СМЕ	CONSTRUCTION MATERIALS ENGINEERS, INC.			
300 Sierra Manor Drive. Suite 1				

300 Sierra Manor Drive, Suite 1 Reno, Nevada 89511 phone (775) 851-8205 fax (775) 851-8593

<b>EVAPORATIVE CONTROL SYSTEMS, INC</b>	)
12955 Mahogany Drive	
Reno, NV 89511	

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FIELD REPORT

DATE 7/20/18	JOB NO. 1058		Page	1 of 4		
PROJECT Evaporative Co	ontrol Systems, IN	C- Con	npressive	Testing		
CME Labora	tory					
owner Evaporative	OWNER Evaporative Control Systems, Inc.					
CONTRACTOR						
WEATHER	TEMP					
Indoor		° F	at	AM		
muoor		°F	at	PM		
PRESENT AT SITE Evaporative Co	ntrol Systems, INC	repres	entatives			

Construction Materials Engineers, Inc. (CME) performed a compressive load test on a small 24" Long EPIC chamber pipe provided by Evaporative Control Systems, Inc. The load test was performed with the use of a Forney Compression machine, model #LI-900-2. This device is calibrated annually to meet the specifications for ASTM test method C 39/C 39M.

The section of pipe was placed directly at the bottom of a welded steel box with an open top, provided by Evaporative Control Systems, Inc. The dimensions of the box were 11.25" W x 29" L x 16.5". The section of pipe was placed upright, in the center of the box, running parallel to the box length. The section of drainage chamber was then covered and the box filled with 3/8-inch minus pea gravel 14" deep. The pea gravel was consolidated by applying external vibration to the steel box. A 2.70" x 7.90" x 15.90" steel plate was then placed over the pea gravel in the center of the filled box. The chamber was still functional although a 1/2" deformity was evident upon examination.

The filled box was then placed into the compression machine and aligned to provide an evenly distributed load to the steel plate resting on the pea gravel. A constant load of approximately 500 pounds per second was applied to the steel plate above the pea gravel and the drainage pipe until compressive failure was achieved. It was noted that the welded steel box began to deform outward along its length as the load increased. Start of compressive failure was exhibited at 63,000 load pounds of pressure.

After compressive testing was complete, the steel plate and the pea gravel were carefully removed and through an examination of the drainage pipe was performed by Evaporative Control Systems, Inc.

CONCRETE FIELD TEST SUMMARY							
Mix No.		Spec Strength	PSI	Concrete	Grout	Mortar Mortar	Other
Truck No.		Location		Cyls Taken	Slump "	Air Content %	Conc Temp. °F
					-		
IN HOUSE ROUTE TO:		EMAIL:					
JVL_							

## **PHOTOS**

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PROJECT

Evaporative Control Systems, INC- Compressive Testing



pea gravel being poured into box



steel box before being completely filled



pea gravel consolidation being performed with an electric concrete vibrator



measurement verification on box centering

Initial:

## **PHOTOS**

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PROJECT

Evaporative Control Systems, INC- Compressive Testing



centered box under top point of contact



filled box within compression machine



load rate being monitored



steel box beginning to bow

Initial:

## **PHOTOS**

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Evaporative Control Systems, INC- Compressive Testing





Evaporative Control System post-compression

minor indentation found on top of device

