	SPEED SWING (2)	
FEL-C (2)	TRUCK (2)	TAMP (2)	DOZER-A (2)	ROLLER (2)	W-TRUCK (2)	FLAT DECK (4)	SPEED SWING (2)	
AGG TRAIN								
FEL-C (2)	TRUCK (2)	TAMP (2)	DOZER-A (2)	ROLLER (2)	W-TRUCK (2)	FLAT DECK (4)	SPEED SWING (2)	

TUG	9
DB	8
PROBE-L	5
PROBE-M	1
FEL-C	48
FEL-B	4
TRUCK	51
W-TRUCK	8
CRANE	15
CLAM	5
BDB	1
CD	7
CP	13
CV	3
ORT	51
DOZER-B	7
DOZER-A	8
EXC-A	14
EXC-B	5
DBC	1
DDR	3
BOOM-LIFT	9
POWER-F	8
GEN	12
FLAT DECK	34
TREMIE	1
TENDER	1
SCREED	2
DER	2
PD	1
AGG TRAIN	2
SPEED SWING	8
ROLLER	8
TAMP	8

TOTAL	363
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■ KCB/AECOM Pieces Of Equipment ■ Delcan Pieces Of Equipment



Peak Day
June 8, and 9, 2022
363 Pieces Of Equipment In Use