



# LAW ENGINEERING

7347-F WEST FRIENDLY AVENUE, GREENSBORO NC 27410

## CONCRETE TEST REPORT

CLIENT: PIEDMONT DIXIE CONCRETE

DATE: 08/22/96

PROJECT: MIX DESIGN

JOB NO: 57-5-1816-01

MIX ID: 4000

LAB NO: 3989

SPECIFIED STRENGTH: 4,000 PSI

MIX DESC:

FIELD INFORMATION				FIELD TESTS	
				(ACTUAL)	(SPECIFIED)
DATE SAMPLED:	06/26/96	BY:	ALG	SLUMP, INCHES:	5
TIME BATCHED:	07:48	SAMPLED:	08:10	AIR PERCENT:	2.0
BATCH PLANT:	PIEDMONT CONCRETE			UNIT WEIGHT, PCF:	147.0
TRUCK/TICKET:	37	DATE RECEIVED:	06/27/96	MOISTURE TEMP, °F:	85/72

### COMPRESSION TEST RESULTS

CYLINDER NUMBER	DIAMETER (IN.)	AREA (SQ. IN.)	DATE TESTED	TEST AGE (DAYS)	MAX LOAD (LBS.)	COMP. STRENGTH (PSI)	FRACTURE TYPE
3989	6.00	28.27	06/29/96	3	89,000	3,150	B
3990	6.00	28.27	06/29/96	3	90,000	3,180	B
3991	6.00	28.27	07/03/96	7	110,000	3,890	B
3992	6.00	28.27	07/03/96	7	105,000	3,710	C
3993	6.00	28.27	07/10/96	14	122,500	4,330	C
3994	6.00	28.27	07/10/96	14	120,000	4,240	C
3995	6.00	28.27	07/24/96	28	130,000	4,600	B
3996	6.00	28.27	07/24/96	28	139,000	4,920	C
3997			RESERVE				
3998			RESERVE				

UNLESS OTHERWISE INDICATED, TESTS WERE PERFORMED IN GENERAL ACCORDANCE WITH THE FOLLOWING ASTM TEST METHODS: C39, C39R, C143, C173, C188  
 \* DENOTES CRACKS IN FIELD      < - < DENOTES LOW COMPRESSIVE STRENGTH  
 FRACTURE TYPE IS INDICATED BY LETTER: (B) CONE (C) CONE & SPALL (S) CONE & SHEAR (SM) (S) COLUMN

POUR LOCATION: PROTECRETE, (MIX WATER CONDITIONER) TEST SLAB BAY#1

REMARKS: CYLINDER#582-591

DISTRIBUTION:  
PIEDMONT CONCRETE (C/B)

RESPECTFULLY SUBMITTED

Post-it Fax Note	7571	Date	9/16/96	# of pages	2
To	David Black	From	Don Hart		
Co./Dept	C.P.S.	Co.	Piedmont-Dixie		
Phone #		Phone #	710 723-0721		
Fax #	723-886-6303	Fax #	910 767-9062		

  
 DAVID W. CUTTER, P.E.

# PIEDMONT CONCRETE COMPANY

## CONCRETE TEST REPORT

CONTRACTOR Piedmont-Dixie Concrete DATE MADE 06/26/96  
 PROJECT Protecrete LOCATION Main Plant

### MIX PROPORTIONS PER CUBIC YARD

MIX NUMBER 40555 SPECIFIED STRENGTH 4000

CEMENT <u>550</u> LBS.	TYPE <u>I</u> BRAND <u>Blue Circle</u>
FLY ASH _____ LBS.	SOURCE: _____
FINE AGG <u>1385</u> LBS. (SSD)	SOURCE: <u>Natural G &amp; S</u>
FINE AGG _____ LBS. (SSD)	SOURCE: _____
COARSE AGG #57 <u>1800</u> LBS. (SSD)	SOURCE: <u>Crushed Granite Vulcan</u>
COARSE AGG 78# _____ LBS. (SSD)	SOURCE: _____
WATER <u>38</u> GALS. <u>316</u> LBS.	WATER / CEMENT RATIO <u>.576</u>
ADMIX WR _____ OZ/CWT	ADMIX AE _____ OZ.
ADMIX HRWR _____ OZ/CWT	ADMIX <u>Protecrete 10 oz/cwt</u>

### MIX FIELD DATA

SLUMP 5 " AIR CONTENT 1.5 % UNIT WEIGHT 149.68 LBS/FT<sup>3</sup>  
 SLUMP AFTER HRWR \_\_\_\_\_ " CONCRETE TEMP. 83 F AIR TEMP. 85 F.  
 TICKET # 81043 TRUCK # 37 TIME BATCHED 7:40 TIME SAMPLED \_\_\_\_\_  
 MADE BY Hart QUANTITY REPRESENTED \_\_\_\_\_ CU. YDS.

### COMPRESSION TEST RESULTS

LAB NUMBER	TEST AGE (DAYS)	CURE	DATE RECEIVED	DATE TESTED	MAX LOAD (LBS.)	UNIT LOAD (PSI)	AVERAGE
<u>4439</u>	<u>2</u>	<u>L</u>	<u>06/25/96</u>	<u>06/28/96</u>	<u>59,000</u>	<u>2090</u>	
<u>4440</u>	<u>3</u>		<u>/ /</u>	<u>06/29/96</u>	<u>68,500</u>	<u>2420</u>	
<u>4441</u>	<u>7</u>		<u>/ /</u>	<u>07/03/96</u>	<u>94,000</u>	<u>3320</u>	
<u>4442</u>	<u>7</u>			<u>07/03/96</u>	<u>97,000</u>	<u>3430</u>	<u>3370</u>
<u>4443</u>	<u>14</u>			<u>07/10/96</u>	<u>120,500</u>	<u>4260</u>	
<u>4444</u>	<u>14</u>			<u>07/10/96</u>	<u>119,500</u>	<u>4230</u>	<u>4240</u>
<u>4445</u>	<u>28</u>			<u>07/24/96</u>	<u>137,000</u>	<u>4840</u>	
<u>4446</u>	<u>28</u>			<u>07/24/96</u>	<u>137,500</u>	<u>4860</u>	<u>4850</u>
<u>4447</u>	<u>56</u>			<u>08/21/96</u>	<u>146,500</u>	<u>5180</u>	
<u>4448</u>	<u>56</u>			<u>08/21/96</u>	<u>149,000</u>	<u>5270</u>	<u>5220</u>

REMARKS \_\_\_\_\_

**PIEDMONT CONCRETE COMPANY**  
**CONCRETE TEST REPORT**

CONTRACTOR Lab DATE MADE 3/15/96  
 PROJECT Protecrete LOCATION \_\_\_\_\_

**MIX PROPORTIONS PER CUBIC YARD**

MIX NUMBER 1B SPECIFIED STRENGTH \_\_\_\_\_

CEMENT <u>550</u> LBS.	TYPE _____	BRAND <u>Blue Circle</u>
FLY ASH _____ LBS.	SOURCE: _____	
FINE AGG <u>1296</u> LBS. (SSD)	SOURCE: <u>GTS Materials</u>	
FINE AGG _____ LBS. (SSD)	SOURCE: _____	
COARSE AGG 3/4 <u>1880</u> LBS. (SSD)	SOURCE: <u>Vulcan</u>	
COARSE AGG 78# _____ LBS. (SSD)	SOURCE: _____	

WATER 10.1 GALS. 334 LBS. WATER / CEMENT RATIO .607

ADMIX WR Protecrete 10 OZ/CWT ADMIX AE \_\_\_\_\_ OZ.  
 ADMIX HRWR \_\_\_\_\_ OZ/CWT ADMIX \_\_\_\_\_

**MIX FIELD DATA**

SLUMP 6.5 AIR CONTENT .73 % UNIT WEIGHT 151.2 LBS/FT<sup>3</sup>

SLUMP AFTER HRWR \_\_\_\_\_ \* CONCRETE TEMP. 71 F AIR TEMP. \_\_\_\_\_ F.  
 TICKET # \_\_\_\_\_ TRUCK # \_\_\_\_\_ TIME BATCHED \_\_\_\_\_ TIME SAMPLED \_\_\_\_\_  
 MADE BY \_\_\_\_\_ QUANTITY REPRESENTED \_\_\_\_\_ CU. YDS.

**COMPRESSION TEST RESULTS**

LAB NUMBER	TEST AGE (DAYS)	DATE RECEIVED	DATE TESTED	MAX LOAD (LBS.)	UNIT LOAD (PSI)	AVERAGE
<u>4271</u>	<u>7</u>	<u>3/16/96</u>	<u>3/22/96</u>	<u>116,500</u>	<u>4120</u>	
<u>4272</u>	<u>7</u>	<u>1/1</u>	<u>1/1</u>	<u>116,500</u>	<u>4120</u>	<u>4120</u>
<u>4273</u>	<u>28</u>	<u>1/1</u>	<u>4/12/96</u>	<u>182,000</u>	<u>6490</u>	
<u>4274</u>	<u>28</u>		<u>4/12/96</u>	<u>176,000</u>	<u>6280</u>	<u>6280</u>
<u>4275</u>	<u>28</u> <u>Protec</u>		<u>1/1</u>	<u>156,000</u>	<u>5520</u>	
<u>4276</u>	<u>28</u> <u>30%</u>		<u>1/1</u>	<u>153,000</u>	<u>5400</u>	
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

REMARKS Water remained in pan from Wed to Friday morning

*112*

MIX DESIG Protectorrete Admix Test  
 SET # \_\_\_\_\_

DATE MADE March 15, 96

MATERIALS

CEMENT: TYPE: 1	BRAND: Blue Circle	S.G. =	3.15
FLY ASH:	SOURCE:	S.G. =	2.26
SAND:	SOURCE: G & S	S.G. =	2.63
		F.M. =	
STONE: SIZE: #57	SOURCE: Vulcan	S.G. =	2.847
		D.R.W. =	
EXTRA:	SOURCE:	S.G. =	2.2
WATER:		S.G. =	1
ADMIXTURE:			
AIR ENTRAINING AGENT	BRAND:	OZ. /CWT. =	0
WATER REDUCER	BRAND: Protect	OZ. /CWT. =	10
SUPERPLASTICIZER	BRAND:	OZ. /CWT. =	

MIX DESIGN CALCULATIONS

CEMENT	550 LBS.	2.80 C.F.
FLY ASH	0 LBS.	0.00 C.F.
EXTRA:	0 LBS.	0.00 C.F.
SAND	1246 LBS.	7.59 C.F.
STONE	1800 LBS.	10.58 C.F.
WATER	334 LBS.	5.35 C.F.
AIR	2.5 %	0.68 C.F.

*Water in pan  
 used until Friday  
 Morning*

40.1 GALS.

TOTAL = 27.00 C.F.

MIX DESIGN

1.4 C.F.

BATCH WEIGHTS

CEMENT	550 LBS.	26.52 LBS.
FLY ASH	0 LBS.	0.00 LBS.
EXTRA:	0 LBS.	0.00
SAND SSD	1246 LBS.	6.6 XMOISTURE
STONE SSD	1800 LBS.	1 XMOISTURE
WATER	334 LBS.	68.86 LBS.
ADMIXTURE		98.46 LBS.
A. E. A.	0 OZ. /CWT.	12.08 LBS.
W. R.	10 OZ. /CWT.	0.00 ML.
H. R. W. R.	0 OZ. /CWT.	84.34 ML.
		0.00 ML.

TOTAL WT. 4010

TOTAL = 148.51 LBS. /C. Y.

TEST RESULTS

YIELD CALCULATION

SLUMP	6.5 INCHES
AIR	0.73 %
CONC. TEN	71
AIR TEMP.	65
CYLINDER #'S	
SLUMP AFTER HRWR	_____ INCHES
WATER HELD BACK/ADDED	
0 ML	
0.00 GALS. /C. Y	

GROSS	88.3	LBS.
TARE	12.65	LBS.
NET	75.65	LBS.
FACTOR	1.9989	
UNIT WT.	151.22	LBS. /CU. FT.

YIELD =	26.52
W/C ratio =	0.607
AIR X	
by unit weight =	0.73

THEO / = 26.325  
 THEO WT 152.3214

PIEDMONT CONCRETE COMPANY

CONCRETE TEST REPORT

CONTRACTOR Lab

DATE MADE 3/15/96

PROJECT Procrete

LOCATION \_\_\_\_\_

MIX PROPORTIONS, PER CUBIC YARD

MIX NUMBER M.B.

SPECIFIED STRENGTH \_\_\_\_\_

CEMENT 500 LBS.  
 FLY ASH 100 LBS.  
 FINE AGG 1327 LBS. (SSD)  
 FINE AGG \_\_\_\_\_ LBS. (SSD)  
 COARSE AGG 3/4 1880 LBS. (SSD)  
 COARSE AGG 78# \_\_\_\_\_ LBS. (SSD)

TYPE \_\_\_\_\_ BRAND Blue Circle  
 SOURCE: Monroe Bayou Creek  
 SOURCE: Co & S Materials  
 SOURCE: \_\_\_\_\_  
 SOURCE: Dulcan  
 SOURCE: \_\_\_\_\_

WATER 36 GALS. 300 LBS.

WATER / CEMENT RATIO .500

ADMIX WR Procrete 10 OZ/CWT  
 ADMIX HRWR \_\_\_\_\_ OZ/CWT

ADMIX AE \_\_\_\_\_ OZ.  
 ADMIX \_\_\_\_\_

MIX FIELD DATA

SLUMP 2 " AIR CONTENT 1.75% UNIT WEIGHT 150.98 LBS/FT

SLUMP AFTER HRWR \_\_\_\_\_ " CONCRETE TEMP. 71 F AIR TEMP. \_\_\_\_\_ F.  
 TICKET # \_\_\_\_\_ TRUCK # \_\_\_\_\_ TIME BATCHED \_\_\_\_\_ TIME SAMPLED \_\_\_\_\_  
 MADE BY \_\_\_\_\_ QUANTITY REPRESENTED \_\_\_\_\_ CU. YDS.

COMPRESSION TEST RESULTS

LAB NUMBER	TEST AGE (DAYS)	DATE RECEIVED	DATE TESTED	MAX LOAD (LBS.)	UNIT LOAD (PSI)	AVERAGE
	CURE					
<u>4283</u>	<u>7</u>	<u>1/1</u>	<u>3/22/96</u>	<u>712,000</u>	<u>3960</u>	
<u>4284</u>	<u>7</u>	<u>1/1</u>	<u>1/1</u>	<u>110,000</u>	<u>3890</u>	<u>3920</u>
<u>4285</u>	<u>28</u>	<u>1/1</u>	<u>4/12/96</u>	<u>172,500</u>	<u>6100</u>	
<u>4286</u>	<u>28</u>		<u>4/12/96</u>	<u>177,500</u>	<u>6280</u>	<u>6190</u>
<u>4287</u>	<u>28</u> <u>Procrete</u>		<u>1/1</u>	<u>145,000</u>	<u>5130</u>	
<u>4288</u>	<u>28</u> <u>90%</u>		<u>1/1</u>	<u>148,500</u>	<u>5250</u>	
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

REMARKS \_\_\_\_\_

LABORATORY MIX DESIGN

**11B**

MIX DESIGN Protectcrete Admix Test  
 TEST # \_\_\_\_\_

DATE MADE March 15, 96

MATERIALS

CEMENT: TYPE: 1	BRAND: Blue Circle	S.G. =	3.15
FLY ASH:	SOURCE:	S.G. =	2.26
SAND:	SOURCE: G & S	S.G. =	2.53
		F.M. =	
STONE: SIZE: #67	SOURCE: Vulcan	S.G. =	2.847
		D.R.W. =	
EXTRA:	SOURCE:	S.G. =	2.2
WATER:		S.G. =	1
AD MIXTURE:			
AIR ENTRAINING AGENT	BRAND:	OZ. /CWT. =	0
WATER REDUCER	BRAND: Protect	OZ. /CWT. =	10
SUPERPLASTICIZER	BRAND:	OZ. /CWT. =	

MIX DESIGN CALCULATIONS

CEMENT	500 LBS.	2.54 C.F.	
FLY ASH	100 LBS.	0.71 C.F.	
EXTRA:	0 LBS.	0.00 C.F.	
SAND	1327 LBS.	8.09 C.F.	
STONE	1880 LBS.	10.58 C.F.	
WATER	300 LBS.	4.81 C.F.	36 GALS.
AIR	1 %	0.27 C.F.	

TOTAL = 27.00 C.F.

MIX DESIGN

1.4 C.F.

BATCH WEIGHTS

CEMENT	500 LBS.	25.93 LBS.
FLY ASH	100 LBS.	5.19 LBS.
EXTRA:	0 LBS.	0.00
SAND SSD	1327 LBS.	6.6 XMOISTURE
STONE SSD	1880 LBS.	1 XMOISTURE
WATER	300 LBS.	73.38 LBS.
AD MIXTURE		98.46 LBS.
A.E.A.	0 OZ. /CWT.	10.03 LBS.
W.R.	10 OZ. /CWT.	0.00 ML.
H.R.W.R.	0 OZ. /CWT.	92.01 ML.
		0.00 ML.

TOTAL WT. 4107 TOTAL = 152.12 LBS. /C.Y.

TEST RESULTS

YIELD CALCULATION

SLUMP	2 INCHES
AIR	1.75 %
CONC. TEM	71
AIR TEMP.	65
CYLINDER #'S	_____
SLUMP AFTER HRWR	_____ INCHES
WATER HELD BACK/ADDED	_____
	0 ML
	0.00 GALS. /C.Y.

GROSS	88.18	LBS.
TARE	12.65	LBS.
NET	75.53	LBS.
FACTOR	1.9989	
UNIT WT.	150.98	LBS. /CU. FT.

YIELD = 27.21  
 W/C ratio = 0.500  
 AIR %  
 by unit weight = 1.75

THEO / = 26.73  
 THEO WT 153.6615

PIEDMONT CONCRETE COMPANY

CONCRETE TEST REPORT

CONTRACTOR Lab DATE MADE 3/15/96  
 PROJECT Procrete LOCATION \_\_\_\_\_

MIX PROPORTIONS PER CUBIC YARD

MIX NUMBER 1A SPECIFIED STRENGTH \_\_\_\_\_  
 CEMENT 550 LBS. TYPE \_\_\_\_\_ BRAND Blue Circle  
 FLY ASH \_\_\_\_\_ LBS. SOURCE: \_\_\_\_\_  
 FINE AGG 1309 LBS. (SSD) SOURCE: GAS Materials  
 FINE AGG \_\_\_\_\_ LBS. (SSD) SOURCE: \_\_\_\_\_  
 COARSE AGG 3/4 1880 LBS. (SSD) SOURCE: Valcar  
 COARSE AGG 78# \_\_\_\_\_ LBS. (SSD) SOURCE: \_\_\_\_\_  
 WATER 372 GALS. 310 LBS. WATER / CEMENT RATIO .563  
 ADMIX WR \_\_\_\_\_ OZ/CWT ADMIX AE \_\_\_\_\_ OZ.  
 ADMIX HRWR \_\_\_\_\_ OZ/CWT ADMIX \_\_\_\_\_

MIX FIELD DATA

SLUMP 6.75 AIR CONTENT 2.73 % UNIT WEIGHT 149.62 LBS/FT  
 SLUMP AFTER HRWR \_\_\_\_\_ \* CONCRETE TEMP. 72 F AIR TEMP. \_\_\_\_\_ F.  
 TICKET # \_\_\_\_\_ TRUCK # \_\_\_\_\_ TIME BATCHED \_\_\_\_\_ TIME SAMPLED \_\_\_\_\_  
 MADE BY \_\_\_\_\_ QUANTITY REPRESENTED \_\_\_\_\_ CU. YDS.

COMPRESSION TEST RESULTS

LAB NUMBER	TEST AGE (DAYS)	DATE RECEIVED	DATE TESTED	MAX LOAD (LBS.)	UNIT LOAD (PSI)	AVERAGE
	CURE					
<u>4296</u>	<u>7</u>	<u>1/1</u>	<u>3/12/96</u>	<u>101,000</u>	<u>3570</u>	
<u>4297</u>	<u>7</u>	<u>1/1</u>	<u>1/1</u>	<u>103,500</u>	<u>3660</u>	<u>3610</u>
<u>4298</u>	<u>28</u>	<u>1/1</u>	<u>4/02/96</u>	<u>163,800</u>	<u>5770</u>	
<u>4299</u>	<u>28</u>		<u>4/12/96</u>	<u>161,000</u>	<u>5700</u>	<u>5790</u>
<u>4300</u>	<u>28</u>	<u>Procrete</u>	<u>4/12/96</u>	<u>132,000</u>	<u>4670</u>	
<u>4301</u>	<u>28</u>	<u>30%</u>	<u>1/1</u>	<u>141,500</u>	<u>5000</u>	
_____	_____	_____	<u>1/1</u>	_____	_____	_____
_____	_____	_____	<u>1/1</u>	_____	_____	_____
_____	_____	_____	<u>1/1</u>	_____	_____	_____
_____	_____	_____	<u>1/1</u>	_____	_____	_____

REMARKS Water in Pan from used to Friday

**1A**

IX DESIG Protectarete Admix Test DATE MADE March 10, 96  
 SET # \_\_\_\_\_

**MATERIALS**

CEMENT: TYPE: 1	BRAND: Blue Circl	S.G. =	3.15
FLY ASH:	SOURCE: Monex	S.G. =	2.26
SAND:	SOURCE: G & S	S.G. =	2.63
		F.M. =	
STONE: SIZE: #67	SOURCE: Vulcan	S.G. =	2.847
		D.R.W. =	
EXTRA:	SOURCE:	S.G. =	2.2
WATER:		S.G. =	1
ADMIXTURE:			
AIR ENTRAINING AGENT	BRAND:	OZ. /CWT. =	0
WATER REDUCER	BRAND: Monex LR	OZ. /CWT. =	4
SUPERPLASTICIZER	BRAND:	OZ. /CWT. =	

**MIX DESIGN CALCULATIONS**

CEMENT	550 LBS.	2.80 C.F.
FLY ASH	0 LBS.	0.00 C.F.
EXTRA:	0 LBS.	0.00 C.F.
SAND	1309 LBS.	7.98 C.F.
STONE	1880 LBS.	10.58 C.F.
WATER	310 LBS.	4.97 C.F.
IR	2.5 %	0.68 C.F.

*Water in pan  
 Wed afternoon until  
 Friday  
 37.2 GALS.*

TOTAL = 27.00 C.F.

**MIX DESIGN 1.4 C.F. BATCH WEIGHTS**

CEMENT	550 LBS.	28.52 LBS.
FLY ASH	0 LBS.	0.00 LBS.
EXTRA:	0 LBS.	0.00
SAND SSD	1309 LBS.	6.6 XMOISTURE 72.37 LBS.
STONE SSD	1880 LBS.	1 XMOISTURE 98.46 LBS.
WATER	310 LBS.	10.61 LBS.
ADMIXTURE		
A. E. A.	0 OZ. /CWT.	0.00 ML.
W. R.	4 OZ. /CWT.	33.74 ML.
H. R. W. R.	0 OZ. /CWT.	0.00 ML.

TOTAL WT. 4049 TOTAL = 149.97 LBS. /C. Y.

**TEST RESULTS**

**YIELD CALCULATION**

SLUMP	6.75 INCHES	GROSS	87.5	LBS.
AIR	2.73 %	TARE	12.65	LBS.
CONC. TEM	72	NET	74.85	LBS.
AIR TEMP.	65	FACTOR	1.9989	
CYLINDER #'S		UNIT WT.	149.62	LBS. /CU. FT.
LUMP AFTER HRWR	_____ INCHES			
WATER HELD BACK/ADDED		YIELD =	27.06	
0 ML		W/C ratio =	0.563	
0.00 GALS. /C. Y		AIR %		
THEO / =	26.325	by unit weight =		2.73

**PIEDMONT CONCRETE COMPANY**  
**CONCRETE TEST REPORT**

CONTRACTOR Lab DATE MADE 3/15/96  
 PROJECT Procrete LOCATION \_\_\_\_\_

**MIX PROPORTIONS PER CUBIC YARD**

MIX NUMBER ILB. SPECIFIED STRENGTH \_\_\_\_\_

CEMENT	<u>450</u>	LBS.	TYPE	BRAND <u>Blue Circle</u>
FLY ASH		LBS.	SOURCE:	
FINE AGG	<u>1396</u>	LBS. (SSD)	SOURCE:	<u>G+S Materials</u>
FINE AGG		LBS. (SSD)	SOURCE:	
COARSE AGG 3/4	<u>1880</u>	LBS. (SSD)	SOURCE:	<u>Vulcan</u>
COARSE AGG 78m		LBS. (SSD)	SOURCE:	
WATER	<u>90.1</u>	GALS.	WATER / CEMENT RATIO	<u>.742</u>
	<u>334</u>	LBS.		
ADHIX WR <u>Procrete</u>	<u>10</u>	OZ/CWT	ADHIX AE	_____ OZ.
ADHIX HRWR		OZ/CWT	ADHIX	_____ OZ.

**MIX FIELD DATA**

SLUMP 4 3/4 \* AIR CONTENT 1.36 % UNIT WEIGHT 149.82 LBS/FT<sup>3</sup>  
 SLUMP AFTER HRWR \_\_\_\_\_ \* CONCRETE TEMP. 71 F AIR TEMP. \_\_\_\_\_ F.  
 TICKET # \_\_\_\_\_ TRUCK # \_\_\_\_\_ TIME BATCHED \_\_\_\_\_ TIME SAMPLED \_\_\_\_\_  
 MADE BY \_\_\_\_\_ QUANTITY REPRESENTED \_\_\_\_\_ CU. YDS.

**COMPRESSION TEST RESULTS**

LAB NUMBER	TEST AGE (DAYS)	CURE	DATE RECEIVED	DATE TESTED	MAX LOAD (LBS.)	UNIT LOAD (PSI)	AVERAGE
<u>4277</u>	<u>7</u>	<u>L</u>	<u>1/1</u>	<u>3/22/96</u>	<u>68,500</u>	<u>2420</u>	
<u>4278</u>	<u>7</u>		<u>1/1</u>	<u>1/1</u>	<u>68,500</u>	<u>2420</u>	<u>2420</u>
<u>4279</u>	<u>28</u>		<u>1/1</u>	<u>4/12/96</u>	<u>118,000</u>	<u>4170</u>	
<u>4280</u>	<u>28</u>			<u>4/12/96</u>	<u>119,000</u>	<u>3860</u>	<u>4010</u>
<u>4281</u>	<u>28</u>	<u>Procrete</u>		<u>1/1</u>	<u>102,000</u>	<u>3680</u>	
<u>4282</u>	<u>28</u>	<u>30%</u>		<u>1/1</u>	<u>102,000</u>	<u>3780</u>	
_____	_____			<u>1/1</u>	_____	_____	_____
_____	_____			<u>1/1</u>	_____	_____	_____
_____	_____			<u>1/1</u>	_____	_____	_____
_____	_____			<u>1/1</u>	_____	_____	_____

REMARKS Water remained in pan from wed to small amount Friday morning

**DLB**

LABORATORY MIX DESIGN

MIX DESIGN Protectcrete Admix Test

DATE MADE March 15, 96

NET # \_\_\_\_\_

MATERIALS

CEMENT: TYPE: 1	BRAND: Blue Circle	S.G. =	3.15
FLY ASH:	SOURCE:	S.G. =	2.26
SAND:	SOURCE: G & S	S.G. =	2.63
		F.M. =	
STONE: SIZE: #67	SOURCE: Vulcan	S.G. =	2.847
		D.R.W. =	
EXTRA:	SOURCE:	S.G. =	2.2
WATER:		S.G. =	1
ADMIXTURE:			
AIR ENTRAINING AGENT	BRAND:	OZ./CWT. =	0
WATER REDUCER	BRAND: Protect	OZ./CWT. =	10
SUPERPLASTICIZER	BRAND:	OZ./CWT. =	

MIX DESIGN CALCULATIONS

CEMENT	450 LBS.	2.29 C.F.	
FLY ASH	0 LBS.	0.00 C.F.	
EXTRA:	0 LBS.	0.00 C.F.	
SAND	1396 LBS.	8.51 C.F.	
STONE	1880 LBS.	10.58 C.F.	
WATER	334 LBS.	5.35 C.F.	40.1 GALS.
AIR	1 %	0.27 C.F.	
TOTAL =		27.00 C.F.	

*Water in pore  
Used afternoon  
a little Friday noon*

MIX DESIGN

1.4 C.F.

BATCH WEIGHTS

CEMENT	450 LBS.	23.33 LBS.
FLY ASH	0 LBS.	0.00 LBS.
EXTRA:	0 LBS.	0.00
SAND SSD	1396 LBS.	6.6 XMOISTURE 77.15 LBS.
STONE SSD	1880 LBS.	1 XMOISTURE 98.46 LBS.
WATER	334 LBS.	11.57 LBS.
ADMIXTURE		
A. E. A.	0 OZ./CWT.	0.00 ML.
W. R.	10 OZ./CWT.	69.01 ML.
H. R. W. R.	0 OZ./CWT.	0.00 ML.

TOTAL WT. 4060 TOTAL = 150.36 LBS./C.Y.

TEST RESULTS

YIELD CALCULATION

SLUMP	4.75 INCHES
AIR	1.36 %
CONC. TEM	71
AIR TEMP.	69
CYLINDER #'S	_____
SLUMP AFTER HRWR	_____ INCHES
ER HELD BACK/ADDED	
0 ML	
0.00 GALS./C.Y.	

GROSS	87.6	LBS.
TARE	12.65	LBS.
NET	74.95	LBS.
FACTOR	1.9989	
UNIT WT.	149.82	LBS./CU. FT.
YIELD =	27.10	
W/C ratio =	0.742	
AIR X		
by unit weight =	1.36	

THEO / = 26.73  
THEO WT 151.8825

**PIEDMONT CONCRETE COMPANY**  
**CONCRETE TEST REPORT**

CONTRACTOR Lab DATE MADE 3/15/96  
 PROJECT Procrete LOCATION \_\_\_\_\_

**MIX PROPORTIONS PER CUBIC YARD**

MIX NUMBER TLA SPECIFIED STRENGTH \_\_\_\_\_

CEMENT <u>150</u> LBS.	TYPE _____	BRAND <u>Blue Circle</u>
FLY ASH _____ LBS.	SOURCE: _____	
FINE AGG <u>1923</u> LBS. (SSD)	SOURCE: <u>G+S Materials</u>	
FINE AGG _____ LBS. (SSD)	SOURCE: _____	
COARSE AGG 3/4 <u>1880</u> LBS. (SSD)	SOURCE: <u>Dulcan</u>	
COARSE AGG 7/8 _____ LBS. (SSD)	SOURCE: _____	
WATER <u>37.2</u> GALS. <u>310</u> LBS.	WATER / CEMENT RATIO <u>.689</u>	
ADMIX WR <u>Morex LR 4</u> OZ/CWT	ADMIX AE _____ OZ.	
ADMIX HRWR _____ OZ/CWT	ADMIX _____	

**MIX FIELD DATA**

SLUMP 6.25" AIR CONTENT 5.5% UNIT WEIGHT 145.42 LBS/FT<sup>3</sup>

SLUMP AFTER HRWR \_\_\_\_\_ CONCRETE TEMP. \_\_\_\_\_ F AIR TEMP. \_\_\_\_\_ F.  
 TICKET # \_\_\_\_\_ TRUCK # \_\_\_\_\_ TIME BATCHED \_\_\_\_\_ TIME SAMPLED \_\_\_\_\_  
 MADE BY \_\_\_\_\_ QUANTITY REPRESENTED \_\_\_\_\_ CU. YDS.

**COMPRESSION TEST RESULTS**

LAB NUMBER	TEST AGE (DAYS)	DATE RECEIVED	DATE TESTED	MAX LOAD (LBS.)	UNIT LOAD (PSI)	AVERAGE
	CURE					
<u>2302</u>	<u>7</u>	<u>1-1</u>	<u>3/22/96</u>	<u>71,000</u>	<u>2510</u>	
<u>2303</u>	<u>7</u>	<u>1-1</u>	<u>1-1</u>	<u>72,500</u>	<u>2560</u>	<u>2530</u>
<u>2304</u>	<u>28</u>	<u>1-1</u>	<u>4/12/96</u>	<u>123,000</u>	<u>4350</u>	
<u>2305</u>	<u>28</u>		<u>4/12/96</u>	<u>122,000</u>	<u>4310</u>	<u>4330</u>
<u>2306</u>	<u>28</u>		<u>1-1</u>	<u>111,000</u>	<u>3930</u>	
<u>2307</u>	<u>28</u>		<u>1-1</u>	<u>110,500</u>	<u>3910</u>	
_____	_____		<u>1-1</u>	_____	_____	_____
_____	_____		<u>1-1</u>	_____	_____	_____
_____	_____		<u>1-1</u>	_____	_____	_____
_____	_____		<u>1-1</u>	_____	_____	_____

REMARKS Water in pan from Wednesday dry Friday morning

**PIEDMONT CONCRETE COMPANY**  
**CONCRETE TEST REPORT**

CONTRACTOR Lab DATE MADE 3/15/96  
 PROJECT Procrete LOCATION \_\_\_\_\_

**MIX PROPORTIONS PER CUBIC YARD**

MIX NUMBER IVA SPECIFIED STRENGTH \_\_\_\_\_

CEMENT	<u>400</u>	LBS.	TYPE	BRAND <u>Blue Circle</u>
FLY ASH	<u>100</u>	LBS.	SOURCE:	<u>Monox Beloit Creek</u>
FINE AGG	<u>1320</u>	LBS. (SSD)	SOURCE:	<u>GFS Materials</u>
FINE AGG		LBS. (SSD)	SOURCE:	
COARSE AGG 3/4	<u>1880</u>	LBS. (SSD)	SOURCE:	<u>Vulcan</u>
COARSE AGG 78#		LBS. (SSD)	SOURCE:	

WATER 33.2 GALS. 310 LBS. WATER / CEMENT RATIO .555

ADMIX WR Monox LR 4 OZ/CWT ADMIX AE \_\_\_\_\_ OZ.  
 ADMIX HRWR \_\_\_\_\_ OZ/CWT ADMIX \_\_\_\_\_

**MIX FIELD DATA**

SLUMP 1.75 AIR CONTENT 1.72% UNIT WEIGHT 151.6 LBS/FT<sup>3</sup>

SLUMP AFTER HRWR \_\_\_\_\_ CONCRETE TEMP. 71 F AIR TEMP. \_\_\_\_\_ F.  
 TICKET # \_\_\_\_\_ TRUCK # \_\_\_\_\_ TIME BATCHED \_\_\_\_\_ TIME SAMPLED \_\_\_\_\_  
 MADE BY \_\_\_\_\_ QUANTITY REPRESENTED \_\_\_\_\_ CU. YDS.

**COMPRESSION TEST RESULTS**

LAB NUMBER	TEST AGE (DAYS)	DATE RECEIVED	DATE TESTED	MAX LOAD (LBS.)	UNIT LOAD (PSI)	AVERAGE
<u>2314</u>	<u>7</u>	<u>1/1</u>	<u>3/22/96</u>	<u>92,500</u>	<u>3270</u>	
<u>2315</u>	<u>7</u>	<u>1/1</u>	<u>1/1</u>	<u>87,000</u>	<u>3080</u>	<u>3170</u>
<u>2316</u>	<u>28</u>	<u>1/1</u>	<u>4/12/96</u>	<u>192,500</u>	<u>5220</u>	
<u>2317</u>	<u>28</u>		<u>4/12/96</u>	<u>149,500</u>	<u>5070</u>	<u>5140</u>
<u>2318</u>	<u>28</u>	<u>Procrete</u>	<u>1/1</u>	<u>150,000</u>	<u>4600</u>	
<u>2319</u>	<u>28</u>	<u>30%</u>	<u>1/1</u>	<u>196,000</u>	<u>4810</u>	
_____	_____		<u>1/1</u>	_____	_____	
_____	_____		<u>1/1</u>	_____	_____	
_____	_____		<u>1/1</u>	_____	_____	
_____	_____		<u>1/1</u>	_____	_____	

REMARKS \_\_\_\_\_



MATERIALS

CEMENT: TYPE: 1	BRAND: Blue Circle	S.G. =	3.15
FLY ASH:	SOURCE: Monex	S.G. =	2.26
SAND:	SOURCE: G & S	S.G. =	2.63
		F.H. =	
STONE: SIZE: #67	SOURCE: Vulcan	S.G. =	2.847
		D.R.W. =	
EXTRA:	SOURCE:	S.G. =	2.2
WATER:		S.G. =	1
ADMIXTURE:			
AIR ENTRAINING AGENT	BRAND:	OZ. /CWT. =	0
WATER REDUCER	BRAND: Mobex LR	OZ. /CWT. =	4
SUPERPLASTICIZER	BRAND:	OZ. /CWT. =	

MIX DESIGN CALCULATIONS

CEMENT	400 LBS.	2.04 C.F.	
FLY ASH	100 LBS.	0.71 C.F.	
EXTRA:	0 LBS.	0.00 C.F.	
SAND	1404 LBS.	8.55 C.F.	
STONE	1880 LBS.	10.58 C.F.	
WATER	277 LBS.	4.45 C.F.	33.2 GALS.
AIR	2.5 X	0.68 C.F.	

TOTAL = 27.00 C.F.

MIX DESIGN

1.4 C.F.

BATCH WEIGHTS

CEMENT	400 LBS.		20.74 LBS.
FLY ASH	100 LBS.		5.19 LBS.
EXTRA:	0 LBS.		0.00
SAND SSD	1404 LBS.	6.6 XMOISTURE	77.59 LBS.
STONE SSD	1880 LBS.	1.00 XMOISTURE	98.49 LBS.
WATER	277 LBS.		8.58 LBS.
ADMIXTURE			
A.E.A.	0 OZ. /CWT.		0.00 ML.
W.R.	4 OZ. /CWT.		30.67 ML.
H.R.W.R.	0 OZ. /CWT.		0.00 ML.

TOTAL WT. 4061 TOTAL = 150.41 LBS. /C.Y.

TEST RESULTS

YIELD CALCULATION

SLUMP	1.75 INCHES
AIR	1.72 X
CONC. TEM	71
AIR TEMP.	65
CYLINDER #'S	
SLUMP AFTER HRWR	INCHES
ER HELD BACK/ADDED	
0 ML	
0.00 GALS. /C.Y	

GROSS	88.5	LBS.
TARE	12.65	LBS.
NET	75.85	LBS.
FACTOR	1.9989	
UNIT WT.	151.62	LBS. /CU. FT.

YIELD = 26.79  
W/C ratio = 0.535  
AIR X

by unit weight = 1.72

THEO / = 26.325  
THEO WT 154.2662

**PIEDMONT CONCRETE COMPANY**  
**CONCRETE TEST REPORT**

CONTRACTOR \_\_\_\_\_

DATE MADE 3/15/96

PROJECT Protecrete

LOCATION \_\_\_\_\_

**MIX PROPORTIONS PER CUBIC YARD**

MIX NUMBER III A

SPECIFIED STRENGTH \_\_\_\_\_

CEMENT 500 LBS.  
 FLY ASH 100 LBS.  
 FINE AGG 1328 LBS. (SSD)  
 FINE AGG \_\_\_\_\_ LBS. (SSD)  
 COARSE AGG 3/4 1880 LBS. (SSD)  
 COARSE AGG 78# \_\_\_\_\_ LBS. (SSD)

TYPE \_\_\_\_\_ BRAND Blue Circle  
 SOURCE: Monex Bekus Cree  
 SOURCE: GTS Materials  
 SOURCE: \_\_\_\_\_  
 SOURCE: Vulcan  
 SOURCE: \_\_\_\_\_

WATER 33.3 GALS. 277 LBS.

WATER / CEMENT RATIO .462

ADMIX WR Monex LR 4 OZ/CWT  
 ADMIX HRWR \_\_\_\_\_ OZ/CWT

ADMIX AE \_\_\_\_\_ OZ.  
 ADMIX \_\_\_\_\_

**MIX FIELD DATA**

SLUMP 4.25" AIR CONTENT 2.8% UNIT WEIGHT 150.56 LBS/FT

SLUMP AFTER HRWR \_\_\_\_\_ \* CONCRETE TEMP. \_\_\_\_\_ F AIR TEMP. \_\_\_\_\_ F.  
 TICKET # \_\_\_\_\_ TRUCK # \_\_\_\_\_ TIME BATCHED \_\_\_\_\_ TIME SAMPLED \_\_\_\_\_  
 MADE BY \_\_\_\_\_ QUANTITY REPRESENTED \_\_\_\_\_ CU. YDS.

**COMPRESSION TEST RESULTS**

LAB NUMBER	TEST AGE (DAYS)	DATE RECEIVED	DATE TESTED	MAX LOAD (LBS.)	UNIT LOAD (PSI)	AVERAGE
CURE						
<u>1308</u>	<u>7</u>	<u>1/1</u>	<u>3/22/96</u>	<u>115,500</u>	<u>4080</u>	
<u>1309</u>	<u>7</u>	<u>1/1</u>	<u>3/22/96</u>	<u>117,500</u>	<u>4160</u>	<u>4120</u>
<u>1310</u>	<u>28</u>	<u>1/1</u>	<u>2/12/96</u>	<u>181,000</u>	<u>6400</u>	
<u>1311</u>	<u>28</u>		<u>2/12/96</u>	<u>177,500</u>	<u>6280</u>	<u>6390</u>
<u>1312</u>	<u>28</u>	<u>Protecrete</u>	<u>1/1</u>	<u>152,500</u>	<u>5380</u>	
<u>1313</u>	<u>28</u>	<u>30%</u>	<u>1/1</u>	<u>155,500</u>	<u>5500</u>	
_____	_____	_____	<u>1/1</u>	_____	_____	_____
_____	_____	_____	<u>1/1</u>	_____	_____	_____
_____	_____	_____	<u>1/1</u>	_____	_____	_____
_____	_____	_____	<u>1/1</u>	_____	_____	_____

REMARKS \_\_\_\_\_

**TILA**

SET # \_\_\_\_\_

**MATERIALS**

CEMENT: TYPE: 1	BRAND: Blue Circl	S.G. =	3.15
FLY ASH:	SOURCE: Monex	S.G. =	2.26
SAND:	SOURCE: G & S	S.G. =	2.63
		F.M. =	
STONE: SIZE: #67	SOURCE: Vulcan	S.G. =	2.847
		D.R.W. =	
EXTRA:	SOURCE:	S.G. =	2.2
WATER:		S.G. =	1
ADMIXTURE:			
AIR ENTRAINING AGENT	BRAND:	OZ. /CWT. =	0
WATER REDUCER	BRAND: Monex LR	OZ. /CWT. =	4
SUPERPLASTICIZER	BRAND:	OZ. /CWT. =	

**MIX DESIGN CALCULATIONS**

CEMENT	500 LBS.	2.54 C.F.	
FLY ASH	100 LBS.	0.71 C.F.	
EXTRA:	0 LBS.	0.00 C.F.	
SAND	1320 LBS.	8.04 C.F.	
STONE	1880 LBS.	10.58 C.F.	
WATER	277 LBS.	4.45 C.F.	33.3 GALS.
AIR	2.5 %	0.68 C.F.	

TOTAL = 27.00 C.F.

**MIX DESIGN 1.4 C.F. BATCH WEIGHTS**

CEMENT	500 LBS.	25.93 LBS.
FLY ASH	100 LBS.	5.19 LBS.
EXTRA:	0 LBS.	0.00
SAND SSD	1320 LBS.	6.6 XMOISTURE
STONE SSD	1880 LBS.	1.03 XMOISTURE
WATER	277 LBS.	8.86 LBS.
ADMIXTURE		
A.E.A.	0 OZ./CWT.	0.00 ML.
W.R.	4 OZ./CWT.	36.80 ML.
H.R.W.R.	0 OZ./CWT.	0.00 ML.

TOTAL WT. 4078 TOTAL = 151.02 LBS./C.Y.

**TEST RESULTS**

**YIELD CALCULATION**

SLUMP	4.25 INCHES	GROSS	87.97	LBS.
AIR	2.8 %	TARE	12.65	LBS.
CONC. TEM	73	NET	75.32	LBS.
AIR TEMP.	65	FACTOR	1.9989	
CYLINDER #'S		UNIT WT.	150.56	LBS./CU. FT.
SLUMP AFTER HRWR	_____ INCHES			
WATER HELD BACK/ADDED		YIELD =	27.08	
0 ML		W/C ratio =	0.462	
0.00 GALS./C.Y.		AIR %		
THEO / =	26.325			

PIEDMONT CONCRETE COMPANY

CONCRETE TEST REPORT

CONTRACTOR Lab DATE MADE 3/15/96  
 PROJECT Protecrete LOCATION \_\_\_\_\_

MIX PROPORTIONS PER CUBIC YARD

MIX NUMBER IV B. SPECIFIED STRENGTH \_\_\_\_\_  
 CEMENT 400 LBS. TYPE \_\_\_\_\_ BRAND Blue Circle  
 FLY ASH 100 LBS. SOURCE: Mered. Potters Creek  
 FINE AGG 1389 LBS. (SSD) SOURCE: G+S Materials  
 FINE AGG \_\_\_\_\_ LBS. (SSD) SOURCE: \_\_\_\_\_  
 COARSE AGG 3/4 1880 LBS. (SSD) SOURCE: Ustcar  
 COARSE AGG 78# \_\_\_\_\_ LBS. (SSD) SOURCE: \_\_\_\_\_  
 WATER 36 GALS. 300 LBS. WATER / CEMENT RATIO .60  
 ADMIX WR Protecrete 10 OZ/CWT ADMIX AE \_\_\_\_\_ OZ.  
 ADMIX HRWR \_\_\_\_\_ OZ/CWT ADMIX \_\_\_\_\_

MIX FIELD DATA

SLUMP 4 1/4 AIR CONTENT .9 % UNIT WEIGHT 151.6 LBS/FT<sup>3</sup>  
 SLUMP AFTER HRWR \_\_\_\_\_ CONCRETE TEMP. 67 F AIR TEMP. \_\_\_\_\_ F.  
 TICKET # \_\_\_\_\_ TRUCK # \_\_\_\_\_ TIME BATCHED \_\_\_\_\_ TIME SAMPLED \_\_\_\_\_  
 MADE BY \_\_\_\_\_ QUANTITY REPRESENTED \_\_\_\_\_ CU. YDS.

COMPRESSION TEST RESULTS

LAB NUMBER	TEST AGE (DAYS)	DATE RECEIVED	DATE TESTED	MAX LOAD (LBS.)	UNIT LOAD (PSI)	AVERAGE
	CURE					
<u>9289</u>	<u>7</u>	<u>1/1</u>	<u>3/22/96</u>	<u>71,000</u>	<u>2620</u>	
<u>9290</u>	<u>7</u>	<u>1/1</u>	<u>1/1</u>	<u>73,000</u>	<u>2580</u>	<u>2600</u>
<u>9291</u>	<u>28</u>	<u>1/1</u>	<u>2/12/96</u>	<u>127,000</u>	<u>4990</u>	
<u>9292</u>	<u>28</u>		<u>2/12/96</u>	<u>126,000</u>	<u>4460</u>	
<u>9293</u>	<u>28</u>	<u>Protecrete</u>	<u>1/1</u>	<u>111,500</u>	<u>3940</u>	<u>4480</u>
<u>9294</u>	<u>28</u>	<u>30%</u>	<u>1/1</u>	<u>112,000</u>	<u>3960</u>	
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

REMARKS \_\_\_\_\_

LABORATORY MIX DESIGN

**IV B**

MIX DESIG Protectcrete Admix Test  
ET # \_\_\_\_\_

DATE MADE March 13, 96

MATERIALS

CEMENT: TYPE: 1	BRAND: Blue Circle	S.G. =	3.15
FLY ASH:	SOURCE: Monex	S.G. =	2.26
SAND:	SOURCE: G & S	S.G. =	2.63
		F.M. =	
STONE: SIZE: #67	SOURCE: Vulcan	S.G. =	2.847
		D.R.W. =	
EXTRA:	SOURCE:	S.G. =	2.2
WATER:		S.G. =	1
ADMIXTURE:			
AIR ENTRAINING AGENT	BRAND:	OZ. /CWT. =	0
WATER REDUCER	BRAND: Protect	OZ. /CWT. =	10
SUPERPLASTICIZER	BRAND:	OZ. /CWT. =	

MIX DESIGN CALCULATIONS

CEMENT	400 LBS.	2.94 C.F.	
FLY ASH	100 LBS.	0.71 C.F.	
EXTRA:	0 LBS.	0.00 C.F.	
SAND	1389 LBS.	8.46 C.F.	
STONE	1880 LBS.	10.58 C.F.	
WATER	300 LBS.	4.81 C.F.	36 GALS.
AIR	1.5 X	0.41 C.F.	
<b>TOTAL =</b>		<b>27.00 C.F.</b>	

MIX DESIGN 1.4 C.F. BATCH WEIGHTS

CEMENT	400 LBS.	20.74 LBS.
FLY ASH	100 LBS.	5.19 LBS.
EXTRA:	0 LBS.	0.00
SAND SSD	1389 LBS.	6.6 XMOISTURE 76.77 LBS.
STONE SSD	1880 LBS.	1 XMOISTURE 98.45 LBS.
WATER	300 LBS.	9.82 LBS.
ADMIXTURE		
A. E. A.	0 OZ. /CWT.	0.00 ML.
W. R.	10 OZ. /CWT.	76.67 ML.
H. R. W. R.	0 OZ. /CWT.	0.00 ML.

TOTAL WT. 4069 TOTAL = 150.69 LBS. /C. Y.

TEST RESULTS

SLUMP	4.25 INCHES
AIR	0.9 X
CONC. TEM	67
AIR TEMP.	65
CYLINDER #'S	_____
SLUMP AFTER HRWR	_____ INCHES
ER HELD BACK/ADDED	
0 ML	
0.00 GALS. /C. Y	

YIELD CALCULATION

GROSS	88.5	LBS.
TARE	12.65	LBS.
NET	75.85	LBS.
FACTOR	1.9989	
UNIT WT.	151.62	LBS. /CU. FT.
YIELD =	26.84	
W/C ratio =	0.600	
AIR X		
by unit weight =	0.90	

THEO / = 26.595  
THEO WT 152.9877