



Wichita **CHEMICAL AND TESTING** *Laboratories*

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1-Knoll
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RESEARCH ON MANUFACTURING PROBLEMS

1428 N. MOSLEY AVE.

PHONE HOBAR 4-3948

WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 906016
Lines (Refer to This Number)
Location: Colwich, Kansas
Contractor: Loch Joint Pipe Co
Architect: Black & Vestch
Owner: City of Wichita
Date Submitted at Lab: 5-10-56

Date: 5 June 1956
Report No. 130 # 221
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1443	5-7	2-3/4	2780	3340	1380	458	7350	RC AF	28	24	66" Line Pipe Coating @ 3:30 PM
No. 1444	5-7	2-3/4	2780	3340	1380	458	7350 7755	RC AF	28	24	66" Line Pipe Coating @ 3:30 PM
No. 1445	5-7	2-3/4	2780	3340	1380	458	7175	VS AF	28	24	66" Line Pipe Coating @ 3:30 PM
TESTS CONDUCTED AT WICHITA											
Required 28 Day Strength: 4500 P.S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh Reg. Portland

AF—aggregate failure.

Admixture None

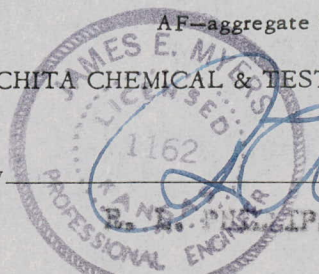
Fine Aggregate Dolosa Concrete Sand

Coarse Aggregate Coline 3/4" Stone

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By





Wichita CHEMICAL AND TESTING Laboratories

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1422 N. MOSELEY AVE.
PHONE HO 0441 - 4-2012
WICHITA & KANSAS

FLEXURE AND COMPRESSION TEST REPORT

Specimen No. _____ Date _____
Contract No. _____ (Refer to This Number)
Job No. _____
City _____
State _____
Material _____
Specimens _____
Report No. _____
Date _____

Specimen Number	Date Made	Flexure Inches	Mixture			Compressive Strength P.S.I.	Type of Concrete	Age in Days	Days in Storage	Remarks
			Coarse Aggregate	Fine Aggregate	Cement					
1	10-1-38	1.25	100	100	100	4500	Normal	28	0	Tested at 28 days
2	10-1-38	1.25	100	100	100	4500	Normal	28	0	Tested at 28 days
3	10-1-38	1.25	100	100	100	4500	Normal	28	0	Tested at 28 days

TESTS CONDUCTED AT WICHITA

TYPE FLEXURE TEST - 1000 lbs. weight applied at 100 lbs. per sq. inch. The test is run at 100 lbs. per sq. inch.

By _____
Wichita Chemical Testing Laboratories
Date _____
City _____
State _____
Material _____
Specimens _____
Report No. _____
Date _____



Wichita CHEMICAL AND TESTING Laboratories

CC: 1-Lock Joint @ Colwich
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PHONE HOBAR 4-3948

WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 906012
Lines (Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 5-8-56

Date 5 June 1956
Report No. LJO # 220
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1436	5-4	5	3660	5480	2060	+87	6930	RC AF	28	23	66" Line Pipe Coating @ 11:30 AM
No. 1437	5-4	5	3660	5480	2060	+87	6880	RC AF	28	23	66" Line Pipe Coating @ 11:30 AM
TESTS CONDUCTED AT WICHITA											
Required 28 Day Strength: 4500 P.S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

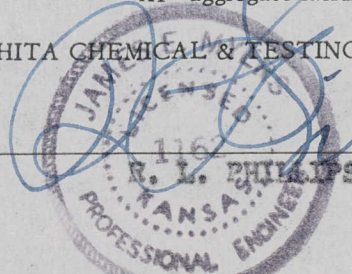
AF—aggregate failure.

Admixture NoneFine Aggregate Dolase Concrete SandCoarse Aggregate Woline 3/4" Limestone

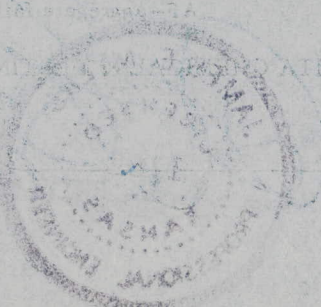
Mixed Aggregate _____

WICHITA CHEMICAL & TESTING LABORATORIES

By



TESTS CONDUCTED AT WICHITA



WE TEST EVERYTHING



UNDER THE SUN

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905481
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Loek Joint Pipe Co
Architect: Black & Veatch
Owner: City of Wichita,
Date Submitted at Lab: 5-4-56 & 5-7-56

Date: 1 June 1956
Report No. LJC # 219
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1428	5-2	4-1/2	3660	5480	2060	+87	7015	RC AF	28	25	66" Line Pipe Coating @ 11:00 AM
No. 1429	5-2	4-1/2	3660	5460	2060	+87	7035	RC AF	28	25	66" Line Pipe Coating @ 11:00 AM
No. 1432	5-3	5	3660	5480	2060	+87	6705	DS AF	28	24	66" Line Pipe Coating @ 2:00PM
No. 1433	5-3	5	3660	5480	2060	+87	6580	RC AF	28	24	66" Line Pipe Coating @ 2:00 PM
TESTS CONDUCTED AT WICHITA											
Required 28 Day Strength: 4500 P.S.I.											

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement Monarch

AF-aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolose Concrete Sand

Coarse Aggregate Woline 3/4" Limestone

Mixed Aggregate

By

R. L. PHILLIPS

TESTS CONDUCTED AT WICHITA

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905458
(Refer to This Number)

Date 29 May 1956

Report No. LJC#218

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co

Made by: Laboratory

Architect: Black & Veatch

Structure: Water Line

Owner: City of Wichita

Date Submitted at Lab: 5-3-56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1424	4-30	5	3660	5480	2060	+ 87	7335	DS AF	28	24	66" Line Pipe Casti @ 11:30 A.M.
No. 1425	4-30	5	3660	5480	2060	+ 87	7440	RC AF	28	24	66" Line Pipe Casti ing @ 11:30 A.M.

TESTS CONDUCTED AT WICHITA

Required 28 Day Strength: 4500 P.S.I.

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement Lehigh

AF-aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolose Concrete Sand

By R. L. PHILLIPS

Coarse Aggregate Moline 3/4" Limestone

Mixed Aggregate

TESTS CONDUCTED AT WICHITA



Wichita CHEMICAL AND TESTING Laboratories

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1428 N. MOSLEY AVE.

PHONE HOBAR 4-3948

WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905422
(Refer to This Number)

Date 26 May 1956Report No. LJC # 217Location: Colwich, Kansas

Specimens

Contractor: Loek Joint Pipe Co.Made by: LaboratoryArchitect: Black & VeatchStructure Water LineOwner: City of Wichita,Date Submitted at Lab: 5-2-56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1420	4-27	5	3660	5480	2060	+87	6980	RC AF	28	21	66" Line Pipe Coating @ 12:00 Noon
No. 1421	4-27	5	3660	5480	2060	+87	6650	DS AF	28	21	66" Line Pipe Coating @ 12:00 Noon
TESTS CONDUCTED AT WICHITA Required 28 Day Strength: 4500 P.S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture NoneFine Aggregate Dolese Concrete SandCoarse Aggregate Moline 3/4" Limestone

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By

E. L. PHILLIPS

TESTS CONDUCTED AT WICHITA

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905396
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 4-30-56

Date 25 May 1956
Report No. LJC # 216
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1415	4-26	3	3660	5480	2060	+ 87	6635	RC AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 1416	4-26	3	3660	5480	2060	+ 87	6475	RC AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 1417	4-27	3	3660	5480	2060	+ 87	6390	RC AF	28	23	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT WICHITA Required 28 Day Strength: 4500 P.S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolese Concrete Sand

By R. L. PHILLIPS

Coarse Aggregate Moline 3/4" Limestone

Mixed Aggregate

TESTS CONDUCTED AT WICHITA



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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905366
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 4/27/56

Date 23 May 1956
Report No. LJC # 215
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1408	4/25	5"	3660	5480	2060	± 87	7280	RC-AF	28	26	66" Line Pipe Core @ 11:30 A.M.
No. 1409	4/25	5"	3660	5480	2060	± 87	6945	DS-AF	28	26	66" Line Pipe Core @ 11:30 A.M.
TESTS CONDUCTED AT WICHITA											
Required 28 day strength: 4500 P. S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Delase Concrete Sand

By R. L. Phillips

Coarse Aggregate Moline Limestone

Mixed Aggregate _____



Wichita **CHEMICAL
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File:1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905339
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Ventch
Owner: City of Wichita
Date Submitted at Lab: 4/27/56

Date: May 22, 1956
Report No. LJT # 214
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1404	4/24	4"	3660	5480	2060	± 87	7810	RC-AF	28	25	66" Line Pipe Coat- ing @ 1:00 P.M.
No. 1405	4/24	4"	3660	5480	2060	± 87	6945	DS-AF	28	25	66" Line Pipe Coat- ing @ 1:00 P.M.
TESTS CONDUCTED AT WICHITA											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

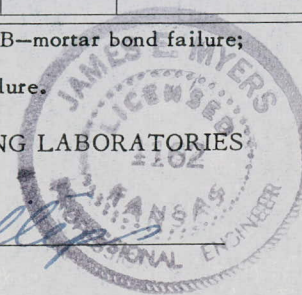
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolose Concrete Sand

By R. L. Phillips
R. L. Phillips

Coarse Aggregate Moline Limestone

Mixed Aggregate _____





TESTING
AND
CHEMICAL

at 10:11 AM

FLXURE AND COMPRESSION TEST REPORT

5185 5193A 52180

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905322
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 4/25/56

Date: 21 May 1956
Report No. LJO # 213
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1399	4/23	5"	3660	5480	2060	± 87	6740	DS-AF	28	26	66" Line Pipe Coat- ing @ 1:30 P.M.
No. 1400	4/23	5"	3660	5480	2060	± 87	7175	DS-AF	28	26	66" Line Pipe Coat- ing @ 1:30 P.M.
No. 1401	4/23	5"	3660	5480	2060	± 87	6945	DS-AF	28	26	66" Line Pipe Coat- ing @ 1:30 P.M.
TESTS CONDUCTED AT WICHITA Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolese Concrete Sand

Coarse Aggregate Moline 3/4" Limestone

Mixed Aggregate

By R. L. Phillips



laboratory

LAZIMHO
DMA
UNITET

Richard

RESEARCH ON MANUFACTURING PROBLEMS

435 W. MOLEY AVE. PHOENIX 4-3948

BABMAN, S. ATINDIN

FLEXURE AND COMPRESSION TEST REPORT

(Refer to This Number)

WICHTA CHEMICALS, INC. 10000



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905268
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Loock Joint Pipe Co
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 4-24-56

Date: 19 XXXX May 1956
Report No. LJC # 212
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
1387	4-19	2 1/2	3660	5480	2060	+87	6795	DS AF	28	22	66" Line Pipe Core @ 2:30 P.M.
1388	4-19	2 1/2	3660	5480	2060	+87	6560	RC AF	28	22	66" Line Pipe Core @ 2:30 P.M.
1389	4-19	2 1/2	3660	5480	2060	+87	6795	RC AF	28	22	66" Line Pipe Core @ 2:30 P.M.
1393	4-20	4	3660	5480	2060	+87	7160	RC AF	28	23	66" Line Pipe Core Coating @ 11:30AM
1394	4-20	4	3660	5480	2060	+87	7315	RC AF	28	23	66" Line Pipe Coating @ 11:30AM
1395	4-20	4	3660	5480	2060	+87	7125	RC AF	28	23	66" Line Pipe Coating @ 11:30AM

TESTS CONDUCTED AT WICHITA

Required 28 Day Strength: 4500 PSI

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

Admixture None

Fine Aggregate Delese Concrete Sand

Coarse Aggregate Woline 3/4" Limestone

Mixed Aggregate _____

AF—aggregate failure.

WICHITA CHEMICAL & TESTING LABORATORIES

By R. L. Phillips

TESTS CONDUCTED AT WICHITA

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1428 N. MOSLEY AVE. PHONE HOBAR 4-3948
WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project 66" Water Transmission Lab. No. 905248
Lines
Location Colwich, Kansas
Contractor Lock Joint Pipe Co.
Architect Black & Veatch
Owner City of Wichita
Date Submitted at Lab 4/27/56

Date 16 May 1956
Report No. LJC # 211
Specimens
Made by Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1381	4/18	3"	3660	5480	2060	± 87	6910	RC-AF	28	25	66" Line Pipe Core @ 2:45 P.M.
No. 1382	4/18	3"	3660	5480	2060	± 87	7070	RC-MB	28	25	66" Line Pipe Core @ 2:45 P.M.
No. 1383	4/18	3"	3660	5480	2060	± 87	6830	RC-AF	28	25	66" Line Pipe Core @ 2:45 P.M.
Required 28 day strength: 4500 P. S. I.											

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolene Concrete Sand

By R. L. Phillips

Coarse Aggregate elaine 3/4" Limestone

Mixed Aggregate

TESTS CONDUCTED AT WICHITA

WE TEST EVERYTHING



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Wichita CHEMICAL AND TESTING Laboratories

CC? Lock Jo int. @ Colwich
2 Weller
1 Knoll
1 Hess

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 903217
Lines
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Ventch
Owner: City of Wichita
Date Submitted at Lab: 4/20 & 5/10/56

Date: 15 May 1956
Report No. LJO # 210
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1375	4/17	3-1/2	3660	5480	2060	± 87	6795	RC-AF	28	25	66" Line Pipe Core @ 1:00 P.M.
No. 1376	4/17	3-1/2	3660	5480	2060	± 87	6795	RC-AF	28	25	66" Line Pipe Core @ 1:00 P.M.
No. 1377	4/17	3-1/2	3660	5480	2060	± 87	7125	DS-AF	28	25	66" Line Pipe Core @ 1:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1440	5/7	2-3/4	2780	3340	1380	± 58	6150	DS-AF	7	0	66" Line Pipe Core @ 3:30 P.M.
No. 1441	5/7	2-3/4	2780	3340	1380	± 58	6100	DS-AF	7	0	66" Line Pipe Core @ 3:30 P.M.
No. 1442	5/7	2-3/4	2780	3340	1380	± 58	5950	DS-AF	7	0	66" Line Pipe Core @ 3:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											

Required 28 day strength: 450 P.S.I.
TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Lehigh

AF—aggregate failure

Admixture: None

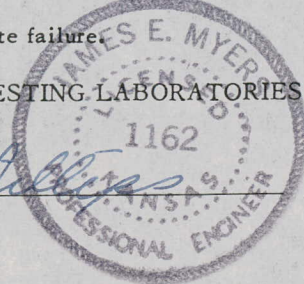
Fine Aggregate: Dolase Concrete Sand

Coarse Aggregate: Moline 3/4" Limestone

Mixed Aggregate: _____

WICHITA CHEMICAL & TESTING LABORATORIES

By R. L. Phillips
R. L. Phillips



TESTS CONDUCTED AT FIELD LABORATORY



Wichita CHEMICAL AND TESTING Laboratories

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2 Weller
1 Knoll
1 Hess

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PHONE HO BART 4-3948

WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905198
(Refer to This Number)

Date 14 May 1956Report No. LJC # 209Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.Made by: LaboratoryArchitect: Black & VeatchStructure Water LineOwner: City of WichitaDate Submitted at Lab: 4/19/56 & 5/10/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1369	4/16	7"	4156	4984	2058	± 87	6230	DS-AF	28	25	66" Line Pipe Cor @ 2:30 P.M.
No. 1370	4/16	7"	4156	4984	2058	± 87	6180	RC-AF	28	25	66" Line Pipe Cor @ 2:30 P.M.
No. 1371	4/16	7"	4156	4984	2058	± 87	5760	DS-AF	28	25	66" Line Pipe Core @ 2:30 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1438	5/7	2-3/4	2780	3340	1380	± 58	5400	RC-AF	3	0	66" Line Pipe Coa ing @ 3:30 P.M.
No. 1439	5/7	2-3/4	2780	3340	1380	± 58	5300	RC-AF	3	0	66" Line Pipe Coa ing @ 3:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. #. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture NoneFine Aggregate Dolless Concrete SandCoarse Aggregate Woline 3/4" LimestoneMixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By

R. L. Phillips

TESTS CONDUCTED AT FIELD LABORATORY



Wichita **CHEMICAL AND TESTING** *Laboratories*

CC: 2 Lock Joint @ Colwich
2 Weller
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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 905175
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 4/18 & 5/8/56

Date 11 May 1956
Report No. LJC # 208
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1363	4/13	3-1/2	4156	4984	2058	± 87	6810	RC-AF	28	23	66" Line Pipe Core @ 2:15 PM
No. 1364	4/13	3-1/2	4156	4984	2058	± 87	7315	RC-AF	28	23	66" Line Pipe Core @ 2:15 PM
No. 1365	4/13	3-1/2	4156	4984	2058	± 87	7370	RC-AF	28	23	66" Line Pipe Core @ 2:15 PM
TESTS CONDUCTED AT FIELD LABORATORY											
No. 1434	5/4	5"	4156	4984	2058	± 87	5000	RC-AF	7	0	66" Line Pipe Coat- ing @ 11:30 AM
No. 1435	5/4	5"	4156	4984	2058	± 87	3600	VS-AF	7	0	66" Line Pipe Coat- ing @ 11:30 AM
TESTS CONDUCTED AT WICHITA											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolomite Concrete Sand

By R. L. Phillips

Coarse Aggregate Wichita Limestone

Mixed Aggregate

TESTS CONDUCTED AT FIELD LABORATORY

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal; and failures

100% *in situ* curing

WICHITA CHEMICAL & PETROLEUM COMPANY

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905158
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 4/17/56

Date 10 May 1956
Report No. LJC # 207
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1357	4/12	4"	4156	4984	2058	± 87	6440	DS-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 1358	4/12	4"	4156	4984	2058	± 87	7050	RC-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 1359	4/12	4"	4156	4984	2058	± 87	6650	RC-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
Required 28 day strength:							4500 P. S. I.				

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

Fine Aggregate Dolose Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By

R. L. Phillips
R. L. Phillips
PROFESSIONAL ENGINEER

LAO MENO
DHA
DINTE

alibi

248 HAN, S. ATINCHI W

WICHITA CHEMICAL & TANK CO. L.S. 101101



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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 905137
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Ventch
Owner: City of Wichita
Date Submitted at Lab: 4/16 & 5/4 & 5/7/56

Date 9 May 1956
Report No. LJO # 206
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1351	4/11	2"	4156	4984	2058	± 87	8020	VS-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 1352	4/11	2"	4156	4984	2058	± 87	6945	DS-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 1353	4/11	2"	4156	4984	2058	± 87	7335	DS-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1426	5/2	4-1/2"	3660	5480	2060	± 87	4800	RC-AF	7	0	66" Line Pipe Coat- ing @ 11:00 A.M.
No. 1427	5/2	4-1/2"	3660	5480	2060	± 87	4700	RC-AF	7	0	66" Line Pipe Coat- ing @ 11:00 AM
No. 1430	5/3	5"	3660	5480	2060	± 87	5000	RC-AF	7	0	66" Line Pipe Coat- ing @ 2:00 PM
No. 1431	5/3	5"	3660	5480	2060	± 87	4800	RC-AF	7	0	66" Line Pipe Coat- ing @ 2:00 PM
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

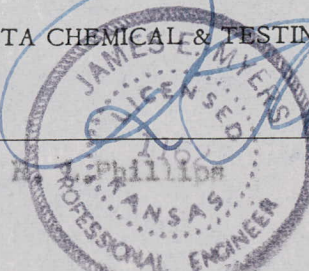
Fine Aggregate Dolom Concrete Sand

Coarse Aggregate Moline Limestone

Mixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

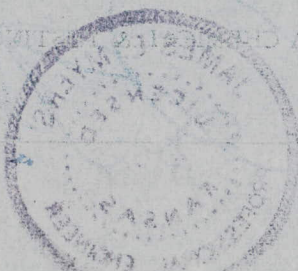
By



TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

WICHITA COUNTY LABORATORIES





Wichita CHEMICAL AND TESTING Laboratories

CC: 2 Lock Joint @ Colwich
2 Weller
1 Knoll
1 Hess

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905126

(Refer to This Number)

Date: 8 May 1956Report No. L-10 # 205

Specimens

Made by: LaboratoryStructure Water LineLocation: Colwich, KansasContractor: Lock Joint Pipe Co.Architect: Black & VeatchOwner: City of WichitaDate Submitted at Lab: 4/12 & 5/3/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1345	4/10	3"	4156	4984	2058	± 87	7175	RC-AF	28	25	66" Line Pipe Core @ 2:00 PM
No. 1346	4/10	3"	4156	4984	2058	± 87	6830	RC-AF	28	25	66" Line Pipe Core @ 2:00 PM
No. 1347	4/10	3"	4156	4984	2058	± 87	7090	RC-AF	28	25	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT WICHITA											
No. 1422	4/30	5"	3660	5480	2060	± 87	5850	RC-AF	7	0	66" Line Pipe Coat- ing @ 11:30 AM
No. 1423	4/30	5"	3660	5480	2060	± 87	5500	RC-AF	7	0	66" Line Pipe Coat- ing @ 11:30 AM
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength:								4500 P. S.I.			

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

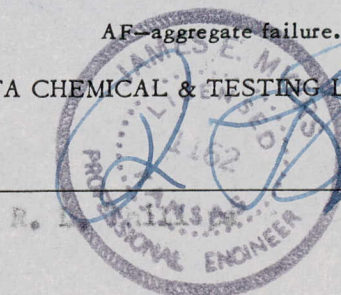
Brand of Cement: Monarch

AF—aggregate failure.

Admixture: NoneFine Aggregate: Dulles Concrete SandCoarse Aggregate: Wichita 3/4" Limestone

Mixed Aggregate: _____

WICHITA CHEMICAL & TESTING LABORATORIES

By: [Signature]



:00

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AND
CHEMICAL

1891

RESEARCH ON MANUFACTURING PROBLEMS

1458 W. MOSLEY AVE.
PHONE HOWARD 4-3848

BARBARA A. ATINCIO

FLXURE AND COMPRESSION TEST REPORT

(Refer to This Number)

TESTS CONDUCTED AT WICHITA



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 905077
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Blad & Veatch
Owner: City of Wichita
Date Submitted at Lab: 4/11 & 5/2/56

Date: 7 May 1956
Report No. LJO # 204
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1339	4/6	7"	4156	4984	2058	± 87	6200	DS-MB	28	23	66" Line Pipe Coat- ing @ 10:00 A.M.
No. 1340	4/6	7"	4156	4984	2058	± 87	5970	RC-AF	28	23	66" Line Pipe Coat- ing @ 10:00 A.M.
No. 1341	4/6	7"	4156	4984	2058	± 87	5880	RC-AF	28	23	66" Line Pipe Coat- ing @ 10:00 A.M.
TESTS CONDUCTED AT WICHITA											
No. 1418	4/27	5"	3660	5480	2060	± 87	5050	RC-AF	7	0	66" Line Pipe Coat- ing @ 12:00 Noon
No. 1419	4/27	5"	3660	5480	2060	± 87	5050	DS-AF	7	0	66" Line Pipe Coat- ing @ 12:00 Noon
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolite Concrete Sand

By R. L. Phillips

Coarse Aggregate Wichita 3/4" Limestone

Mixed Aggregate



TESTS CONDUCTED AT FIELD LABORATORY

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 905055
(Refer to This Number)

Date: 4 May 1956

Report No. LJC # 203

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co

Made by: Laboratory

Architect: Black & Veatch

Structure: Water Pipe

Owner: City of Wichita

Date Submitted at Lab: 4-11-56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
1333	4-5	3	4156	4984	2058	+ 87	6600	RC AF	28	21	66" Line Pipe Core @ 2:30 P.M.
1334	4-5	3	4156	4984	2058	+ 87	6760	DS AF	28	21	66" Line Pipe Core @ 2:30 P.M.
1335	4-5	3	4156	4984	2058	+ 87	6880	RC AF	28	21	66" Line Pipe Core @ 2:30 P.M.
1406	4-25	5	3660	5480	2060	+ 87	5000	RC AF	7	0	66" Line Pipe Coating @ 11:30 AM
1407	4-25	5	3660	5480	2060	+ 87	5500	RC AF	7	0	66" Line Pipe Coating @ 11:30 AM
1412	4-26	3	3660	5480	2060	+ 87	5150	RC AF	7	0	66" Line Pipe Coating @ 2:00 PM
1413	4-26	3	3660	5480	2060	+ 87	5400	RC AF	7	0	66" Line Pipe Coating @ 2:00 PM
1414	4-26	3	3660	5480	2060	+ 87	5200	RC AF	7	0	66" Line Pipe Coating @ 2:00 PM

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Lehigh & Monarch

AF—aggregate failure.

Admixture: None

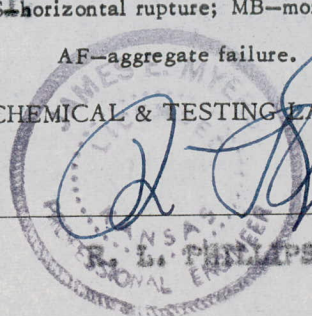
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: Dolese Concrete Sand

Coarse Aggregate: Moline 3/4" Limestone

Mixed Aggregate: _____

By _____



2507XIM?

TESTS CONDUCTED AT WINDOM

TESTS CONDUCTED AT FIELD LABORATORY



Wichita CHEMICAL AND TESTING Laboratories

CC: 2-Lock Joint @ Col with
2-Weller
1-Knoll
1-Hess

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 905037
(Refer to This Number)

Date: 2 May 1956

Report No. LJC # 202

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co

Made by: Laboratory

Architect: Black & Veatch

Structure: Water Line

Owner: City of Wichita

Date Submitted at Lab: 4-10-56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
1327	4-4	3 1/2	4156	4984	2058	+ 87	6945	RC AF	28	21	66" Line Pipe Core @ 1:15 PM
1328	4-4	3 1/2	4156	4984	2058	+ 87	6760	RC AF	28	21	66" Line Pipe Core @ 1:15 PM
1329	4-4	3 1/2	4156	4984	2058	+ 37	7210	RC AF	28	21	66" Line Pipe Core @ 1:15 PM
TESTS CONDUCTED AT WICHITA											
1402	4-24	4	3660	5490	2060	+ 87	5550	RC AF	7	0	66" Line Pipe Coating @ 1:00 PM
1403	4-24	4	3660	5480	2060	+ 87	5700	RC AF	7	0	66" Line Pipe Coating @ 1:00 PM
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 Day Strength: 4500 P.S.I											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolese Concrete Sand

Coarse Aggregate Holine 3/4" Limestone

Mixed Aggregate

By R. L. Phillips

R. L. PHILLIPS

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FLEXURE AND COMPRESSION TEST REPORT

 Project: 66" Water Transmission Lines Lab. No. 905003
 (Refer to This Number)
Date: 1 May 1956Report No. LJC # 200

Specimens

Made by: LaboratoryStructure Water LineLocation: Colwich, KansasContractor: Lock Joint Pipe Co.Architect: Black & VeatchOwner: City of WichitaDate Submitted at Lab: 4-24, 4-25, & 4-30

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
1390	4-20	4	3660	5480	2060	± 87	4900	RC AF	7	0	66" Line Pipe Coating
1391	4-20	4	3660	5480	2060	± 87	4750	DS AF	7	0	66" Line Pipe EXXU Coating
1392	4-20	4	3660	5480	2060	± 87	4950	DS AF	7	0	66" Line Pipe Coating
1396	4-23	5	3660	5480	2060	± 87	5400	RC AF	7	0	66" Line Pipe Coating
1397	4-23	5	3660	5480	2060	± 87	5250	RC AF	7	0	66" Line Pipe EXXU Coating
1398	4-23	5	3660	5480	2060	± 87	5300	DS AF	7	0	66" Line Pipe Coating
1410	4-26	3	3660	5480	2060	± 87	4400	RC AF	4	0	66" Line Pipe Coating
1411	4-26	3	3660	5480	2060	± 87	5400	DS AF	4	0	66" Line Pipe Coating

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure

Admixture NoneFine Aggregate DoloseCoarse Aggregate Moline 3/4"Mixed Aggregate None

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TESTS CONDUCTED AT FIELD LABORATORY

14-00000

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 905004
(Refer to This Number)

Date 1 May 1956

Report No. LJC # 201

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 4-6, 5

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
1315	4-2	3	4156	4984	2058	± 87	6775	RC AF	28	24	66" Line Pipe Core @ 2:45 P.M.
1316	4-2	3	4156	4984	2058	± 87	6830	DS AF	28	24	66" Line Pipe Core @ 2:45 P.M.
1317	4-2	3	4156	4984	2058	± 87	6560	RC AF	28	24	66" Line Pipe Core @ 2:45 PM
1321	4-3	4 1/2	4156	4984	2058	± 87	6775	DS AF	28	25	66" Line Pipe Core @ 1:15 P.M.
1322	4-3	4 1/2	4156	4984	2058	± 87	6635	DS AF	28	25	66" Line Pipe Core @ 1:15 P.M.
1323	4-3	4 1/2	4156	4984	2058	± 87	6230	RC AF	28	25	66" Line Pipe Core @ 1:15 P.M.

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

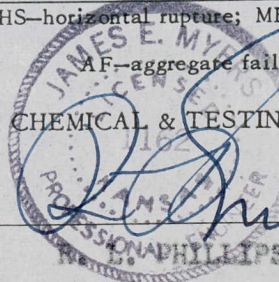
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolose

By [Signature]

Coarse Aggregate Moline 3/4"

Mixed Aggregate None





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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904350
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 4/4 & 4/24/56

Date 27 April 1956
Report No. LJC # 199
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1309	3/30	2"	4156	4984	2058	± 87	8090	RC-AF	28	23	66" Line Pipe Core @ 1:30 PM
No. 1310	3/30	2"	4156	4984	2058	± 87	7795	RC-AF	28	23	66" Line Pipe Core @ 1:30 PM
No. 1311	3/30	2"	4156	4984	2058	± 87	7990	RC-AF	28	23	66" Line Pipe Core @ 1:30 PM
TESTS CONDUCTED AT WICHITA											
No. 1384	4/19	2-1/2	4156	4984	2058	± 87	5650	RC-AF	7	0	66" Line Pipe Core @ 2:30 PM
No. 1385	4/19	2-1/2	4156	4984	2058	± 87	5450	RC-AF	7	0	66" Line Pipe Core @ 2:30 PM
No. 1386	4-19	2-1/2	4156	4984	2058	± 87	5750	DS-AF	7	0	66" Line Pipe Core @ 2:30 PM
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch Lehigh

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolase Concrete Sand

Coarse Aggregate Moline Limestone

Mixed Aggregate

By

R. L. Phillips
R. L. Phillips
PROFESSIONAL ENGINEER

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY



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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904331
(Refer to This Number)

Date April 26, 1956Report No. LJC # 198

Specimens

Made by: LaboratoryStructure Water LineLocation: Colwich, KansasContractor: Lock Joint Pipe Co.Architect: Black & VeatchOwner: City of WichitaDate Submitted at Lab: 4/3 & 4/21/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1303	3/29	4"	4156	4984	2058	± 87	6560	VS-AF	28	23	66" Line Pipe Core @ 1:45 PM
No. 1304	3/29	4"	4156	4984	2058	± 87	6705	RC-AF	28	23	66" Line Pipe Core @ 1:45 PM
No. 1305	3/29	4"	4156	4984	2058	± 87	6650	RC-AF	28	23	66" Line Pipe Core @ 1:45 PM
TESTS CONDUCTED AT WICHITA											
No. 1378	4/18	3"	3660	5480	2060	± 87	5750	DS-AF	7	0	66" Line Pipe Core @ 2:45 PM
No. 1379	4/18	3"	3660	5480	2060	± 87	5650	RC-AF	7	0	66" Line Pipe Core @ 2:45 PM
No. 1380	4/18	3"	3660	5480	2060	± 87	5600	RC-AF	7	0	66" Line Pipe Core @ 2:45 PM
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture NoneFine Aggregate Polare Concrete SandCoarse Aggregate Woline Limestone

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

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TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 904312
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 4/2/56 & 4/20/56

Date April 25, 1956
Report No. LJC # 197
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No.1297	3/28	4"	4156	4984	2058	± 87	6800	RC-AF	28	23	66" Line Pipe Core @ 2:45 PM
No.1298	3/28	4"	4156	4984	2058	± 87	6900	RC-AF	28	23	66" Line Pipe Core @ 2:45 PM
No.1299	3/28	4"	4156	4984	2058	± 87	6285	RC-AF	28	23	66" Line Pipe Core @ 2:45 PM
TESTS CONDUCTED AT WICHITA											
No.1372	4/17	3-1/2	3660	5480	2060	± 87	5250	RC-AF	7	7	66" Line Pipe Core @ 1:00 PM
No.1373	4/17	3-1/2	3660	5480	2060	± 87	5350	DS-AF	7	0	66" Line Pipe Core @ 1:00 PM
No.1374	4/17	3-1/2	3660	5480	2060	± 87	5300	DS-AF	7	0	66" Line Pipe Core @ 1:00 PM
TESTS CONDUCTED AT FIELD LABORATORY											
CONTRACT EXTENSION											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

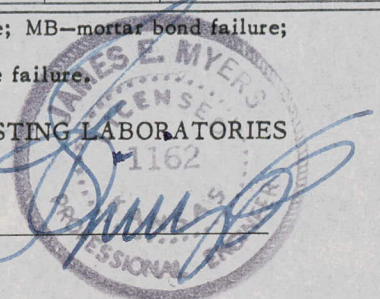
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Fine Aggregate Doloso Concrete Sand

Coarse Aggregate Wolima Limestone

Mixed Aggregate

By R. L. Phillips



TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY



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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 904297
Lines (Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/30 & 4/19/56

Date: April 24, 1956
Report No. LJO # 176
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1291	3/27	5"	4156	4984	2058	± 87	6005	DS-AF	28	25	66" Line Pipe Core @ 1:50 PM
No. 1292	3/27	5"	4156	4984	2058	± 87	6305	RC-AF	28	25	66" Line Pipe Core @ 1:50 PM
No. 1293	3/27	5"	4156	4984	2058	± 87	6775	RC-AF	28	25	66" Line Pipe Core @ 1:50 PM
TESTS CONDUCTED AT WICHITA											
No. 1366	4/16	7"	4156	4984	2058	± 87	4300	DS-AF	7	0	66" Line Pipe Core @ 2:30 PM
No. 1367	4/16	7"	4156	4984	2058	± 87	4450	DS-AF	7	0	66" Line Pipe Core @ 2:30 PM
No. 1368	4/16	7"	4156	4984	2058	± 87	4350	RC-AF	7	0	66" Line Pipe Core @ 2:30 PM
CONTRACT EXTENSION Required 28 day strengths 4500 P. S. I. TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch

AF—aggregate failure.

Admixture: None

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Fine Aggregate: Dolase Concrete Sand

By: R. L. Phillips

Coarse Aggregate: Woline Limestone

R. L. Phillips

Mixed Aggregate: _____



W. B. E. M.

243142, 4 41101W

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TESTS CONDUCTED AT FIELD LABORATORY



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FLEXURE AND COMPRESSION TEST REPORT

 Project: 66" Water Transmission Lines Lab. No. 904257
 (Refer to This Number)
Date: April 23, 1956Report No. LJC # 195Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.Made by: LaboratoryArchitect: Black & VeatchStructure: Water LineOwner: City of WichitaDate Submitted at Lab: 3/28 & 3/29 & 4/18/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1279	3/23	5"	4156	4984	2058	± 87	6740	RC-AF	28	23	66" Line Pipe Core @ 4:00 PM
No. 1280	3/23	5"	4156	4984	2058	± 87	6410	RC-AF	28	23	66" Line Pipe Core @ 4:00 PM
No. 1281	3/23	5"	4156	4984	2058	± 87	6110	RC-AF	28	23	66" Line Pipe Core @ 4:00 PM
No. 1285	3/26	4"	4156	4984	2058	± 87	6830	DS-AF	28	25	66" Line Pipe Core @ 1:30 PM
No. 1286	3/26	4"	4156	4984	2058	± 87	7125	RC-AF	28	25	66" Line Pipe Core @ 1:30 PM
No. 1287	3/26	4"	4156	4984	2058	± 87	7160	DS-AF	28	25	66" Line Pipe Core @ 1:30 PM
No. 1360	4/13	3-1/2	4156	4984	2058	± 87	5350	RC-AF	7	0	66" Line Pipe Core @ 2:15 PM
No. 1361	4/13	3-1/2	4156	4984	2058	± 87	5750	RC-AF	7	0	66" Line Pipe Core @ 2:15 PM
No. 1362	4/13	3-1/2	4156	4984	2058	± 87	5750	DS-AF	7	0	66" Line Pipe Core @ 2:15 PM
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch No. 1360, 1361, 1362

AF—aggregate failure.

Admixture: Lehigh No. 1279 thru 1287Fine Aggregate: Dolose Concrete SandCoarse Aggregate: Woline 3/4" Limestone

Mixed Aggregate: _____

WICHITA CHEMICAL & TESTING LABORATORIES

By: R. L. Phillips



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AND
CHEMICAL

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ЗАВНАХ А. АТИНОВ

(Refer to This Number)

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1090-1091-1092-1093-1094-1095-1096-1097-1098-109



Wichita CHEMICAL AND TESTING Laboratories

CC:2 Lock Joint @ Colwich
2 Weller
1 Knoll
1 Hess

Principals Are
MEMBERS OF:
AMERICAN CHEMICAL
SOCIETY
AMERICAN SOCIETY FOR
TESTING MATERIALS
AMERICAN SOCIETY OF
CIVIL ENGINEERS
ASS'N OF ASPHALT
PAVING TECHNOLOGISTS
LICENSED PROFESSIONAL
ENGINEERS

ANALYTICAL CHEMISTS - BACTERIOLOGISTS - TESTING ENGINEERS
RESEARCH ON MANUFACTURING PROBLEMS
1428 N. MOSLEY AVE. PHONE HOBAR 4-3948
WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904241
(Refer to This Number)

Date: 21 April 1956

Report No. LJC # 194

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure: Water Pipe

Owner: City Of Wichita

Date Submitted at Lab: 3-27-56 4-19-56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1273	3-22	4 1/2	4156	4984	2058	± 87	6705	RC AF	28	23	66" Line Pipe Core @ 2:00 PM
No. 1274	3-22	4 1/2	4156	4984	20 58	± 87	6410	VS AF	28	23	66" Line Pipe Core @ 2:00 PM
No. 1275	3-22	4 1/2	4156	4984	2058	± 87	6355	RC AF	28	23	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT WICHITA											
No. 1354	4-12	4	4156	4984	2058	± 87	5400	RC AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1355	4-12	4	4156	4984	2058	± 87	5700	RC AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1356	4-12	4	4156	4984	2058	± 87	5650	DS AF	7	0	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 Day Strength: 4500 P.S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;
Brand of Cement No. 1273-1274-1275 - LeHigh
No. 1354-1355-1356 - Monarch

Admixture: None

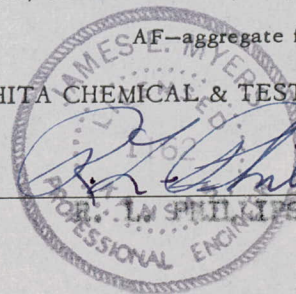
Fine Aggregate: Dolom Concrete Sand

Coarse Aggregate: Moline 3/4" Stone

Mixed Aggregate: _____

WICHITA CHEMICAL & TESTING LABORATORIES

By



WE TEST EVERYTHING



UNDER THE SUN

Wichita CHEMICAL AND TESTING Laboratories

CC:2 Lock Joint @Colwich
2 Weller
1 Knoll
1 Hesse

Principals Are
MEMBERS OF:
AMERICAN CHEMICAL
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ANALYTICAL CHEMISTS - BACTERIOLOGISTS - TESTING ENGINEERS

RESEARCH ON MANUFACTURING PROBLEMS

1428 N. MOSLEY AVE.

PHONE HOBAR 4-3948

WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904216
(Refer to This Number)

Date: 19 April 1956

Report No. LJC # 193

Specimens

Made by: Laboratory

Structure Water Pipe

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 3-26-56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1267	3-21	3	4156	4984	2058	± 87	6865	DS AF	28	22	66" Line Pipe Core @ 2:00 P.M.
No. 1268	3-21	3	4156	4984	2058	± 87	7090	RC AF	28	22	66" Line Pipe Core @ 2:00 P.M.
No. 1269	3-21	3	4156	4984	2058	± 87	7335	RC AF	28	22	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1348	4-11	2	4156	4984	2058	± 87	5900	DS AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 1349	4-11	2	4156	4984	2058	± 87	5900	DS AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 1350	4-11	2	4156	4984	2058	± 87	6150	DS AF	7	0	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 Day Strength: 4500 P.S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement 1267-1268-1269 Lehigh
1348-1349-1350 Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Doloss Concrete Sand

By

Coarse Aggregate Moline 3/4" Limestone

R. L. PHILLIPS

Mixed Aggregate None



Wichita
CHEMICAL
AND
TESTING
Laboratories

Engineers
Licensed Professional
Surveyors
Civil Engineers
American Society of
Testing Materials
American Society of
Concrete Engineers
American Chemical
Society
Members of
Friedrichs Ave.

WICHITA 4, KANSAS
PHONE HWY 4-0248
RESEARCH ON MANUFACTURING PROBLEMS
ANALYTICAL CHEMISTS - BACTERIOLOGISTS - TESTING ENGINEERS

FLUXURE AND COMPRESSION TEST REPORT

Date: _____
Report No.: _____
Specimens: _____
Made by: _____
Structure: _____
Project: _____
Location: _____
Contract: _____
Architect: _____
Owner: _____
Date Submitted at Lab: _____

Specimen Number	Date Made	Height Inches	Time Aggregate	Coarse Aggregate	Comment	Mixture	Total Water	Compressive Strength P.S.I.	Type Fracture	Age in Days	Day Made, Cured, and Conditions	Remarks and Location of Form
10-1	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-2	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-3	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-4	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-5	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-6	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-7	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-8	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-9	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-10	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-11	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-12	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-13	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-14	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-15	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-16	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-17	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-18	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-19	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-20	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-21	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-22	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-23	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-24	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-25	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-26	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-27	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-28	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-29	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-30	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-31	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-32	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-33	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-34	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-35	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-36	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-37	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-38	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-39	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-40	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-41	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-42	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-43	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-44	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-45	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-46	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-47	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-48	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-49	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-50	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-51	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-52	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-53	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-54	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-55	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-56	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-57	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-58	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-59	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-60	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-61	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-62	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-63	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-64	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-65	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-66	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-67	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-68	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-69	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-70	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-71	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-72	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-73	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-74	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-75	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-76	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-77	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-78	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-79	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-80	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-81	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-82	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-83	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-84	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-85	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-86	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-87	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-88	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-89	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-90	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-91	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-92	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-93	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-94	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-95	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-96	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-97	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-98	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-99	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%
10-100	10-1-50	4	1:15	100%	100%	100%	100%	100%	100%	100%	100%	100%

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC - flexural; CS - vertical shear; DS - diagonal shear; HS - horizontal rupture; B - bottom; T - top

AF - aggregate failure

WICHITA CHEMICAL & TESTING LABORATORIES

By

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CC: 2-Loek Joint @ Colwich
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1-Knoll
1-Hess

File: 1

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1428 N. MOSLEY AVE.

PHONE HOBAR 4-3948

WICHITA 4, KANSAS

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 901180
(Refer to This Number)

Date 16 April 1956

Report No. LJC # 191

Location: Colwich, Kansas

Specimens

Contractor: Loek Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 3-22-56 & 4-11-56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1253	3-19	4"	4156	4984	2058	+ 87	6945	RC AF	28	24	66" Line Pipe Cor @ 1:15 P.M.
No. 1254	3-19	4"	4156	4984	2058	+ 87	6720	DS AF	28	24	66" Line Pipe Cor @ 1:15 P.M.
No. 1255	3-19	4"	4156	4984	2058	+ 87	6740	DS AF	28	24	66" Line Pipe Cor @ 1:15 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1336	4-6	7"	4156	4984	2058	+ 87	4400	DS AF	7	0	66" Line Pipe & Coating @ 10:00 A
No. 1337	4-6	7"	4156	4984	2058	+ 87	4800	DS AF	7	0	66" Line Pipe Coating @ 10:00 A
No. 1338	4-6	7"	4156	4984	2058	+ 87	5050	DS AF	7	0	66" Line Pipe Coating @ 10:00AM
TESTS CONDUCTED AT FIELD LABORATORY											
CONTRACT EXTENSION											
Required 28 Day Strength: 4500 P.S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh Regular Portland

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolese Concrete Sand

Coarse Aggregate Maline 3/4" Limestone

Mixed Aggregate NONE

By

R. L. PHILLIPS



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904201
(Refer to This Number)

Date: 18 April 1956
Report No. LJC # 192
Specimens Laboratory
Made by: _____
Structure Water Pipe

Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3-24-56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1261	3-20	5	4156	4984	2058	± 87	6635	DS AF	28	23	66" Line Pipe Core @ 3:00 P.M.
No. 1262	3-20	5	4156	4984	2058	± 87	6510	DS AF	28	23	66" Line Pipe Core @ 3:00 P.M.
No. 1263	3-20	5	4156	4984	2058	± 87	6635	DS AF	28	23	66" Line Pipe Core @ 3:00 P.M.
No. 1342	4-10	3	4156	4984	2058	± 87	5550	DS AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 1343	4-10	3	4156	4984	2058	± 87	5900	DS AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 1344	4-10	3	4156	4984	2058	± 87	5750	DS AF	7	0	66" Line Pipe Core @ 2:00 P.M.

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh Regular Portland

AF—aggregate failure.

Admixture None

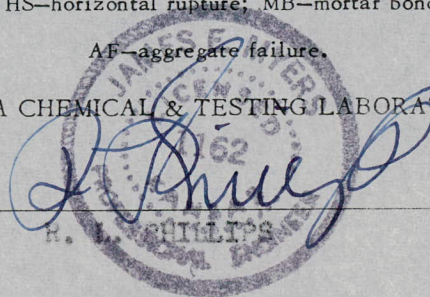
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolese Concrete Sand

Coarse Aggregate Moline 3/4" Limestone

Mixed Aggregate None

By R. L. Phillips





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FLEXURE AND COMPRESSION TEST REPORT

Project: Concrete Slab (Refer to This Number)
Location: 10th & Main
Contractor: Wichita
Architect: Wichita
Date Submitted at Lab: 10-1-34
Specimen Number: 101
Date: 10-1-34
Report No.: 101
Specimens: 101
Made by: Wichita
Structure: 101

SPECIMEN NUMBER	DATE MADE	SEUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Specimen	Age in Days	Days After Standard Conditions	Remarks and Location of Test
			Aggregate	Fine Aggregate	Coarse Cement	Total Water					
101	10-1-34	2	100	100	100	100	100	101	1	1	101
102	10-1-34	2	100	100	100	100	100	102	1	1	102
103	10-1-34	2	100	100	100	100	100	103	1	1	103
104	10-1-34	2	100	100	100	100	100	104	1	1	104
105	10-1-34	2	100	100	100	100	100	105	1	1	105
106	10-1-34	2	100	100	100	100	100	106	1	1	106
107	10-1-34	2	100	100	100	100	100	107	1	1	107
108	10-1-34	2	100	100	100	100	100	108	1	1	108
109	10-1-34	2	100	100	100	100	100	109	1	1	109
110	10-1-34	2	100	100	100	100	100	110	1	1	110

TYPE FRACTURE: KO - tensile cone; VS - vertical shear; DS - diagonal shear; HS - horizontal tension; MB - mortar bond failure;

Brand of Cement: Wichita
Aggregate: Wichita
Fine Aggregate: Wichita
Coarse Aggregate: Wichita
Mixed Aggregate: Wichita
By: Wichita
WICHITA CHEMICAL AND TESTING LABORATORIES



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1 Kroll
1 Haas

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904055
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/23/54/11/56

Date: April 13, 1956
Report No. LJO # 190
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No.1247	3/16	2-1/2	4156	4984	2058	± 87	7350	RC-AF	28	23	66" Line Pipe Core @ 1:15 PM
No.1248	3/16	2-1/2	4156	4984	2058	± 87	7160	RC-AF	28	23	66" Line Pipe Core @ 1:15 PM
No.1249	3/16	2-1/2	4156	4984	2058	± 87	6270	RC-AF	28	23	66" Line Pipe Core @ 1:15 PM
TESTS CONDUCTED AT WICHITA											
No.1330	4/5	3"	4156	4984	2058	± 87	5500	DS-AF	7	0	66" Line Pipe Core @ 2:30 PM
No.1331	4/5	3"	4156	4984	2058	± 87	5200	RC-AF	7	0	66" Line Pipe Core @ 2:30 PM
No.1332	4/5	3"	4156	4984	2058	± 87	5650	RC-AF	7	0	66" Line Pipe Core @ 2:30 PM
TESTS CONDUCTED AT FIELD LABORATORY											
CONTRACT EXTENSION											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement Louisiana

AF-aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

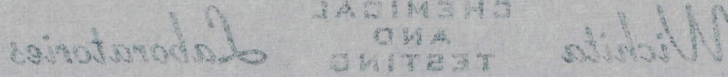
Fine Aggregate Polysar Concrete Sand

Coarse Aggregate Wichita 3/4" Limestone

Mixed Aggregate

By

R. L. CHILDS





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CC:2 Lock Joint @ Colwich
2 Weller
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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 904143

(Refer to This Number)

Date April 12, 1956Report No. LJC # 139

Specimens

Made by: LaboratoryStructure Water LineLocation: Colwich, KansasContractor: Lock Joint Pipe Co.Architect: Black & VeatchOwner: City of WichitaDate Submitted at Lab: 4/10/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1324	4/4	3-1/2	4156	4984	2058	± 87	5800	DS-AF	7	0	66" Line Pipe Core @ 1:15 PM
No. 1325	4/4	3-1/2	4156	4984	2058	± 87	5800	DS-AF	7	0	66" Line Pipe Core @ 1:15 PM
No. 1326	4/4	3-1/2	4156	4984	2058	± 87	5850	DS-AF	7	0	66" Line Pipe Core @ 1:15 PM
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture NoneFine Aggregate Dallas Concrete SandCoarse Aggregate Wichita 3/4" Limestone

Mixed Aggregate _____

WICHITA CHEMICAL & TESTING LABORATORIES

By _____

R. L. Phillips



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EABERMAN, A. A. T1421W

TESTS CONDUCTED AT FIELD LABORATORY

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CC: 2 Lock Joint @ Colwich
2 Weller
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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904123

(Refer to This Number)

Date April 11, 1956

Report No. LJC # 188

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Vestich

Owner: City of Wichita

Date Submitted at Lab: 3/20 & 4/6/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1241	3/14	3-1/2	4156	4984	2058	± 87	6900	RC-AF	28	22	66" Line Pipe Core @ 3:15 PM
No. 1242	3/14	3-1/2	4156	4984	2058	± 87	6150	DS-AF	28	22	66" Line Pipe Core @ 3:15 PM
No. 1243	3/14	3-1/2	4156	4984	2058	± 87	6305	RC-AF	28	22	66" Line Pipe Core @ 3:15 PM
TESTS CONDUCTED AT WICHITA											
No. 1312	4/2	3"	4156	4984	2058	± 87	5550	DS-AF	7	0	66" Line Pipe Core @ 2:45 PM
No. 1313	4/2	3"	4156	4984	2058	± 87	5550	DS-AF	7	0	66" Line Pipe Core @ 2:45 PM
No. 1314	4/2	3"	4156	4984	2058	± 87	5750	DS-AF	7	0	66" Line Pipe Core @ 2:45 PM
No. 1318	4/3	4-1/2	4156	4984	2058	± 87	5750	DS-AF	7	0	66" Line Pipe Core @ 1:15 PM
No. 1319	4/3	4-1/2	4156	4984	2058	± 87	5800	RC-AF	7	0	66" Line Pipe Core @ 1:15 PM
No. 1320	4/3	4-1/2	4156	4984	2058	± 87	5300	DS-AF	7	0	66" Line Pipe Core @ 1:15 PM
TESTS CONDUCTED AT FIELD LABORATORY Required 28 day strength: 4500 P. S. I. CONTRACT EXTENSION											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolase Concrete Sand

Coarse Aggregate Moline 3/4" Limestone

Mixed Aggregate

By

R. L. Phillips



CO:

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FLUXURE AND COMPRESSION
TESTING

Project No. _____ (Refer to This Number)
Location: _____
Contractor: _____
Architect: _____
Owner: _____
Date Submitted at Lab: _____
Date: _____
Report No. _____
Specimens: _____
Made by: _____
Structure: _____

EXPERIMENT NUMBER	DATE M.D.	SLUMP INCHES	FINE AGGREGATE	COARSE AGGREGATE	CEMENT	TOTAL WEIGHT	COMPRESSIVE STRENGTH P.S.I.	TYPE FRACTURE	AGE IN DAYS	DATE TESTED	REMARKS and Location of Failure
1	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete
2	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete
3	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete
4	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete
5	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete
6	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete
7	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete
8	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete
9	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete
10	10-10-54	4.0	100	100	100	300	1000	Concrete	7	10-10-54	Concrete

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC - regular cone; VS - vertical shear; DS - diagonal shear; MS - bond-shear failure; AB - bond failure.

Brand of Cement: _____
Aggregate: _____
Fine Aggregate: _____
Coarse Aggregate: _____
Mixed Aggregate: _____

WICHITA CHEMICAL AND TESTING LABORATORIES

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CC: 2 Lock Joint & Colwich
2 Weller
1 Knoll
1 Hess

File: 1

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FLEXURE AND COMPRESSION TEST REPORT

Project: Water Transmission Lines Lab. No. 904099

(Refer to This Number)

Date: April 10, 1956

Report No. LJO # 187

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure: Water Line

Owner: City of Wichita

Date Submitted at Lab: 3/19/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1235	3/13	3-1/2	4156	4984	2058	± 87	6475	RC-AF	28	22	66" Line Pipe Core @ 2:00 PM
No. 1236	3/13	3-1/2	4156	4984	2058	± 87	6010	DS-AF	28	22	66" Line Pipe Core @ 1:30 PM
No. 1237	3/13	3-1/2	4156	4984	2058	± 87	6545	RC-AF	28	22	66" Line Pipe Core @ 1:30 PM
			CONTACT EXTENSION Required 28 day strength: 4500 P. S. I.								

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Lehigh

AF—aggregate failure.

Admixture: None

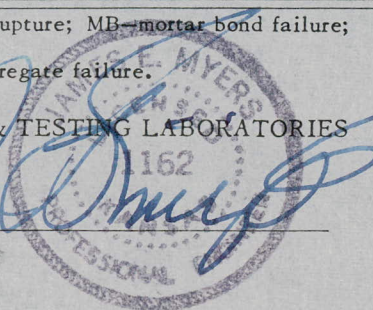
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: Delaware Concrete Sand

Coarse Aggregate: Woline 3/4" Limestone

Mixed Aggregate: _____

By: R. L. Phillips



30

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CMA
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EXHIBIT AND COMPRESSION TEST REPORT

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WICHITA 4, KANSAS

File:

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 906085
(Refer to This Number)

Date April 9, 1956

Report No. LIC # 186

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 3/15 & 4/4/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1229	3/12	2-1/2	4156	4984	2058	± 87	6760	RC-AF	28	25	66" Line Pipe Core @ 2:45 PM
No. 1230	3/12	2-1/2	4156	4984	2058	± 87	6845	RC-AF	28	25	66" Line Pipe Core @ 2:45 PM
No. 1231	3/12	2-1/2	4156	4984	2058	± 87	6650	RC-AF	28	25	66" Line Pipe Core @ 2:45 PM
TESTS CONDUCTED AT WICHITA											
No. 1306	3/30	2"	4156	4984	2058	± 87	5450	RC-AF	7	0	66" Line Pipe Core @ 1:30 PM
No. 1307	3/30	2"	4156	4984	2058	± 87	5400	RC-AF	7	0	66" Line Pipe Core @ 1:30 PM
No. 1308	3/30	2"	4156	4984	2058	± 87	5750	RC-AF	7	0	66" Line Pipe Core @ 1:30 PM
CONTRACT EXTENSION											
TESTS CONDUCTED AT FIELD LABORATORY Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolase Concrete Sand

By [Signature] Phillips

Coarse Aggregate Maline 3/4" Limestone

Mixed Aggregate _____

SECRET

DAEMAN, A. A. (1961)

TESTS CONDUCTED BY THE BUREAU OF RESEARCH

100-100000-1

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UNDER THE SUN

Wichita CHEMICAL AND TESTING Laboratories

CC: 2 Lock Joint & Colwicl
2 Keller
1 Knoll
1 Hess

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RESEARCH ON MANUFACTURING PROBLEMS

1428 N. MOSLEY AVE.

PHONE HOBAR 4-3948

WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 904061
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/14 & 4/3/56

Date April 6, 1956
Report No. LJC 185
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1223	3/9	5-1/2	4156	4984	2058	± 90	6650	DS-AF	28	23	66" Line Pipe Core @ 2:30 PM
No. 1224	3/9	5-1/2	4156	4984	2058	± 90	6320	RC-AF	28	23	66" Line Pipe Core @ 2:30 PM
No. 1225	3/9	5-1/2	4156	4984	2058	± 90	6560	HC-AF	28	23	66" Line Pipe Core @ 2:30 PM
TESTS CONDUCTED AT WICHITA											
No. 1300	3/29	4"	4156	4984	2058	± 87	5750	DS-AF	7	0	66" Line Pipe Core @ 1:45 PM
No. 1301	3/29	4"	4156	4984	2058	± 87	5800	RC-AF	7	0	66" Line Pipe Core @ 1:45 PM
No. 1302	3/29	4"	4156	4984	2058	± 87	5800	RC-AF	7	0	66" Line Pipe Core @ 1:45 PM
Required 28 day strength: 4500 P. S.I. CONTRACT EXTENSION											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolese Concrete Sand

By [Signature]

Coarse Aggregate Moline 3/4" Limestone

Mixed Aggregate



WICHITA
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AND
TESTING
LABORATORIES

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PHONE HWY. 4-3243
WICHITA 4, KANSAS

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PAVING TECHNOLOGISTS
LICENSED PROFESSIONAL
ENGINEERS

FLEXURE AND COMPRESSION TEST REPORT

Project: _____
Location: _____
Contractor: _____
Architect: _____
Owner: _____
Date Submitted at Lab: _____
Date: _____
Report No.: _____
Specimens: _____
Made by: _____
Structure: _____
(Refer to This Number)

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MINIATURE				Compressive Strength P.S.I.	Type Fracture	Age in Days	Days and Storage Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
101-10	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-11	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-12	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-13	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-14	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-15	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-16	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-17	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-18	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-19	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-20	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-21	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-22	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-23	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-24	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-25	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-26	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-27	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-28	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-29	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-30	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-31	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-32	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-33	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-34	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-35	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-36	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-37	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-38	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-39	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-40	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-41	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-42	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-43	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-44	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-45	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-46	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-47	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-48	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-49	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-50	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-51	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-52	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-53	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-54	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-55	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-56	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-57	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-58	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-59	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-60	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-61	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-62	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-63	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-64	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-65	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-66	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-67	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-68	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-69	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-70	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-71	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-72	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-73	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-74	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-75	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-76	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-77	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-78	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-79	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-80	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-81	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-82	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-83	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-84	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-85	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-86	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-87	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-88	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-89	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-90	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-91	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-92	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-93	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-94	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-95	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-96	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-97	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-98	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-99	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100
101-100	10-10-35	1-1/2	100	100	100	100	100	100	100	100	100

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

THE FRACTURE: RC - radial cone; VS - vertical shear; DS - diagonal shear; HS - horizontal rupture; WP - weak bond failure;

Brand of Cement _____
Aggregate _____
Fine Aggregate _____
Coarse Aggregate _____
Mixed Aggregate _____
WICHITA CHEMICAL AND TESTING LABORATORIES
BY _____

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CC: 2 Lock Joint & Colwich
2 Moller
1 Kroll
1 Hesse

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RESEARCH ON MANUFACTURING PROBLEMS

1428 N. MOSLEY AVE.

PHONE HOBAR 4-3948

WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904040
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/13/56

Date: April 5, 1956
Report No. LJC # 184
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1217	3/8	3	4156	4984	2058	± 87	7265	RC-AF	28	23	66" Line Pipe Core @ 2:00 PM
No. 1218	3/8	3	4156	4984	2058	± 87	7140	RC-AF	28	23	66" Line Pipe Core @ 2:00 PM
No. 1219	3/8	3	4156	4984	2058	± 87	7050	RC-AF	28	23	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT WICHITA											
No. 1294	3/28	4	4156	4984	2058	± 87	5300	DS-AF	7	0	66" Line Pipe Core @ 2:45 PM
No. 1295	3/28	4	4156	4984	2058	± 87	5100	DS-AF	7	0	66" Line Pipe Core @ 2:45 PM
No. 1296	3/28	4	4156	4984	2058	± 87	5750	RC-AF	7	0	66" Line Pipe Core @ 2:45 PM
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure

Admixture None

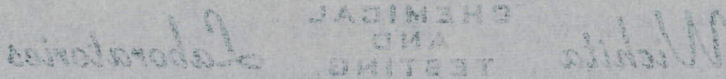
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolosa Concrete Sand

By R. L. Phillips

Coarse Aggregate Moline 3/4" Limestone

Mixed Aggregate



ATTACCHI TA ETTOLUNGO 2123

PROCESSED BY THE NATIONAL ARCHIVES

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Wichita CHEMICAL AND TESTING Laboratories

CC? Lock Joint @ Colwich
2 Weller
1 Knoll
1 Hess

File: 1

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1428 N. MOSLEY AVE. PHONE HOBAR 4-3948
WICHITA 4, KANSAS

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904029
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/30/56

Date April 4, 1956
Report No. LJC # 183
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1288	3/27	5	4156	4984	2058	± 87	5600	RC-AF	7	0	66" Line Pipe Core @ 1:50 PM
No. 1289	3/27	5	4156	4984	2058	± 87	5300	RC-AF	7	0	66" Line Pipe Core @ 1:50 PM
No. 1290	3/27	5	4156	4984	2058	± 87	5450	RC-AF	7	0	66" Line Pipe Core @ 1:55 PM
TESTS CONDUCTED AT FIELD LABORATORY CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

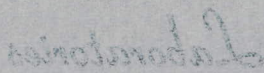
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Delose Concrete Sand

Coarse Aggregate Woline 3/4" Limestone

Mixed Aggregate

By R. L. Phillips



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CC:2 Lock Joint @ Colwich
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PHONE HOBAR 4-3948

WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 904008

(Refer to This Number)

Date April 3, 1956

Report No. LJC # 182

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 3/12 & 3/29/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1209	3/6	3"	4110	4950	2145	± 90	8110	RC-AF	28	22	66" Line Pipe Core @ 1:45 PM
No. 1210	3/6	3"	4110	4950	2145	± 90	7420	RC-AF	28	22	66" Line Pipe Core @ 1:45 PM
No. 1211	3/6	3"	4110	4950	2145	± 90	6945	RC-AF	28	22	66" Line Pipe Core @ 1:45 PM
TESTS CONDUCTED AT FIELD LABORATORY											
No. 1282	3/26	4"	4156	4984	2058	± 90	5600	DS-AF	7	0	66" Line Pipe Core @ 1:30 PM
No. 1283	3/26	4"	4156	4984	2058	± 90	5750	DS-AF	7	0	66" Line Pipe Core @ 1:30 PM
No. 1284	3/26	4"	4156	4984	2058	± 90	5700	RC-AF	7	0	66" Line Pipe Core @ 1:30 PM
TESTS CONDUCTED AT WICHITA											
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Dohigh

AF—aggregate failure.

Admixture None

Fine Aggregate Dolese

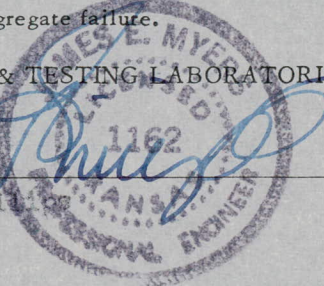
Coarse Aggregate Woline 3/4"

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By

R. L. Phillips





Wichita
Chemical
and
Testing
Laboratories

Wichita
Chemical
and
Testing
Laboratories

Pharmacists and
Members of
American Chemical
Society
American Society for
Testing Materials
American Society of
Civil Engineers
Associated General
Engineers
Professional
Engineers

FLUXURE AND COMPRESSION TEST REPORT

RESEARCH ON MANUFACTURING PROBLEMS
JAMES H. MOSELEY AVE.
BUNKER HOBBS 4-3248
WICHITA, KANSAS

ANALYTICAL CHEMISTS - BACTERIOLOGISTS - TESTING ENGINEERS

Info

Date: _____

Report No.: _____

Specimens: _____

Made by: _____

Structure: _____

(Refer to This Number)

Project: _____

Location: _____

Construction: _____

Architect: _____

Owner: _____

Date Submitted at Lab: _____

NUMBER	DATE MADE	SILICA INCHES	FINE AGGREGATE	COARSE AGGREGATE	COMPOUND	TOTAL WATER	COMPRESSION STRENGTH P.S.I.	TYPE FRACTURE	AGE IN DAYS	TESTED IN	REMARKS
1000	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1001	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1002	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1003	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1004	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1005	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1006	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1007	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1008	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1009	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1010	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1011	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1012	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1013	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1014	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1015	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1016	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1017	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1018	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1019	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1020	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1021	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1022	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1023	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1024	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1025	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1026	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1027	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1028	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1029	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1030	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1031	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1032	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1033	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1034	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1035	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1036	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1037	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1038	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1039	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1040	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1041	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1042	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1043	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1044	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1045	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1046	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1047	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1048	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1049	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1050	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1051	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1052	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1053	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1054	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1055	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1056	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1057	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1058	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1059	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1060	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1061	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1062	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1063	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1064	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1065	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1066	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1067	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1068	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1069	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1070	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1071	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1072	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1073	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1074	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1075	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1076	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1077	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1078	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1079	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1080	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1081	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1082	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1083	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1084	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1085	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1086	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1087	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1088	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1089	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1090	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1091	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1092	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1093	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1094	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1095	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1096	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1097	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1098	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1099	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1100	10-10-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

TESTS CONDUCTED AT FIELD LABORATORY

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: KC-vegan cone; VS-vegan cone; DS-hagonal shear; MS-horizontal shear; MS-notion bond failure

Brand of Cement: _____

Administrative: _____

Fine Aggregate: _____

Coarse Aggregate: _____

Mixed Aggregate: _____

WICHITA

WE TEST EVERYTHING



UNDER THE SUN

Wichita CHEMICAL AND TESTING Laboratories

CC: 2 Lock Joint @ Colwich
2 Weller
1 Knoll
1 Hess

File: 1

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RESEARCH ON MANUFACTURING PROBLEMS

1428 N. MOSLEY AVE.

PHONE HOBAR 4-3948

WICHITA 4, KANSAS

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903427
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/10 & 3/28/56

Date: April 2, 1956
Report No. LJC # 181
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1203	3/5	4-1/2	4110	4950	2145	± 90	7265	RC-AF	28	23	66" Line Pipe Core @ 2:15 PM
No. 1204	3/5	4-1/2	4110	4950	2145	± 90	7455	RC-AF	28	23	66" Line Pipe Core @ 2:15 PM
No. 1205	3/5	4-1/2	4110	4950	2145	± 90	7370	RC-AF	28	23	66" Line Pipe Core @ 2:15 PM
TESTS CONDUCTED AT WICHITA											
No. 1276	3/23	5"	4156	4984	2058	± 87	5100	DS-AF	7	0	66" Line Pipe Core @ 4:00 PM
No. 1277	3/23	5"	4156	4984	2058	± 87	5300	DS-AF	7	0	66" Line Pipe Core @ 4:00 PM
No. 1278	3/23	5"	4156	4984	2058	± 87	5300	DS-AF	7	0	66" Line Pipe Core @ 4:00 PM
TESTS CONDUCTED AT FIELD LABORATORY											
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

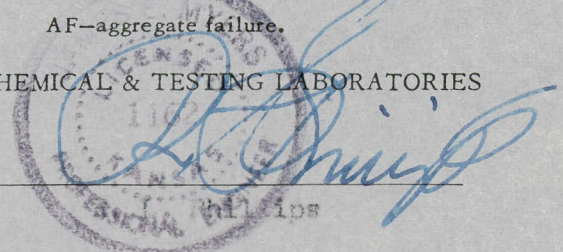
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolex Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate _____

By _____



WAGNER
CH
BUREAU

14-00000

РАЭНН, А. АТНЭН

ZETTERBERG

ATTENTION TO CITIZENSHIP STATE

PROCESSED BY THE DISTRICT ATTORNEY

WE TEST EVERYTHING



UNDER THE SUN

Wichita

CHEMICAL
AND
TESTING

Laboratories

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2 Waller
1 Mohl
1 Nees

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CIVIL ENGINEERS
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ENGINEERS

ANALYTICAL CHEMISTS - BACTERIOLOGISTS - TESTING ENGINEERS

RESEARCH ON MANUFACTURING PROBLEMS

1428 N. MOSLEY AVE.

PHONE HOBAR 4-3948

WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 909416

(Refer to This Number)

Date March 30, 1956

Report No. LJC # 18

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure: Water Line

Owner: City of Wichita

Date Submitted at Lab: 3/8 & 3/27/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1197	3/2	4-1/2	4110	4950	2145	± 90	5290	RC-AF	28	22	66" Line Pipe Core @ 2:00 PM
No. 1198	3/2	4-1/2	4110	4950	2145	± 90	6360	RC-AF	28	22	66" Line Pipe Core @ 2:00 PM
No. 1199	3/2	4-1/2	4110	4950	2145	± 90	6280	RC-AF	28	22	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT WICHITA											
No. 1270	3/22	4-1/2	4156	4984	2058	± 87	5800	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1271	3/22	4-1/2	4156	4984	2058	± 87	6000	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1272	3/22	4-1/2	4156	4984	2058	± 87	5800	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Lehigh

AF—aggregate failure.

Admixture: None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: Colwich

Coarse Aggregate: Colwich

Mixed Aggregate:

By: R. L. Phillips

R. L. Phillips

200

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232407, 232408

TESTS CONDUCTED AT WHEELS

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WE TEST EVERYTHING



UNDER THE SUN

Wichita CHEMICAL AND TESTING Laboratories

CC: Lock Joint & Colwich
2 Weller
1 Knoll
1 Hess

File:

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AMERICAN CHEMICAL
SOCIETY
AMERICAN SOCIETY FOR
TESTING MATERIALS
AMERICAN SOCIETY OF
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ASS'N OF ASPHALT
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ANALYTICAL CHEMISTS - BACTERIOLOGISTS - TESTING ENGINEERS

RESEARCH ON MANUFACTURING PROBLEMS

1428 N. MOSLEY AVE.

PHONE HOBAR 4-3948

WICHITA 4, KANSAS

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903389
(Refer to This Number)

Date March 29, 1956

Report No. LJC # 179

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 3/6 & 3/26/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1191	3/1	4-1/2	4110	4950	2145	± 90	6860	DS-AF	28	23	66" Line Pipe Core @ 1:45 PM
No. 1192	3/1	4-1/2	4110	4950	2145	± 90	6560	RC-AF	28	23	66" Line Pipe Core @ 1:45 PM
No. 1193	3/1	4-1/2	4110	4950	2145	± 90	6660	DS-AF	28	23	66" Line Pipe Core @ 1:45 PM
TESTS CONDUCTED AT WICHITA											
No. 1264	3/21	3"	4156	4984	2058	± 87	5700	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1265	3/21	3"	4156	4984	2058	± 87	5750	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1266	3/21	3"	4156	4984	2058	± 87	5750	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT FIELD LABORATORY CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Welling

By R. L. Phillips

Coarse Aggregate Dalene

Mixed Aggregate

[illegible]

FLXURE AND COMPRESSION TEST REPORT

WE TEST EVERYTHING



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Wichita CHEMICAL AND TESTING Laboratories

CC: 2 Lock Joint • Colwich
2 Weller
1 Knoll
1 Hess

File: 1

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PHONE HOBAR 4-3948

WICHITA 4, KANSAS

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903369

(Refer to This Number)

Date March 28, 1956

Report No. LJC # 178

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 3/5 & 3/24/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1185	2/29	4-1/2	4110	4950	2145	± 90	6710	RC-AF	28	23	66" Line Pipe Core @ 3:00 PM
No. 1186	2/29	4-1/2	4110	4950	2145	± 90	6650	RC-AF	28	23	66" Line Pipe Core @ 3:00 PM
No. 1187	2/29	4-1/2	4110	4950	2145	± 90	6600	RC-AF	28	23	66" Line Pipe Core @ 3:00 PM
TESTS CONDUCTED AT WICHITA											
No. 1258	3/20	5"	4156	4984	2058	± 90	5250	DS-AF	7	0	66" Line Pipe Core @ 3:00 PM
No. 1259	3/20	5"	4156	4984	2058	± 90	5750	DS-AF	7	0	66" Line Pipe Core @ 3:00 PM
No. 1260	3/20	5"	4156	4984	2058	± 90	5400	DS-AF	7	0	66" Line Pipe Core @ 3:00 PM
CONTRACT EXTENSION											
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Lehigh

AF—aggregate failure.

Admixture None

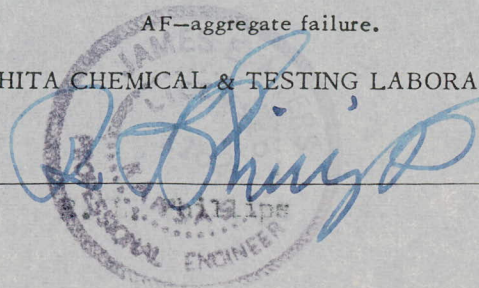
Fine Aggregate Moline

Coarse Aggregate Dolase

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By [Signature]





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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Line Lab. No. 903361
(Refer to This Number)

Date March 28, 1956
Report No. LJC # 173
Specimens
Made by: Laboratory
Structure Water Line

Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/2 & 3/22/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1179	2/28	4"	4110	4950	2145	± 90	6260	DS-AF	28	25	66" Line Pipe Core @ 2:15 PM
No. 1180	2/28	4"	4110	4950	2145	± 90	6040	DS-AF	28	25	66" Line Pipe Core @ 2:15 PM
No. 1181	2/28	4"	4110	4950	2145	± 90	6240	RC-AF	28	25	66" Line Pipe Core @ 2:15 PM
TESTS CONDUCTED AT WICHITA											
No. 1250	3/19	4"	4156	4984	2058	± 90	5850	RC-AF	7	4	66" Line Pipe Core @ 1:15 PM
No. 1251	3/19	4"	4156	4984	2058	± 90	5800	DS-AF	7	4	66" Line Pipe Core @ 1:15 PM
No. 1252	3/19	4"	4156	4984	2058	± 90	5750	DS-AF	7	4	66" Line Pipe Core @ 1:15 PM
No. 1250, 1251, 1252 Contract Extension											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

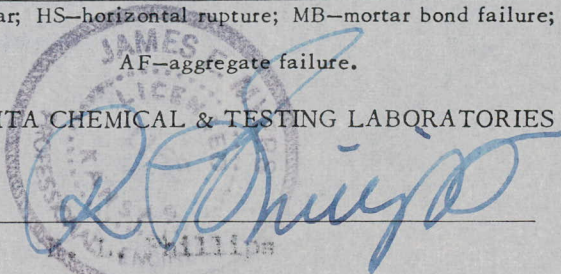
Admixture None

Fine Aggregate Moline

Coarse Aggregate Dolane

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By  J. L. Phillips



FILEDURE AND COMPRESSION TEST REPORT

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1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903338

(Refer to This Number)

Date March 24, 1956

Report No. WJC # 177

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 3/21/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1244	3/16	2-1/2	4156	4984	2058	± 87	5800	DS-AF	7	Q	66" Line Pipe Core @ 1:15 PM
No. 1245	3/16	2-1/2	4156	4984	2058	± 87	5750	DS-AF	7	Q	66" Line Pipe Core @ 1:15 PM
No. 1246	3/16	2-1/2	4156	4984	2058	± 87	5750	RC-AF	7	Q	66" Line Pipe Core @ 1:15 PM
No. 1256	3/20	5"	4156	4984	2058	± 90	5550	RC-AF	3	Q	66" Line Pipe Core @ 3:00 PM
No. 1257	3/20	5"	4156	4984	2058	± 90	5500	RC-AF	3	Q	66" Line Pipe Core @ 3:00 PM
CONTRACT EXTENSION Required 28 day strength:							4500 P. S. I.				

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Delaware

AF—aggregate failure.

Admixture None

Fine Aggregate Delaware

Coarse Aggregate Delaware

Fixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By

R. L. Phillips

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carcinoma

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903322
(Refer to This Number)

Date March 26, 1936

Report No. LJC #176

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 2/29 & 3/1

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1167	2/24	4"	4110	4950	2145	±90	6480	DS-AF	28	23	66" Line Pipe Core @ 3:00 PM
No. 1168	2/24	4"	4110	4950	2145	±90	7300	RC-AF	28	23	66" Line Pipe Core @ 3:00 PM
No. 1169	2/24	4"	4110	4950	2145	±90	6930	RC-AF	28	23	66" Line Pipe Core @ 3:00 PM
No. 1173	2/27	5"	4110	4950	2145	±90	6290	DS-AF	28	26	66" Line Pipe Core @ 2:15 PM
No. 1174	2/27	5"	4110	4950	2145	±90	6440	RC-AF	28	26	66" Line Pipe Core @ 2:15 PM
No. 1175	2/27	5"	4110	4950	2145	±90	6400	DS-AF	28	26	66" Line Pipe Core @ 2:15 PM
TESTS CONDUCTED AT WICHITA Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

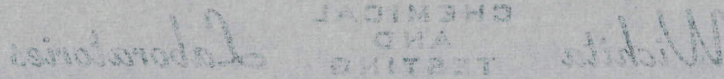
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolose Concrete Sand

Coarse Aggregate Woline Limestone

Fixed Aggregate

By R. H. Hines



FLXURE AND COMPRESSION TEST REPORT

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 902299

Date March 22, 1956

Report No. LJC # 175

Liner

(Refer to This Number)

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure: Water Line

Owner: City of Wichita

Date Submitted at Lab: 3/20/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1238	3/14	3-1/2	4156	4984	2058	± 87	5450	DS-AF	7	0	66" Line Pipe Core @ 3:15 PM
No. 1239	3/14	3-1/2	4156	4984	2058	± 87	5600	DS-AF	7	0	66" Line Pipe Core @ 3:15 PM
No. 1240	3/14	3-1/2	4156	4984	2058	± 87	5600	DS-AF	7	0	66" Line Pipe Core @ 3:15 PM
CONTRACT EXTENSION Required 28 day strength:							4500 P. S. I.				

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Polara Concrete Sand

Coarse Aggregate Malina Limestone

Mixed Aggregate None

By

R. L. Phillips
R. L. PHILLIPS
REGISTERED PROFESSIONAL ENGINEER



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Specimens

TESTS CONDUCTED AT FIELD LABORATORY



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 903278
Lines (Refer to This Number)
Location: Volwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/29/56

Date: March 22, 1956
Report No. LJC # 174
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1155	2/23	3-1/2	4110	4950	2145	± 90	5576	DS-AF	28	23	66" Line Pipe Core @ 2:00 PM
No. 1156	2/23	3-1/2	4110	4950	2145	± 90	5913	DS-AF	28	23	66" Line Pipe Core @ 2:00 PM
No. 1157	2/23	3-1/2	4110	4950	2145	± 90	6300	DS-AF	28	23	66" Line Pipe Core @ 2:00 PM

TESTS CONDUCTED AT WICHITA

Required 28 day strength: 4500 P. S. I.

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Consolidated Victor

AF—aggregate failure.

Admixture: None

Fine Aggregate: Dolene Concrete Sand

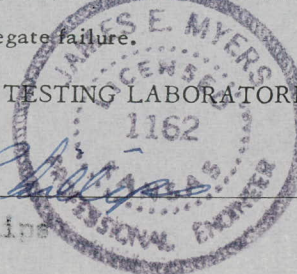
Coarse Aggregate: Holine Limestone

Mixed Aggregate: None

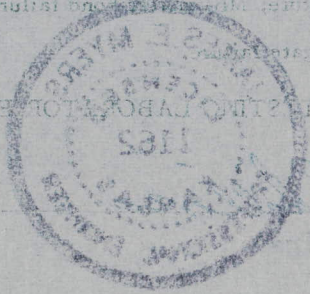
WICHITA CHEMICAL & TESTING LABORATORIES

By: R. L. Phillips

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903276
(Refer to This Number)

Date March 21, 1956

Location: Colwich, Kansas

Report No. LJO 173

Contractor: Lock Joint Pipe Co.

Specimens

Architect: Black & Veatch

Made by: Laboratory

Owner: City of Wichita

Structure Water Line

Date Submitted at Lab: 3/19/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No.1232	3/13	3-1/2	4156	4984	2058	± 87	5750	DS-AF	7	0	66" Line Pipe Core @ 1:30 PM
No.1233	3/13	3-1/2	4156	4984	2058	± 87	5900	RC-AF	7	0	66" Line Pipe Core @ 1:30 PM
No.1234	3/13	3-1/2	4156	4984	2058	± 87	5850	RC-AF	7	0	66" Line Pipe Core @ 1:30 PM
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolase Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate None

By [Signature]



FLUXURE AND COMPRESSION TEST REPORT

TESTS CONDUCTED AT FIELD LABORATORY



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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 903281Date March 21, 1956Lines

(Refer to This Number)

Report No. LJC # 172Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.Made by: LaboratoryArchitect: Blank & VatchStructure: Water LineOwner: City of WichitaDate Submitted at Lab: 2/27/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1149	2/22	4"	4110	4950	2145	± 90	6775	DS-AF	28	23	66" Line Pipe Core @ 2:00 PM
No. 1150	2/22	4"	4110	4950	2145	± 90	6545	RC-AF	28	23	66" Line Pipe Core @ 2:00 PM
No. 1151	2/22	4"	4110	4950	2145	± 90	6900	RC-AF	28	23	66" Line Pipe Core @ 2:00 PM
TEST CONDUCTED AT WICHITA			Green Concrete 70° - 62° Outside. Required 28 day strength: 4500 P. S. I.								

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Delate Concrete SandCoarse Aggregate Maline LimestoneMixed Aggregate

By

R. L. Phillips



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FLEXURE AND COMPRESSION TEST REPORT

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25



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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmissi. Lab. No. 903253
Lines (Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/24/56

Date: March 20, 1956
Report No. LJC # 171
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1143	2/21	3-1/2	4110	4950	2145	± 90	6710	RC-AF	28	25	66" Line Pipe Core @ 3:00 PM
No. 1144	2/21	3-1/2	4110	4950	2145	± 90	6800	DS-AF	28	25	66" Line Pipe Core @ 3:00 PM
No. 1145	2/21	3-1/2	4110	4950	2145	± 90	4920	VS-AF	28	25	66" Line Pipe Core @ 3:00 PM
TESTS CONDUCTED AT WICHITA Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Vletoer

AF—aggregate failure.

Admixture None

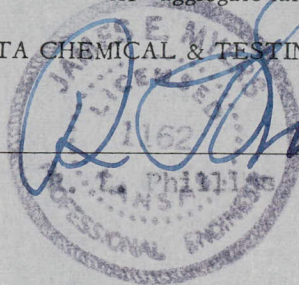
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Fine Aggregate Dolose Concrete Sand

Coarse Aggregate Holine Limestone

Mixed Aggregate _____

By



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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903252
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/15/56

Date March 20, 1956
Report No. LJC # 170
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1226	3/12	2-1/2	4156	4984	2058	± 87	5750	RC-AP	7	0	66" Line Pipe Core @ 2:45 PM
No. 1227	3/12	2-1/2	4156	4984	2058	± 87	5700	RC-AP	7	0	66" Line Pipe Core @ 2:45 PM
No. 1228	3/12	2-1/2	4156	4984	2058	± 87	5800	RC-AP	7	0	66" Line Pipe Core @ 2:45 PM
CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

Fine Aggregate Dolose Concrete Sand

Coarse Aggregate Moline Limestone

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By

[Signature]



Labrador

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EAGAN, A. ATKINSON

FLUXURE AND COMPRESSION TEST REPORT

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903233
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Flack & Vasteh
Owner: City of Wichita
Date Submitted at Lab: 2/22/56

Date: March 19, 1956
Report No. LJC # 169
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1137	2/20	5"	4110	4950	2145	± 90	6820	DS-AF	28	25	66" Line Pipe Core @ 2:00 PM
No. 1138	2/20	5"	4110	4950	2145	± 90	6960	RC-AF	28	25	66" Line Pipe Core @ 2:00 PM
No. 1139	2/20	5"	4110	4950	2145	± 90	6420	DS-AF	28	25	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT WICHITA							Required 28 day strength: 4500 P. S. I.				

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

Admixture None

Fine Aggregate Deless Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate

AF—aggregate failure.
WICHITA CHEMICAL & TESTING LABORATORIES
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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903225
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/14/56

Date March 19, 1956
Report No. LJC # 168
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1220	3/9	5-1/2	4156	4984	2058	± 90	5950	DS-AF	7	Q	66" Line Pipe Core @ 2:30 PM
No. 1221	3/9	5-1/2	4156	4984	2058	± 90	5750	RC-AF	7	O	66" Line Pipe Core @ 2:30 PM
No. 1222	3/9	5-1/2	4156	4984	2058	± 90	5600	RC-AF	7	O	66" Line Pipe Core @ 2:30 PM
CONTRACT EXTENSION											
Required 28 day strength:								4500 P. S.I.			

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolase Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate None

By [Signature]

TESTS CONDUCTED AT FIELD LABORATORY





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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 903208
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Leak Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/22/56

Date: March 10, 1956
Report No. LJW # 167
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1131	2/17	2-1/2	4110	4950	2145	± 90	7480	DS-AF	28	23	66" Line Pipe Core @ 1:45 PM
No. 1132	2/17	2-1/2	4110	4950	2145	± 90	7880	RC-AF	28	23	66" Line Pipe Core @ 1:45 PM
No. 1133	2/17	2-1/2	4110	4950	2145	± 90	6750	DS-AF	28	23	66" Line Pipe Core @ 1:45 PM
TESTS CONDUCTED AT WICHITA											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement Consolidated Victor

AF-aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolene Concrete Sand

Coarse Aggregate Maline Limestone

Mixed Aggregate None

By [Signature]





JAMES H.
O'DAY
DIRECTOR

reintegrated.

8482-4 00004 34004 . 574 YELSON, M BSM

BAGHAM, R. A. T. H. D. IV

(Answer to This Number)

ATTORNEY AT LAW

[illegible]

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 903201
(Refer to This Number)

Date March 15, 1956

Report No. LJC # 166

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 2/21/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1125	2/16	3 1/2	4110	4950	2145	± 90	6420	RC-AF	28	23	66" Line Pipe Core @ 2:30 PM
No. 1126	2/16	3 1/2	4110	4950	2145	± 90	6120	DS-AF	28	23	66" Line Pipe Core @ 2:30 PM
No. 1127	2/16	3 1/2	4110	4950	2145	± 90	7090	DS-AF	28	23	66" Line Pipe Core @ 2:30 PM
TESTS CONDUCTED AT WICHITA			Green Concrete 70° @ 43° Outside Required 28 day strength: 4500 P. S. I.								

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

Fine Aggregate Dolose Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By R. L. Phillips

R. L. Phillips

LABORATORY AND TESTING

TEST REPORT

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 903200

(Refer to This Number)

Date March 13, 1956

Report No. LJO # 165

Specimens

Made by: Laboratory

Structure Water Line

Location: Colvich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Vestch

Owner: City of Wichita

Date Submitted at Lab: 3/13/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1214	3/8	3"	4156	4984	2058	± 87	6100	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1215	3/8	3"	4156	4984	2058	± 87	6000	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1216	3/8	3"	4156	4984	2058	± 87	5950	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
CONTRACT EXTENSION											
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

Fine Aggregate Dolens Concrete Sand

Coarse Aggregate Rolling Limestone

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES
By James E. Phillips

Lebanon

LA JOLLA
CALIF
92037

St. John

647

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ЗАБНАН, А. АТИДИН

FLUXURE AND COMPRESSION TEST REPORT

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 909181
(Refer to This Number)

Date March 14, 1956

Report No. 100-164

Specimens

Made by: Laboratory

Structure: Water Line

Location: Colvich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 2/20/56

THIS IS A TRIAL PATCH OF 7.3 SACK
55% ROCK 45% SAND MIX TO DETERMINE
STRENGTH OF CALCULATED MIX MADE
BY WICHITA CHEMICAL & TESTING LAB.

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1113	2/15	5"	4140 3.3 FM	5000 1.5 FM	2060	± 87	5278	RC-AF	28	23	66" Line Pipe Cast ing @ 11:00 AM
No. 1114	2/15	5	4140 3.3 FM	5000 1.5 FM	2060	± 87	5295	RC-AF	28	23	66" Line Pipe Cast ing @ 11:00 AM
No. 1115	2/15	5"	4140 3.3 FM	5000 1.5 FM	2060	± 87	5912	RC-AF	28	23	66" Line Pipe Cast ing @ 11:00 AM
Green Concrete 66° & 93° Outside No evidence of bleeding											
Required 28 day strength: 4500 P. S. I.											

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

Fine Aggregate Dolare Concrete Sand

Coarse Aggregate Colvich Limestone

Mixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By R. L. Miller



cont. mod. 2

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FLEXURE AND COMPRESSION TEST REPORT

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FLEXURE AND COMPRESSION TEST REPORT

Project: Lab. No.

66" Water Transmission

(Refer to This Number)

Date March 14, 1956

Report No. LJO # 163

Specimens

Made by: Laboratory

Structure Water Line

Location: Lines

Contractor: Colwich, Kansas

Architect: Look Joint Pipe Co.

Owner: Black A. Kesch

Date Submitted at Lab: City of Wichita, Kansas

2/20/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P. S. I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1119	2/15	4"	4110	4950	2145	± 90	6352	D3-AF	28	23	66" Line Pipe Core @ 1:30 PM
No. 1120	2/15	4"	4110	4950	2145	± 90	6790	D3-AF	28	23	66" Line Pipe Core @ 1:30 PM
No. 1121	2/15	6"	4110	4950	2145	± 90	6960	D5-AF	28	23	66" Line Pipe Core @ 1:30 PM

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement _____

AF—aggregate failure.

Admixture Consolidated Vicator

Fine Aggregate None

Coarse Aggregate Dolomitic Concrete Sand

Mixed Aggregate Maline 3/4" Stone

None

WICHITA CHEMICAL & TESTING LABORATORIES

By: _____

R. L. Phillips



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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 903180
Lines (Refer to This Number)

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Ventch

Owner: City of Wichita

Date Submitted at Lab: 3/22/56

Date: March 14, 1956

Report No. 1162 # 162

Specimens

Made by: Laboratory

Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P. S. I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1206	3/6	3"	4110	4950	2145	± 90	6050	DS-AF	7	0	66" Line Pipe Core @ 1:45 PM
No. 1207	3/6	3"	4110	4950	2145	± 90	6000	DS-AF	7	0	66" Line Pipe Core @ 1:45 PM
No. 1208	3/6	3"	4110	4950	2145	± 90	6050	RC-AF	7	0	66" Line Pipe Core @ 1:45 PM
No. 1212	3/6	3"	4155	4955	2058	± 87	5300	DS-AF	7	0	66" Line Pipe Core @ 3:30 PM
No. 1213	3/6	3"	4155	4955	2058	± 87	5350	RC-AF	7	0	66" Line Pipe Core @ 3:30 PM
TESTS CONDUCTED AT FIELD LABORATORY CONTRACT EXTENSION Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

Fine Aggregate Beloro

Coarse Aggregate Galena Limestone

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By: A. L. Phillips

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903166
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Ventch
Owner: City of Wichita
Date Submitted at Lab: 2/27/56

Date: March 13, 1956
Report No. LJC # 161
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1101	2/14	4-1/2	4110	4950	2145	± 90	6600	DS-AF	28	25	66" Line Pipe Core @ 1:30 PM
No. 1102	2/14	4-1/2	4110	4950	2145	± 90	6540	DS-AF	28	25	66" Line Pipe Core @ 1:30 PM
No. 1103	2/14	4-1/2	4110	4950	2145	± 90	6670	DS-AF	28	25	66" Line Pipe Core @ 1:30 PM
TESTS CONDUCTED AT WICHITA			Required 28 day strength: 4500 P. S. I.								

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolose Concrete Sand

By [Signature]

Coarse Aggregate Kalina Limestone

Mixed Aggregate None



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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 903162

Date March 13, 1956

Report No. LJC # 160

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 3/10/56

CONTRACT EXTENSION

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No.1200	3/5	4-1/2	4110	4950	2145	± 90	6050	SC-AF	7	0	66" Line Pipe Core @ 2:15 PM
No.1201	3/5	4-1/2	4110	4950	2145	± 90	5800	DS-AF	7	0	66" Line Pipe Core @ 2:15 PM
No.1202	3/5	4-1/2	4110	4950	2145	± 90	6050	DG-AF	7	0	66" Line Pipe Core @ 2:15 PM
TESTS CONDUCTED AT FIELD LABORATORY Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolomitic Concrete Sand

By

Coarse Aggregate Woline Limestone

Mixed Aggregate_____

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903153
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 3/8/56

Date March 12, 1956
Report No. LJC # 159
Specimens
Made by: Laboratory
Structure Water Line

CONTRACT EXTENSION

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1194	3/2	4-1/2	4110	4950	2145	± 90	5900	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1195	3/2	4-1/2	4110	4950	2145	± 90	5800	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1196	3/2	4-1/2	4110	4950	2145	± 90	5600	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM

TESTS CONDUCTED AT FIELD LABORATORY

Green Concrete 67° @ 65° outside
Required 28 day strength: 4500 P.S.I.

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

Fine Aggregate Delass Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By R. L. Hillman

2011

1911

4-29 N. MOBILE AVE. 4-29 N. MOBILE AVE.

FLUXURE AND COMPRESSION TEST REPORT

Signature _____
Made by _____
Specimens _____
Report No. _____
Date _____

Date Submitted at Lab:

TESTS CONDUCTED AT FIELD LABORATORY

WIGHT & ORR

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Wichita CHEMICAL AND TESTING Laboratories

CC: 2 Lock Joint Colwich
2 Weller
1 Knoll
1 Hess

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 903152

Line

(Refer to This Number)

Date March 12, 1956

Report No. LJC # 158

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 2/16/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1095	2/13	4"	4110	4950	2145	± 90	7210	RC-AF	28	25	66" Line Pipe Core @ 2:00 PM
No. 1096	2/13	4"	4110	4950	2145	± 90	7125	DS-AF	28	25	66" Line Pipe Core @ 2:00 PM
No. 1097	2/13	4"	4110	4950	2145	± 90	6370	DS-AF	28	25	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT WICHITA Green Concrete 66° @ 5° Outside Required 28 day strength 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Connell dated Victor

AF—aggregate failure.

Admixture: None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: D. L. Concrete Sand

Coarse Aggregate: Colima Limestone

Mixed Aggregate: one

By: R. L. Phillips



LABORATORY AND TESTING CHEMICAL

TESTS CONDUCTED AT NICHOLS

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 903118
Lines (Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Ventch
Owner: City of Wichita
Date Submitted at Lab: 3/5 & 3/6/56

Date March 9, 1956
Report No. LJC # 156
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1182	2/29	4-1/2	4110	4950	2145	± 90	5200	RC-AF	7	0	66" Line Pipe Core @ 3:00 PM
No. 1183	2/29	4-1/2	4110	4950	2145	± 90	5750	DS-AF	7	0	66" Line Pipe Core @ 3:00 PM
No. 1184	2/29	4-1/2	4110	4950	2145	± 90	5600	DS-AF	7	0	66" Line Pipe Core @ 3:00 PM
Green Concrete 74° & 71° Outside											
No. 1188	3/1	4-1/2	4110	4950	2145	± 90	5800	DS-AF	7	0	66" Line Pipe Core @ 1:45 PM
No. 1189	3/1	4-1/2	4110	4950	2145	± 90	6000	RC-AF	7	0	66" Line Pipe Core @ 1:45 PM
No. 1190	3/1	4-1/2	4110	4950	2145	± 90	5950	RC-AF	7	0	66" Line Pipe Core @ 1:45 PM
Contract Extension Required 28 day strength: 4500 P. S. I.											

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolan Concrete Sand

By R. L. Phillips

Coarse Aggregate Moline Limestone

Mixed Aggregate None

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 903125
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/15/56

Date March 9, 1956
Report No. LJC # 157
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1089	2/10	4"	4110	4950	2145	± 90	6495	DS-AF	28	23	66" Line Pipe Core @ 2:30 PM
No. 1090	2/10	4"	4110	4950	2145	± 90	6759	VS-AF	28	23	66" Line Pipe Core @ 2:30 PM
No. 1091	2/10	4"	4110	4950	2145	± 90	6636	DS-AF	28	23	66" Line Pipe Core @ 2:30 PM
TESTS CONDUCTED AT WICHITA Green Concrete 58° @ 37° Outside Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Votor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolose Concrete Sand

Coarse Aggregate Coline Limestone

Mixed Aggregate None

By [Signature]



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EADMAN, A. A. 1901.



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 903106
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/14/56

Date March 8, 1956
Report No. LJO # 155
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1083	2/9	4-1/2	4110	4950	2145	± 90	6019	DS-AF	28	23	66" Line Pipe Core @ 1:45 PM
No. 1084	2/9	4-1/2	4110	4950	2145	± 90	5930	DS-AF	28	23	66" Line Pipe Core @ 1:45 PM
No. 1085	2/9	4-1/2	4110	4950	2145	± 90	6461	DS-AF	28	23	66" Line Pipe Core @ 1:45 PM
TESTS CONDUCTED AT WICHITA Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

Admixture None

Fine Aggregate Dolese Concrete Sand

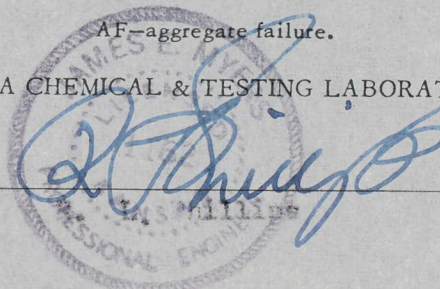
Coarse Aggregate Woline 3/4" Limestone

Mixed Aggregate None

AF—aggregate failure.

WICHITA CHEMICAL & TESTING LABORATORIES

By [Signature]





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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903084

(Refer to This Number)

Date March 7, 1956Report No. LJO # 154

Specimens

Made by: LaboratoryStructure Water LineLocation: Colwich, KansasContractor: Lock Joint Pipe Co.Architect: Black & VentonOwner: City of WichitaDate Submitted at Lab: 2/13 & 3/2/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No.1077	2/8	5-1/2	4110	4950	2145	± 90	5258	DS-AF	28	23	66" Line Pipe Core @ 1:15 PM
No.1078	2/8	5-1/2	4110	4950	2145	± 90	6090	DS-AF	28	23	66" Line Pipe Core @ 1:15 PM
No.1079	2/8	5-1/2	4110	4950	2145	± 90	4870	DS-AF	28	23	66" Line Pipe Core @ 1:15 PM
TESTS CONDUCTED AT FIELD LABORATORY											
No.1176	2/28	4"	4110	4950	2145	± 90	5900	DS-AF	7	0	66" Line Pipe Core @ 2:15 PM
No.1177	2/28	4"	4110	4950	2145	± 90	5750	DS-AF	7	0	66" Line Pipe Core @ 2:15 PM
No.1178	2/28	4"	4110	4950	2145	± 90	5950	RC-AF	7	0	66" Line Pipe Core @ 2:15 PM
TESTS CONDUCTED AT WICHITA											
Green Concrete 74° @ 40° outside Required 28 day strength 4500 P. S. I. TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dalase Concrete SandBy R. L. PhillipsCoarse Aggregate Woline 3/4" LimestoneMixed Aggregate None

TESTS CONDUCTED AT WICHITA

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 903067
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/10 & 3/1/56

Date March 6, 1956
Report No. 120 # 153
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No.1071	2/7	3-1/2	4110	4950	2145	± 90	6811	RC-AF	28	25	66" Line Pipe Core @ 2:30 PM
No.1072	2/7	3-1/2	4110	4950	2145	± 90	6759	RC-AF	28	25	66" Line Pipe Core @ 2:30 PM
No.1073	2/7	3-1/2	4110	4950	2145	± 90	6600	VS-AF	28	25	66" Line Pipe Core @ 2:30 PM
TESTS CONDUCTED AT WICHITA											
No.1170	2/27	5"	4110	4950	2145	± 90	5550	DS-AF	7	0	66" Line Pipe Core @ 2:15 PM
No.1171	2/27	5"	4110	4950	2145	± 90	5950	DS-AF	7	0	66" Line Pipe Core @ 2:15 PM
No.1172	2/27	5"	4110	4950	2145	± 90	5850	DS-AF	7	0	66" Line Pipe Core @ 2:15 PM
Green Concrete: 64° @ 66° Outside Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Visitor

AF—aggregate failure.

Admixture None

Fine Aggregate Dolosa Concrete Sand

Coarse Aggregate Coline 3/4" Limestone

Mixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By

James E. Myers
1162
PROFESSIONAL ENGINEER



CO:

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FLEXURE AND COMPRESSION TEST REPORT

Project: _____
Location: _____
Contract: _____
Architect: _____
Owner: _____
Date Submitted as Lab: _____
(Refer to This Number)
Report No. _____
Specimens: _____
Made by: _____
Signature: _____
Date: _____

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	Flow Aggreg.	MIXTURE			Compressive Strength P.S.I.	Type Fracture	Age in Days	Days Lab. Cured Standard Conditions	Remarks and Location of Pour
				Coarse Aggreg.	Gravel	Total Water					
1	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100
2	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100
3	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100
4	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100
5	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100
6	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100
7	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100
8	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100
9	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100
10	1-1-54	4-1/2	100	100	100	100	100	100	100	100	100

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

TYPE EVALUATION: RC - regular concrete; VS - vertical shear; IS - diagonal shear; HS - horizontal rupture; MB - mortar bond failure;

By: _____
Checked: _____
Approved: _____
Wichita Laboratories
Circular stamp: WICHITA LABORATORIES, KANSAS, 1954



Wichita CHEMICAL AND TESTING Laboratories

CC: 2 Lock Joint @ Colwich
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1 Knoll
1 Hess

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WICHITA 4, KANSAS

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 903051
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Company
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/9 & 2/29/56

Date March 6, 1956
Report No. LJC # 152
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1065	2/6	3-1/2	4110	4950	2145	± 90	6441	DS-AF	28	25	66" Line Pipe Core @ 3:30 PM
No. 1066	2/6	3-1/2	4110	4950	2145	± 90	6352	DS-AF	28	25	66" Line Pipe Core @ 3:30 PM
No. 1067	2/6	3-1/2	4110	4950	2145	± 90	6354	DS-AF	28	25	66" Line Pipe Core @ 3:30 PM
TESTS CONDUCTED AT WICHITA											
No. 1164	2/24	4"	4110	4950	2145	± 90	5600		7	0	66" Line Pipe Core @ 3:00 PM
No. 1165	2/24	4"	4110	4950	2145	± 90	5600		7	0	66" Line Pipe Core @ 3:00 PM
No. 1166	2/24	4"	4110	4950	2145	± 90	5650		7	0	66" Line Pipe Core @ 3:00 PM
Green Concrete: 71° @ 78° Outside Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

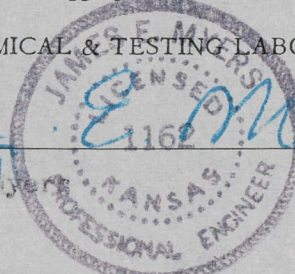
Fine Aggregate Dolese Concrete Sand

Coarse Aggregate None 3/4" Limestone

Mixed Aggregate None

By

J. E. Myers





atkins

TESTS CONDUCTED AT FIELD LABORATORY

WICHITA CHEMICAL & TESTING LABORATORIES





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WICHITA 4, KANSAS

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902015
(Refer to This Number)

Date March 3, 1956

Report No. LJO # 151

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: J. A. & M. J. Voth

Structure: Water Line

Owner: City of Wichita

Date Submitted at Lab: 2/7, 2/17 & 2/20/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1146	2/22	4"	4110	4950	2145	± 90	5700	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1147	2/22	4"	4110	4950	2145	± 90	5800	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1148	2/22	4"	4110	4950	2145	± 90	5750	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT FIELD LABORATORY											
Green Concrete 74° @ 62° Inside											
No. 1059	2/3	5-1/2	4110	4950	2145	± 90	6865*		28	24	66" Line Pipe Core @ 1:30 PM
No. 1060	2/3	5-1/2	4110	4950	2145	± 90	6865	VS-AF	28	24	66" Line Pipe Core @ 1:30 PM
No. 1061	2/3	5-1/2	4110	4950	2145	± 90	6310	DS-AF	28	24	66" Line Pipe Core @ 1:30 PM
TESTS CONDUCTED AT WICHITA											
No. 1152	2/23	3-1/2	4110	4950	2145	± 90	5300	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1153	2/23	3-1/2	4110	4950	2145	± 90	5300	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1154	2/23	3-1/2	4110	4950	2145	± 90	5350	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT FIELD LABORATORY											
Green Concrete 74° @ 62° Outside											
*Beyond Capacity of Machine											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Delaware Concrete Sand

By R. L. Hill

Coarse Aggregate Wichita 3/4" Stone

Mixed Aggregate None



JACIMENO
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9174

1000 N. W. HOLLEY AVE. PHONE NUMBER 4-3949

BAERMAN, A. ATINDIWA

FLUXUS AND COMPRESSION TEST REPORT

(Refer to This Number)

100-100000-1A

WICHITA CHEMISTS TESTING LABORATORIES



Wichita CHEMICAL AND TESTING Laboratories

CC: Lock Joint & Colwich
2 Weller
1 Knoll
1 Hess

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmissi Lab. No. 909022

(Refer to This Number)

Date March 2, 1956Report No. LJC # 150Location: Colwich, KansasContractor: Lock Joint Pipe Co.Architect: Black & VeatchOwner: City of WichitaDate Submitted at Lab: 2/2/56

Specimens

Made by: LaboratoryStructure Water Line

THIS IS A TRIAL BATCH OF 7.3 SACKS
55% ROCK, 45% SAND MIX.

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1158	2/24	3-1/2	4140 5.0%PM	5000 2.0%PM	2060	± 85	4500	RC-AF	3	0	66" Line Pipe Core @ 10:30 AM
No. 1159	2/24	3-1/2	4140 5.0%PM	5000 2.0%PM	2060	± 85	4400	RC-AF	3	0	66" Line Pipe Core @ 10:30 AM
No. 1160	2/24	3-1/2	4140 5.0%PM	5000 2.0%PM	2060	± 85	4500	RC-AF	3	0	66" Line Pipe Core @ 10:30 AM
No. 1161	2/24	3-1/2	4140 5.0%PM	5000 2.0%PM	2060	± 85	4550	RC-AF	7	0	66" Line Pipe Core @ 10:30 AM
No. 1162	2/24	3-1/2	4140 5.0%PM	5000 2.0%PM	2060	± 85	4500	RC-AF	7	0	66" Line Pipe Core @ 10:30 AM
No. 1163	2/24	3-1/2	4140 5.0%PM	5000 2.0%PM	2060	± 85	4800	RC-AF	7	0	66" Line Pipe Core @ 10:30 AM
Green Concrete 74" @ 500 Outside Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT FIELD LABORATORY											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture NoneFine Aggregate Delaware Concrete SandCoarse Aggregate Woline 3/4" StoneMixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By

R. L. Hillier



Wichita CHEMICAL AND TESTING Laboratories

CC: 2 Lock Joint • Colwich
2 Weller
1 Knoll
1 Hess

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 902333
(Refer to This Number)

Date February 29, 1956Report No. LJC # 149Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.Made by: LaboratoryArchitect: Black & VetchStructure Water LineOwner: City of WichitaDate Submitted at Lab: 2/3 & 2/23 & 2/24/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1053	2/1	5"	4110	4950	2145	90	5984	DS-AF	28	21	66" Line Pipe Core @ 1:45 PM
No. 1054	2/1	5"	4110	4950	2145	90	5966	DS-AF	28	21	66" Line Pipe Core @ 1:45 PM
No. 1055	2/1	5"	4110	4950	2145	90	5594	DS-AF	28	21	66" Line Pipe Core @ 1:45 PM
No. 1134	2/20	5"	4110	4950	2145	90	6200	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1135	2/20	5"	4110	4950	2145	90	6050	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1136	2/20	5"	4110	4950	2145	90	6200	DS-AF	7	0	66" Line Pipe Cor @ 2:00 PM
Green Concrete 72° @ 47° Outside											
No. 1140	2/21	3-1/2	4110	4950	2145	9	6000	RC-AF	7	0	66" Line Pipe Core @ 3:00 PM
No. 1151	2/21	3-1/2	4110	4950	2145	90	6150	DS-AF	7	0	66" Line Pipe Core @ 3:00 PM
No. 1142	2/21	3-1/2	4110	4950	2145	90	6100	DS-AF	7	0	66" Line Pipe Core @ 3:00 PM
Green Concrete 74° @ 60° Outside											

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Delase Concrete SandCoarse Aggregate Holine 3/4" LimestoneMixed Aggregate NoneBy R.L. Phillips

R.L. Phillips

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UNDER THE SUN

2 Lock Joint @ Colwich
CC: 2 Weller
1 Knoll
1 Hess

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 902321
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/7/56

Date: February 28, 1956
Report No. LJC # 148
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1047	1/31	4"	4110	4950	2145	± 90	6406	VS-AF	28	21	66" Line Pipe Core @ 2:00 PM
No. 1048	1/31	4"	4110	4950	2145	± 90	6037	DS-AF	28	21	66" Line Pipe Core @ 2:00 PM
No. 1049	1/31	4"	4110	4950	2145	± 90	5806	VS-AF	28	21	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT WICHITA			Required 28 day strength:					4500 P. S. I.			

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolase Concrete Sand

By

Coarse Aggregate Woline 3/4" Limestone

Mixed Aggregate None

Wichita



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CC: 2 Lock Joint • Colwich
2 Weller
1 Knoll
1 Hess

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 902305

Date February 27, 1956

Lines (Refer to This Number)

Report No. LIC # 147

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 2/3 & 2/4 & 2/22/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No.1035	1/28	4"	4110	4950	2145	± 90	5948	DS-AF	28	22	66" Line Pipe Core @ 1:00 PM
No.1036	1/28	4"	4110	4950	2145	± 90	6406	DS-AF	28	22	66" Line Pipe Core @ 1:00 PM
No.1037	1/28	4"	4110	4950	2145	± 90	6441	DS-AF	28	22	66" Line Pipe Core @ 1:00 PM
No.1041	1/30	4"	4110	4950	2145	± 90	5859	DS-AF	28	23	66" Line Pipe Core @ 3:00 PM
No.1042	1/30	4"	4110	4950	2145	± 90	6654	DS-AF	28	23	66" Line Pipe Core @ 3:00 PM
No.1043	1/30	4"	4110	4950	2145	± 90	6424	DS-AF	28	23	66" Line Pipe Core @ 3:00 PM
TESTS CONDUCTED AT WICHITA											
No.1128	2/17	2-1/2	4110	4950	2145	± 90	6300	RC-AF	7	0	66" Line Pipe Core @ 1:45 PM
No.1129	2/17	2-1/2	4110	4950	2145	± 90	6300	RC-AF	7	0	66" Line Pipe Core @ 1:45 PM
No.1130	2/17	2-1/2	4110	4950	2145	± 90	6500	RC-AF	7	0	66" Line Pipe Core @ 1:45 PM

Green Concrete 66" 27" Outside Required 28 day strength 4500 P. S. I. @ 1:45 PM

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

TESTS CONDUCTED AT FIELD LABORATORY

Brand of Cement Consolidated Victor

AF-aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolase Concrete Sand

By R. L. Phillips

Coarse Aggregate Moline 3/4" Limestone

Mixed Aggregate None



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CC: 2 Lock Joint Colwich
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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902285
(Refer to This Number)

Date February 24, 1956

Report No. LJC # 146

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 1/31 & 2/21/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1029	1/27	4"	4110	4950	2145	± 90	5966	RC-AF	28	24	66" Line Pipe Core @ 2:15 PM
No. 1030	1/27	4"	4110	4950	2145	± 90	5558	DS-AF	28	24	66" Line Pipe Core @ 2:15 PM
No. 1031	1/27	4"	4110	4950	2145	± 90	5523	DS-AF	28	24	66" Line Pipe Core @ 2:15 PM
No. 1122	2/16	3-1/2	4110	4950	2145	± 90	6100	RC-AF	7	0	66" Line Pipe Core @ 2:30 PM
No. 1123	2/16	3-1/2	4110	4950	2145	± 90	6000	RC-AF	7	0	66" Line Pipe Core @ 2:30 PM
No. 1124	2/16	3-1/2	4110	4950	2145	± 90	6000	RC-AF	7	0	66" Line Pipe Core @ 2:30 PM

TESTS CONDUCTED AT WICHITA

Required 28 day strength: 4500 P. S. I.

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

Fine Aggregate Dolese Concrete Sand

Coarse Aggregate Welling 3/4" Limestone

Mixed Aggregate

WICHITA CHEMICAL & TESTING LABORATORIES

By

R. L. Phillips

ATKINS TA 031200MOS 21837

TESTS CONDUCTED AT FIELD LABORATORY



Wichita CHEMICAL AND TESTING Laboratories

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902267
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 1/30 & 2/20/56

Date: February 23, 1956
Report No. LJC # 145
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1023	1/26	4"	4110	4950	2145	± 90	5665	DS-AF	28	24	66" Line Pipe Core @ 2:00 PM
No. 1024	1/26	4"	4110	4950	2145	± 90	6352	RC-AF	28	24	66" Line Pipe Core @ 2:00 PM
No. 1025	1/26	4"	4110	4950	2145	± 90	6265	DS-AF	28	24	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT FIELD LABORATORY											
No. 1116	2/15	4"	4110	4950	2145	± 90	6000	RC-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1117	2/15	4"	4110	4950	2145	± 90	5900	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1118	2/15	4"	4110	4950	2145	± 90	5900	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Consolidated Victor

AF—aggregate failure.

Admixture: None

Fine Aggregate: Delco Concrete Sand

Coarse Aggregate: Welling 3/4" Limestone

Mixed Aggregate: None

WICHITA CHEMICAL & TESTING LABORATORIES

By

J. E. Myers

Leptocarpus

THE
MAY
TEST

9298-A (MARTIN SMITH) 134A Y 1120M. 4 050

BARMAN & STROCK

FLEXURE AND COMPRESSION TEST REPORT

Specimens

TESTS CONDUCTED AT FIELD LABORATORY

TEST CONDUCTED AT FIELD LABORATORY

3. *W. g.*

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 902214-B
(Refer to This Number)
Location: Colvich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/17/56

Date: February 22, 1956
Report No. LJD 143
Specimens
Made by: Laboratory
Structure Water Line

THIS IS A TRIAL BATCH OF 7.3 BAGS
55% ROCK 45% SAND MIX TO DETERMINE
STRENGTH OF CALCULATED MIX MADE
BY WICHITA CHEMICAL & TESTING LAB.

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE / 3 parts				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1104	2/15	5"	4140 3.3% FM	5000 1.5% FM	2060	870ml	4450	RC-AF	48hr.	0	66" Line Pipe Core @ 11:00 AM
No. 1105	2/15	5"	4140 3.3% FM	5000 1.5% FM	2060	870ml	4400	RC-AF	48hr.	0	66" Line Pipe Core @ 11:00 AM
No. 1106	2/15	5"	4140 3.3% FM	5000 1.5% FM	2060	870ml	4700	RC-AF	48hr.	0	66" Line Pipe Core @ 11:00 AM
TESTS CONDUCTED AT FIELD LABORATORY											
No. 1107	2/15	5"	4140 3.3% FM	5000 1.5% FM	2060	870ml	4412	RC-AF	3	0	66" Line Pipe Core @ 11:00 AM
No. 1108	2/15	5"	4140 3.3% FM	5000 1.5% FM	2060	870ml	4394	RC-AF	3	0	66" Line Pipe Core @ 11:00 AM
No. 1109	2/15	5"	4140 3.3% FM	5000 1.5% FM	2060	870ml	4359	RC-AF	3	0	66" Line Pipe Core @ 11:00 AM
TESTS CONDUCTED AT WICHITA											
No. 1110	2/15	5"	4140 3.3% FM	5000 1.5% FM	2060	870ml	5000	RC-AF	7	0	66" Line Pipe Core @ 11:00 AM
No. 1111	2/15	5"	4140 3.3% FM	5000 1.5% FM	2060	870ml	4950	DS-AF	7	0	66" Line Pipe Core @ 11:00 AM
No. 1112	2/15	5"	4140 3.3% FM	5000 1.5% FM	2060	870ml	5400	DS-AF	7	0	66" Line Pipe Core @ 11:00 AM
Green Concrete 66" & 33" Outside. No evidence of bleeding. Required 28 day strength: 4500 P. S. I.											

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Wichita Concrete Sand

Coarse Aggregate Wichita 3/4" Stone

Mixed Aggregate None

By

J. E. Myers
J. E. Myers
PROFESSIONAL ENGINEER

Michael

WILSON, A. RAYNES

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В. В. Мухомов

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 902250
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 1/28 & 2/17/56

Date: February 22, 1956
Report No. LJC # 144
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1017	1/25	4-1/2	4110	4950	2145	90	5913	DS-AF	28	25	66" Line Pipe Core @ 4:00 PM
No. 1018	1/25	4-1/2	4110	4950	2145	90	5806	DS-AF	28	25	66" Line Pipe Core @ 4:00 PM
No. 1019	1/25	4-1/2	4110	4950	2145	90	5188	DS-AF	28	25	66" Line Pipe Core @ 4:00 PM
TESTS CONDUCTED AT WICHITA											
No. 1098	2/14	4-1/2	4110	4950	2145	90	5600	DS-AF	7	0	66" Line Pipe Core @ 1:30 PM
No. 1099	2/14	4-1/2	4110	4950	2145	90	5700	DS-AF	7	0	66" Line Pipe Core @ 1:30 PM
No. 1100	2/14	4-1/2	4110	4950	2145	90	5900	DS-AF	7	0	66" Line Pipe Core @ 1:30 PM
TESTS CONDUCTED AT FIELD LABORATORY											
							Required 28 day strength: 4500 P. S. I.				

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Consolidated Victor

AF—aggregate failure.

Admixture: None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: Polase Concrete Sand

Coarse Aggregate: Moline 3/4" Limestone

Mixed Aggregate: None

By

J. E. Myers
J. E. MYERS
LICENSED PROFESSIONAL ENGINEER
KANSAS
1162



1. A. J. M. B. H. S.
2. M. A.
3. M. I. T. E. S. T.

ATTENTION TO DETROITERS 21231

TESTS CONDUCTED AT FIELD LABORATORY

Mrs. J. M. [unclear]



Wichita **CHEMICAL AND TESTING** **Laboratories**

CC: 2 Lock Joint @ Colwich
2 Teller
1 Knoll
1 Hess

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 902237
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/16/56

Date: February 21, 1956
Report No. LJC # 142
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1092	2/13	4"	4110	4950	2145	± 90	5700	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1093	2/13	4"	4110	4950	2145	± 90	5900	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
No. 1094	2/13	4"	4110	4950	2145	± 90	5800	DS-AF	7	0	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT FIELD LABORATORY			Temperature 66° @ 58° Outside. Required 28 day strength: 4500 P. S. I.								

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Deloss Concrete Sand

Coarse Aggregate Holins Limestone

Mixed Aggregate None

By

J. E. Myers
J. E. MYERS
LICENSED PROFESSIONAL ENGINEER



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmissi Lab. No. 902214-A

Date February 20, 1956

Lines

(Refer to This Number)

Report No. LJC # 141

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 2/15/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1086	2/10	4"	4110	4950	2145	±90	5400	DS-AF	7	0	66" Line Pipe Core @ 2:30 PM
No. 1087	2/10	4"	4110	4950	2145	±90	6050	DS-AF	7	0	66" Line Pipe Core @ 2:30 PM
No. 1088	2/10	4"	4110	4950	2145	±90	6100	DS-AF	7	0	66" Line Pipe Core @ 2:30 PM
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolase Concrete Sand

Coarse Aggregate Keline Limestone

Mixed Aggregate None

By

J. E. Myers
J. E. Myers
LICENSED PROFESSIONAL ENGINEER



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902200
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 1/25 & 2/14/56

Date: February 17, 1956
Report No. LJC # 140
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1011	1/20	3"	4110	4950	2145	± 90	5895	RC-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 1012	1/20	3"	4110	4950	2145	± 90	6370	RC-AF	28	23	66" Line Pipe Core @ 2:00 PM
No. 1013	1/20	3"	4110	4950	2145	± 90	6037	DS-AF	28	23	66" Line Pipe Core @ 2:00 PM
TESTS CONDUCTED AT WICHITA											
No. 1080	2/9	4-1/2	4110	4950	2145	± 90	5950	DS-AF	7	0	66" Line Pipe Core @ 1:45 PM
No. 1081	2/9	4-1/2	4110	4950	2145	± 90	5650	DS-AF	7	0	66" Line Pipe Core @ 1:45 PM
No. 1082	2/9	4-1/2	4110	4950	2145	± 90	5950	DS-AF	7	0	66" Line Pipe Core @ 1:45 PM
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Viator

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolans Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate None

By [Signature]
R. L. Phillips

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmissi Lab. No. 902184
Lines (Refer to This Number)
Location: Colwich, Kansas
Contractor: Look Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 1/24 & 2/13/56

Date: February 16, 1956
Report No. LJC # 139
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1005	1/19	6"	4110	4950	2145	± 90	5736	DS-AF	28	23	66" Line Pipe Core @ 3:15 P.M.
No. 1006	1/19	6"	4110	4950	2145	± 90	5293	DS-AF	28	23	66" Line Pipe Core @ 3:15 P.M.
No. 1007	1/19	6"	4110	4950	2145	± 90	5030	DS-AF	28	23	66" Line Pipe Core @ 3:15 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1074	2/8	5-1/2	4110	4950	2145	± 90	5200	DS-AF	7	0	66" Line Pipe Core @ 1:15 P.M.
No. 1075	2/8	5-1/2	4110	4950	2145	± 90	5200	DS-AF	7	0	66" Line Pipe Core @ 1:15 P.M.
No. 1076	2/8	5-1/2	4110	4950	2145	± 90	5250	DS-AF	7	0	66" Line Pipe Core @ 1:15 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Viator

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolosa Concrete Sand

Coarse Aggregate Wolina Limestone

Mixed Aggregate None

By

R. L. PHILLIPS

E. A. MEYER, JR. AND D. W.

TESTS CONDUCTED IN FIELD LABORATORY

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 902172

Date February 15, 1956

Lines

(Refer to This Number)

Report No. LJC # 138

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 1/23/56 & 2/10/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 999	1/18	4-1/2	4110	4950	2145	± 90	5188	DS-AF	28	23	66" Line Pipe Core @ 1:00 P.M.
No. 1000	1/18	4-1/2	4110	4950	2145	± 90	5346	DS-AF	28	23	66" Line Pipe Core @ 1:00 P.M.
No. 1001	1/18	4-1/2	4110	4950	2145	± 90	5048	RC-AF	28	23	66" Line Pipe Core @ 1:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1068	2/7	3-1/2	4110	4950	2145	± 90	5950	RC-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
No. 1069	2/7	3-1/2	4110	4950	2145	± 90	6000	RC-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
No. 1070	2/7	3-1/2	4110	4950	2145	± 90	6000	RC-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

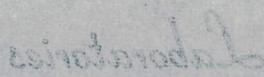
WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolere Concrete Sand

By R. L. Phillips

Coarse Aggregate Moline Limestone

Mixed Aggregate



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FLEXURE AND COMPRESSION TEST REPORT

(Number of this number)

Have Submitted as Lab:

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 902158
(Refer to This Number)

Date February 15, 1956

Report No. LJC # 137

Location: Colwich, Kansas

Specimens

Contractor: Look Joint Pipe Co.

Made by: Laboratory

Architect: Black & Ventch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 2/9/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No.1062	2/6	3-1/2	4110	4950	2145	± 90	5600	DS-AF	7	0	66" Line Pipe Core @ 3:30 P.M.
No.1063	2/6	3-1/2	4110	4950	2145	± 90	5650	RC-AF	7	0	66" Line Pipe Core @ 3:30 P.M.
No.1064	2/6	3-1/2	4110	4950	2145	± 90	5600	RC-AF	7	0	66" Line Pipe Core @ 3:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement Consolidated Victor

AF-aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolans Concrete Sand

By R. L. Phillips

Coarse Aggregate Woline Limestone

Mixed Aggregate

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902151
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Look Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/7/56

Date February 13, 1956
Report No. LJO # 136
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 1056	2/3	5-1/2	4110	4950	2145	±90	6250	RC-AF	7	0	66" Line Pipe Core @ 1:30 P.M.
No. 1057	2/3	5-1/2	4110	4950	2145	±90	6200	RC-AF	7	0	66" Line Pipe Core @ 1:30 P.M.
No. 1058	2/3	5-1/2	4110	4950	2145	±90	6400	RC-AF	7	0	66" Line Pipe Core @ 1:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dalco Concrete Sand

By R. E. Phillips

Coarse Aggregate Woline Limestone

Mixed Aggregate None

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902127
(Refer to This Number)
Location: Golwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Ventch
Owner: City of Wichita
Date Submitted at Lab: 1/19/56

Date: February 10, 1956
Report No. LJC # 135
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 993	1/13	3 1/2	4110	4950	2145	90	6583	RC-AF	28	22	66" Line Pipe Core @ 2:30 P.M.
No. 994	1/13	3 1/2	4110	4950	2145	90	6424	DS-AF	28	22	66" Line Pipe Core @ 2:30 P.M.
No. 995	1/13	3 1/2	4110	4950	2145	90	6724	DS-AF	28	22	66" Line Pipe Core @ 2:30 P.M.
Required 28 day strength: 4500 P. S. I.											

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch

AF—aggregate failure.

Admixture: None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: Delaware Concrete Sand

Coarse Aggregate: Woline Limestone

Mixed Aggregate: None

By: [Signature]



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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 902088
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 2/10 & 2/7/56

Date: February 9, 1956
Report No. LJO # 133
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 981	1/11	4"	4110	4950	2145	90	5276	RC-AF	28	23	66" Line Pipe Core @ 3:30 P.M.
No. 982	1/11	4"	4110	4950	2145	90	5611	RC-AF	28	23	66" Line Pipe Core @ 3:30 P.M.
No. 983	1/11	4"	4110	4950	2145	90	5223	RC-AF	28	23	66" Line Pipe Core @ 3:30 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1044	1/31	4"	4110	4950	2145	90	6400	DS-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 1045	1/31	4"	4110	4950	2145	90	6100	DS-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 1046	1/31	4"	4110	4950	2145	90	6400	DS-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
Required 28 day strength:							4500 P. S.I.				

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Non-reh

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolene Concrete Sand

By J. E. Myers

Coarse Aggregate Woline Limestone

Mixed Aggregate None



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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902106

(Refer to This Number)

Date: February 9, 1956Report No. LJC # 132

Specimens

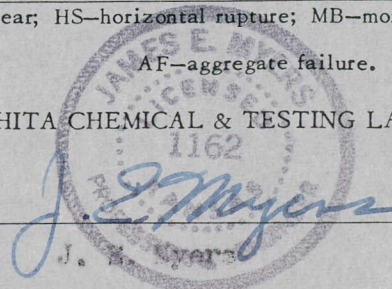
Made by: LaboratoryStructure: Water LineLocation: Colwich, KansasContractor: Lock Joint Pipe Co.Architect: Black & VeatchOwner: City of WichitaDate Submitted at Lab: 1/18 & 2/8/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 987	1/12	3 1/2	4110	4950	2145	90	6777	DS-AF	28	22	66" Line Pipe Core @ 2:15 P.M.
No. 988	1/12	3 1/2	4110	4950	2145	90	6600	DS-AF	28	22	66" Line Pipe Core @ 2:15 P.M.
No. 999	1/12	3 1/2	4110	4950	2145	90	6400	DS-AF	28	22	66" Line Pipe Core @ 2:15 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1050	2/1	5"	4110	4950	2145	90	5300	DS-AF	7	0	66" Line Pipe Core @ 1:45 P.M.
No. 1051	2/1	5"	4110	4950	2145	90	5900	DS-AF	7	0	66" Line Pipe Core @ 1:45 P.M.
No. 1052	2/1	5"	4110	4950	2145	90	5900	DS-AF	7	0	66" Line Pipe Core @ 1:45 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: MonarchAdmixture: NoneFine Aggregate: Bole - Concrete SandCoarse Aggregate: Holine LimestoneMixed Aggregate: None

WICHITA CHEMICAL & TESTING LABORATORIES

By: J. E. Myers



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File:

1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 902077
(Refer to This Number)

Date February 7, 1956

Report No. LJC # 133

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 1/13 & 2/6/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 973	1/10	3 1/2	4110	4950	2145	90	5930	RC-AF	28	25	66" Water Pipe Core @ 2:00 P.M.
No. 974	1/10	3 1/2	4110	4950	2145	90	5877	RC-AF	28	25	66" Line Pipe Core @ 2:00 P.M.
No. 975	1/10	3 1/2	4110	4950	2145	90	5966	DS-AF	28	25	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1038	1/30	4"	4110	4950	2145	90	5650	DS-AF	7	0	66" Line Pipe Core @ 3:00 P.M.
No. 1039	1/30	4"	4110	4950	2145	90	5600	RC-AF	7	0	66" Line Pipe Core @ 3:00 P.M.
No. 1040	1/30	4"	4110	4950	2145	90	5600	RC-AF	7	0	66" Line Pipe Core @ 3:00 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolase Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate None

By [Signature]



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TESTS CONDUCTED AT WICHITA

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902060
(Refer to This Number)

Date February 8, 1956

Report No. LJO # 132

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure Water Line

Owner: City of Wichita

CORRECTED COPY

Date Submitted at Lab: 1/12/ 1/31 2/1

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 965	1/9	2 1/2	4110	4950	2145	90	6565	VS-AF	28	25	66" Line Pipe Core @ 1:45 P.M.
No. 966	1/9	2 1/2	4110	4950	2145	90	6072	DS-AF	28	25	66" Line Pipe Core @ 1:45 P.M.
No. 967	1/9	2 1/2	4110	4950	2145	90	6370	VS-AF	28	25	66" Line Pipe Core @ 1:45 P.M.
No. 1032	1/28	4"	4110	4950	2145	90	4730	DS-AF	7	1	66" Line Pipe Core @ 1:00 P.M.
No. 1033	1/28	4"	4110	4950	2145	90	4324	DS-AF	7	1	66" Line Pipe Core @ 1:00 P.M.
No. 1034	1/28	4"	4110	4950	2145	90	4818	RC-AF	7	1	66" Line Pipe Core @ 1:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1026	1/27	4"	4110	4950	2145	90	5450	DS-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 1027	1/27	4"	4110	4950	2145	90	5600	RC-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 1028	1/27	4"	4110	4950	2145	90	5600	RC-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength							4500 U. S. I.				

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

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Fine Aggregate Dolomitic Concrete Sand

By

Coarse Aggregate Wolfine Limestone

R. L. Phillips

Mixed Aggregate None



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902060
(Refer to This Number)

Date February 6, 1956

Report No. LJC # 132

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Vosteh

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 1/12 1/31/ 2/1

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 965	1/9	2 1/2	4110	4950	2145	90	6565	VS-AF	28	25	66" Line Pipe Core @ 1:45 PM
No. 966	1/9	2 1/2	4110	4950	2145	90	6072	DS-AF	28	25	66" Line Pipe Core @ 1:45 PM
No. 967	1/9	2 1/2	4110	4950	2145	90	6370	VS-AF	28	25	66" Line Pipe Core @ 1:45 PM
No. 1032	1/28	4"	4110	4950	2145	90	4730	DS-AF	28	25	66" Line Pipe Core @ 1:00 PM
No. 1033	1/28	4"	4110	4950	2145	90	4324	DS-AF	28	25	66" Line Pipe Core @ 1:00 PM
No. 1034	1/28	4"	4110	4950	2145	90	4818	RC-AF	28	25	66" Line Pipe Core @ 1:00 PM
TESTS CONDUCTED AT WICHITA											
No. 1026	1/27	4"	4110	4950	2145	90	5450	DS-AF	7	0	66" Line Pipe Core @ 2:15 PM
No. 1027	1/27	4"	4110	4950	2145	90	5600	RC-AF	7	0	66" Line Pipe Core @ 2:15 PM
No. 1028	1/27	4"	4110	4950	2145	90	5600	RC-AF	7	0	66" Line Pipe Core @ 2:15 PM
TESTS CONDUCTED AT FIELD LABORATORY Required 28 day strength: 4500 P.S.I.											

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement Monarch

AF-aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolese Concrete Sand

By R. L. Phillips

Coarse Aggregate Moline Limestone

Mixed Aggregate None

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Signature _____

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 902039
(Refer to This Number)

Date: February 3, 1956

Report No. LJC # 131

Specimens

Made by: Laboratory

Structure: Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 1/11/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 959	1/6	5"	4110	4950	2145	90	5540	DS-AF	28	23	66" Line Pipe Core @ 2:15 P.M.
No. 960	1/6	5"	4110	4950	2145	90	6126	DS-AF	28	23	66" Line Pipe Core @ 2:15 P.M.
No. 961	1/6	5"	4110	4950	2145	90	5276	DS-AF	28	23	66" Line Pipe Core @ 2:15 P.M.
TESTS CONDUCTED AT WICHITA Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch

AF—aggregate failure.

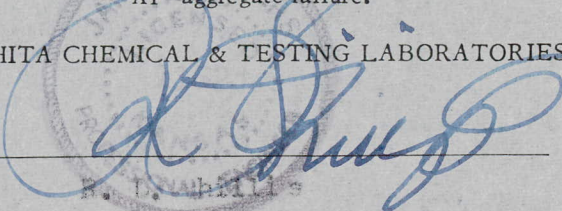
Admixture: None

Fine Aggregate: Delene Concrete Sand

Coarse Aggregate: Weline Limestone

Mixed Aggregate: None

WICHITA CHEMICAL & TESTING LABORATORIES

By: 



Chlorophyll

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TESTS CONDUCTED AT WICHITA

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902029

(Refer to This Number)

Date: February 2, 1956

Report No. 100 # 130

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Vasten

Owner: City of Colwich

Date Submitted at Lab: 1/10 & 1/30/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 953	1/5	3 1/2	4110	4950	2145	90	6019	RC-AF	28	23	66" Line Pipe Core @ 2:15 P.M.
No. 954	1/5	3 1/2	4110	4950	2145	90	6318	DS-AF	28	23	66" Line Pipe Core @ 2:15 P.M.
No. 955	1/5	3 1/2	4110	4950	2145	90	6689	RC-AF	28	23	66" Line Pipe Core @ 2:15 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1020	1/26	4"	4110	4950	2145	90	5450	DS-AF	6	0	66" Line Pipe Core @ 2:00 P.M.
No. 1021	1/26	4"	4110	4950	2145	90	5950	DS-AF	6	0	66" Line Pipe Core @ 2:00 P.M.
No. 1022	1/26	4"	4110	4950	2145	90	5800	RC-AF	6	0	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength:								4500 P. S. I.			

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Morton

AF—aggregate failure.

Admixture None

Fine Aggregate Lehigh Concrete Sand

Coarse Aggregate Wichita Limestone

Mixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By R. L. Miller



EARMAN, R. ALFRED W.

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 902011
(Refer to This Number)

Date February 1, 1956

Report No. LJC # 129

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 1/10 & 1/28/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P. S. I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 947	1/4	4"	4110	4950	2145	90	5895	RC-AF	28	22	66" Line Pipe Core @ 2:15 P.M.
No. 948	1/4	4"	4110	4950	2145	90	6512	DS-AF	28	22	66" Line Pipe Core @ 2:15 P.M.
No. 949	1/4	4"	4110	4950	2145	90	6759	DS-AF	28	22	66" Line Pipe Core @ 2:1 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1014	1/25	4 1/2	4110	4950	2145	90	5400	DS-AF	6	0	66" Line Pipe Core @ 4:00 P.M.
No. 1015	1/25	4 1/2	4110	4950	2145	90	5200	DS-AF	6	0	66" Line Pipe Core @ 4:00 P.M.
No. 1016	1/25	4 1/2	4110	4950	2145	90	5600	RC-AF	6	0	66" Line Pipe Core @ 4:00 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolose Concrete Sand

By [Signature]

Coarse Aggregate Rollin Limestone

Mixed Aggregate None



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AND
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Michael

1917

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GAZIAN, A. ATINDIYU

FLEXURE AND COMPRESSION TEST REPORT

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TESTS CONDUCTED AT FIELD LABORATORY

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 901315

(Refer to This Number)

Date: January 31, 1956

Report No. LJC # 128

Specimens

Made by: Laboratory

Structure: Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 1/6/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 939	1/3	6"	4110	4950	2145	90	5083	DS-AF	28	25	66" Line Pipe Core @ 2:30 P.M.
No. 940	1/3	6"	4110	4950	2145	90	5310	DS-AF	28	25	66" Line Pipe Core @ 2:30 P.M.
No. 941	1/3	6"	4110	4950	2145	90	5170	DS-AF	28	25	66" Line Pipe Core @ 2:30 P.M.

TESTS CONDUCTED AT WICHITA

Required 28 day strength: 4500 P. S. I.

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch

AF—aggregate failure.

Admixture: None

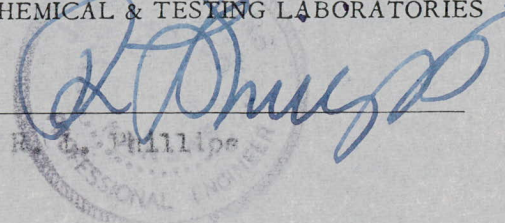
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Fine Aggregate: Delese Concrete Sand

Coarse Aggregate: Woline Limestone

Mixed Aggregate: None

By: [Signature]





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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 901303

(Refer to This Number)

Date January 30, 1956

Report No. LJO # 127

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Ventch

Owner: City of Wichita

Date Submitted at Lab: 1/5 & 1/25/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 931	1/2	5"	4110	4950	2145	90	5683	DS-AF	28	25	66" Line Pipe Core @ 2:30 P.M.
No. 932	1/2	5"	4110	4950	2145	90	5558	DS-AF	28	25	66" Line Pipe Core @ 2:30 P.M.
No. 933	1/2	5"	4110	4950	2145	90	5505	DS-AF	28	25	66" Line Pipe Core @ 2:30 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1008	1/20	3"	4110	4950	2145	90	6000	RC-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 1009	1/20	3"	4110	4950	2145	90	6000	RC-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 1010	1/20	3"	4110	4950	2145	90	6250	DS-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
Required 28 day strength:							4500 P. S. I.	TESTS CONDUCTED AT FIELD LABORATORY			

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

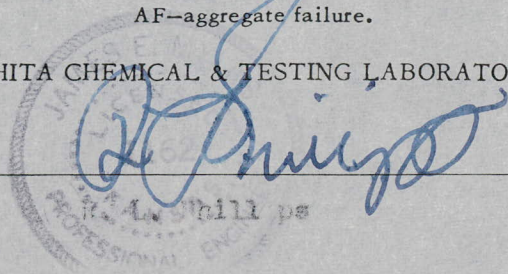
Fine Aggregate Polase Concrete Sand

Coarse Aggregate Moline Limestone

Mixed Aggregate None

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ENGINEERS

Date: _____
Report No.: _____
Specimens: _____
Made by: _____
Structure: _____

Project: _____
(Refer to This Number)

Location: _____
Contract: _____
Architect: _____
Owner: _____
Date Submitted at Lab: _____

Specimen Number	Cylindrical Specimen	Slump in Inches	Mixture				Compressive Strength P.S.I.	Type Reaction	Age in Days	Test Cylinder Size and Condition	Remarks and Location of Test
			Coarse Aggregate	Fine Aggregate	Cement	Total Water					
10-1											
10-2											
10-3											
10-4											
10-5											
10-6											
10-7											
10-8											
10-9											
10-10											
10-11											
10-12											
10-13											
10-14											
10-15											
10-16											
10-17											
10-18											
10-19											
10-20											

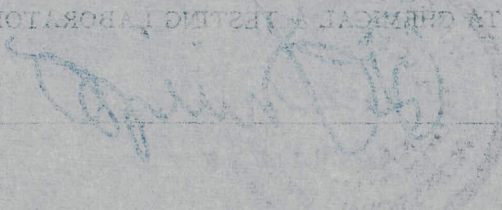
TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: IC - regular crack; VS - vertical shear; DS - diagonal shear; HS - horizontal rupture; MB - mortar bond failure;

Aggregate failure

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By _____

Mixed Aggregate

Coarse Aggregate

Fine Aggregate

Substrate

Brand of Cement

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1 Knoll
1 Hess

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 901261
(Refer to This Number)

Date January 27, 1956

Report No. LJC # 126

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Blank & Vanteh

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 1/4 & 1/27/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 925	12/30	5"	4110	4950	2145	90	5310	DS-AF	28	23	66" Line Pipe Cor @ 2:00 P.M.
No. 926	1/1/56	5"	4110	4950	2145	90	5700	DS-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 927	12/30	5"	4110	4950	2145	90	5788	DS-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 1002	1/19	6"	4110	4950	2145	90	5000	DS-AF	7	0	66" Line Pipe Cor @ 3:15 P.M.
No. 1003	1/19	6"	4110	4950	2145	90	5050	DS-AF	7	0	66" Line Pipe Cor @ 3:15 P.M.
No. 1004	1/19	6"	4110	4950	2145	90	5300	RC-AF	7	0	66" Line Pipe Cor @ 3:15 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

Fine Aggregate Dalase Concrete Sand

Coarse Aggregate Maline Limestone

Mixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By

[Signature]
T. A. S. L. ENGINEER

200

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CHEMISTRY
UNITED STATES DEPARTMENT OF AGRICULTURE

FLXURE AND COMPRESSION TEST REPORT

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Trans. Lab. No. 901272
Lines (Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 1/3 & 1/23/56

Date January 26, 1956
Report No. LJC # 125
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 919	12/29	3 1/2	4110	4950	2145	90	6090	VS-AF	28	23	66" Line Pipe Core @ 3:00 P.M.
No. 920	12/29	3 1/2	4110	4950	2145	90	5824	DS-AF	28	23	66" Line Pipe Core @ 3:00 P.M.
No. 921	12/29	3 1/2	4110	4950	2145	90	5877	DS-AF	28	23	66" Line Pipe Core @ 3:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 996	1/18	4"	4110	4950	2145	90	4850	DS-AF	7	0	66" Line Pipe Core @ 1:00 P.M.
No. 997	1/18	4"	4110	4950	2145	90	4700	DS-AF	7	0	66" Line Pipe Core @ 1:00 P.M.
No. 998	1/18	4"	4110	4950	2145	90	4800	RC-AF	7	0	66" Line Pipe Core @ 1:00 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

Fine Aggregate Dolese Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By

R. B. Phillips



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FLEXURE AND COMPRESSION TEST REPORT

Date: _____ Specimen No.: _____
Report No.: _____ (Refer to Test Number)
Specimens: _____
Made by: _____
Structure: _____
Date Submitted at Lab: _____
Owner: _____
Architect: _____
Contractor: _____
Location: _____

Specimen Number	Date Made	Specimen	MIXTURE				Compressive Strength P.S.I.	Type Pressure	Age in Days	Days to Test	Remarks and Location of Test
			Aggregate	Concrete	Water	Cement					
10-101	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35
10-102	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35
10-103	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35
10-104	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35
10-105	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35
10-106	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35
10-107	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35
10-108	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35
10-109	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35
10-110	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35	10-10-35

TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

TEST SPECIMENS: RC - regular concrete; VP - vertical shear; DS - diagonal shear; MB - moment-resisting failure.

Brand of Cement: _____
Aggregate: _____
The Aggregate: _____
Date Aggregate: _____
Which Aggregate: _____
By: _____
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1 Knoll
1 Hens

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Trans. Lab. No. 901260
Lines (Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 1/2/56

Date: January 25, 1956
Report No. LJC # 124
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 911	12/28	5 1/2	4110	4950	2145	90	4977	DS-AF	28	23	66" Line Pipe Core @ 2:15 P.M.
No. 912	12/28	5 1/2	4110	4950	2145	90	4898	VS-AF	28	23	66" Line Pipe Core @ 2:15 P.M.
No. 913	12/28	5 1/2	4110	4950	2145	90	4941	VS-AF	28	23	66" Line Pipe Core @ 2:15 P.M.
TESTS CONDUCTED AT WICHITA Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch

AF—aggregate failure.

Admixture: None

Fine Aggregate: Dolese Concrete Sand

Coarse Aggregate: Woline Limestone

Mixed Aggregate: None

WICHITA CHEMICAL & TESTING LABORATORIES

By: [Signature]
W. L. Phillips



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1870

TESTS CONDUCTED AT INCHON



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Trans. Lab. No. 001253
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 12/31/55

Date: January 24, 1956
Report No. LJO # 123
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 903	12/27	3 1/2	4110	4950	2145	90	5700	DS-AF	28	24	66" Line Pipe Core @ 3:15 P.M.
No. 904	12/27	3 1/2	4110	4950	2145	90	5877	DS-AF	28	24	66" Line Pipe Core @ 3:15 P.M.
No. 905	12/27	3 1/2	4110	4950	2145	90	6037	RC-AF	28	24	66" Line Pipe Core @ 3:15 P.M.
TESTS CONDUCTED AT WICHITA											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch

AF—aggregate failure.

Admixture: None

Fine Aggregate: Dolomitic Concrete Sand

Coarse Aggregate: Moline Limestone

Mixed Aggregate: None

WICHITA CHEMICAL & TESTING LABORATORIES

By: *[Signature]*
R. D. Phillips

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2 Lock Joint & Colrich
CC: Keller
1 Koll
1 Hess

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1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 901243
(Refer to This Number)

Date: January 23, 1956

Report No. LJO # 122

Location: Colrich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure: Water Line

Owner: City of Wichita

Date Submitted at Lab: 1/19/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 990	1/13	3 1/2	4110	4950	2145	90	6200	DS-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
No. 991	1/13	3 1/2	4110	4950	2145	90	6000	DS-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
No. 992	1/13	3 1/2	4110	4950	2145	90	5950	RC-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength:								4500 P. S. I.			

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch

AF—aggregate failure.

Admixture: None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: Dolose Concrete Sand

By: [Signature]

Coarse Aggregate: Coline Limestone

Mixed Aggregate: None

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2 Weller
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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 961217
(Refer to This Number)

Date: January 20, 1956

Report No. LJO # 121

Specimens

Made by: Laboratory

Structure: Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 12/29/55 & 1/18/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 895	12/23	5"	4110	4950	2145	90	6406	RC-AF	28	22	66" Line Pipe Core @ 2:15 P.M.
No. 896	12/23	5"	4110	4950	2145	90	6352	DS-AF	28	22	66" Line Pipe Core @ 2:15 P.M.
No. 897	12/23	5"	4110	4950	2145	90	5895	DS-AF	28	22	66" Line Pipe Core @ 2:15 P.M.
TESTS CONDUCTED AT WICHITA											
No. 984	1/12	3 1/2	4110	4950	2145	90	6150	DS-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 985	1/12	3 1/2	4110	4950	2145	90	5850	DS-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 986	1/12	3 1/2	4110	4950	2145	90	5950	RC-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength:							4500 P. S. I.				

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch

AF—aggregate failure.

Admixture: None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: Colase Concrete Sand

By: [Signature]

Coarse Aggregate: Volino

R. L. Phillips

Mixed Aggregate: None

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CC: 2 Lock Joint @ Colwich
2 Weller
1 Knoll
1 Hess

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 901205
Lines (Refer to This Number)

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Blum & Vestal

Owner: City of Wichita

Date Submitted at Lab: 12/28/55 & 1/16/56

Date January 19, 1956

Report No. LJC # 120

Specimens

Made by: Laboratory

Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 889	12/22	5"	4110	4950	2145	90	6126	DS-AF	28	22	66" Line Pipe Core @ 2:00 P.M.
No. 890	12/22	5"	4110	4950	2145	90	5629	DS-AF	28	22	66" Line Pipe Core @ 2:00 P.M.
No. 891	12/22	5"	4110	4950	2145	90	6001	DS-AF	28	22	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 978	1/11	4"	4110	4950	2145	90	5450	RC-AF	7	0	66" Line Pipe Core @ 3:30 P.M.
No. 979	1/11	4"	4110	4950	2145	90	5300	RC-AF	7	0	66" Line Pipe Core @ 3:30 P.M.
No. 980	1/11	4"	4110	4950	2145	90	5350	RC-AF	7	0	66" Line Pipe Core @ 3:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

Fine Aggregate Dallas Concrete Sand

Coarse Aggregate None

Mixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By R. L. Phillips



100

Laboratory CHEMICAL
AND
TESTING *Mickie*

TESTS CONDUCTED AT NIGHT

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2 Lock Joint - Colwich
CC: 2 Weller
1 Knoll
1 Hess

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WICHITA 4, KANSAS

File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 901136
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Vatch
Owner: City of Wichita
Date Submitted at Lab: 12/29/55 & 1/12/ & 1/12/56

Date January 18, 1956
Report No. LJC # 119
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 981	12/21	3 1/2	4110	4950	2145	90	6370	VS-AF	28	26	66" Line Pipe Cor @ 2:00 P.M.
No. 982	12/21	3 1/2	4110	4950	2145	90	6477	VS-AF	28	26	66" Line Pipe Cor @ 2:00 P.M.
No. 983	12/21	3 1/2	4110	4950	2145	90	6318	RC-AF	28	26	66" Line Pipe Cor @ 2:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 963	1/9	5"	4110	4950	2145	90	5950	DS-AF	7	0	66" Line Pipe Cor @ 1:45 P.M.
No. 964	1/9	5"	4110	4950	2145	90	5300	RC-AF	7	0	66" Line Pipe Cor @ 1:45 P.M.
No. 969	1/9	2 1/2	4110	4950	2145	90	5950	DS-AF	7	0	66" Line Pipe Cor @ 3:30 P.M.
No. 971	1/10	3 1/2	4110	4950	2145	90	5700	RC-AF	7	0	66" Line Pipe Cor @ 2:00 P.M.
No. 972	1/10	3 1/2	4110	4950	2145	90	5650	RC-AF	7	0	66" Line Pipe Cor @ 2:00 P.M.
No. 977	1/10	5"	4110	4950	2145	90	4900	RC-AF	7	0	66" Line Pipe Cor @ 3:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Doleso Concrete Sand

By R. L. Phillips

Coarse Aggregate Woline Limestone

Mixed Aggregate None



TESTS CONDUCTED AT WICHITA

TESTS CONDUCTED AT FIELD LABORATORY

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48



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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 901176
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Flagg & Ventch
Owner: City of Wichita
Date Submitted at Lab: 10/22/55

Date: January 17, 1956
Report No. LJC # 116
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 873	12/20	5 1/2	4110	4950	2145	90	6406	VS-AF	28	25	66" Line Pipe Core @ 3:45 P.M.
No. 874	12/20	5 1/2	4110	4950	2145	90	6388	DS-MB	28	25	66" Line Pipe Core @ 3:45 P.M.
No. 875	12/20	5 1/2	4110	4950	2145	90	6600	DS-AF	28	25	66" Line Pipe Core @ 3:45 P.M.
TESTS CONDUCTED AT WICHITA											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement Monarch

AF-aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolene Concrete Sand

By [Signature]

Coarse Aggregate Woline Limestone

Mixed Aggregate None

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 901166

(Refer to This Number)

Date January 16, 1956

Report No. LJO # 117

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Ventch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 12/22/55 & 1/11 & 1/13/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 865	12/19	4"	4110	4950	2145	90	6777	RC-AF	28	25	66" Line Pipe Core @ 3:15 P.M.
No. 866	12/19	4"	4110	4950	2145	90	6865	RC-MB	28	25	66" Line Pipe Core @ 3:15 P.M.
No. 867	12/19	4"	4110	4950	2145	90	7920	RC-AF	28	25	66" Line Pipe Core @ 3:15 P.M.
TESTS CONDUCTED AT WICHITA											
No. 956	1/6	5"	4110	4950	2145	90	5950	DS-DS-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 957	1/6	5"	4110	4950	2145	90	5950	DS-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 958	1/6	5"	4110	4950	2145	90	5600	DS-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 970	1/6	5"	4110	4950	2145	90	5650	RC-AF	3	0	66" Line Pipe Core @ 2:15 P.M.
No. 976	1/10	5"	4110	4950	2145	90	4800	RC-AF	3	0	66" Line Pipe Core @ 3:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S.I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Delaware Concrete Sand

Coarse Aggregate Moline Limestone

Mixed Aggregate None

By R. L. Phillips

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lines Lab. No. 901144
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Look Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 12/27/55 & 1/10 & 1/12/56

Date: January 13, 1956
Report No. LJC # 116
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 859	12/16	4"	4110	4950	2145	90	6724	VS-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 860	12/16	4"	4110	4950	2145	90	5753	DS-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
No. 861	12/16	4"	4110	4950	2145	90	6019	VS-AF	28	23	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT WICHITA											
No. 950	1/5	3 1/2	4110	4950	2145	90	5350	RC-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 951	1/5	3 1/2	4110	4950	2145	90	5400	RC-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 952	1/5	3 1/2	4110	4950	2145	90	5950	DS-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 962	1/9	5"	4110	4950	2145	90	5400	RC-AF	3	0	66" Line Pipe Core @ 1:45 P.M.
No. 968	1/9	2 1/2	4110	4950	2145	90	5350	RC-AF	3	0	66" Line Pipe Core @ 3:30 P.M.
Required 28 day strength: 4500 P. S. I.											

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement Consolidated Victor

AF-aggregate failure.

Admixture None

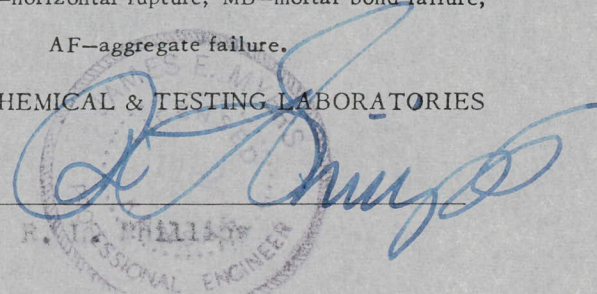
WICHITA CHEMICAL & TESTING LABORATORIES

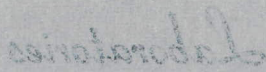
Fine Aggregate D-100 Concrete Sand

By [Signature]

Coarse Aggregate Wichita Limestone

Mixed Aggregate None





W. H. H.

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line, No. 901130
(Refer to This Number)

Date: January 12, 1956

Report No. LJC 115

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Veatch

Structure: Water Line

Owner: City of Wichita

Date Submitted at Lab: 12/20 & 1/10

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 853	12/15	5"	4110	4950	2145	90	6370	RC-AF	28	23	66" Line Pipe Core @ 3:15 P.M.
No. 854	12/15	5"	4110	4950	2145	90	6671	VS-AF	28	23	66" Line Pipe Core @ 3:15 P.M.
No. 855	12/15	5"	4110	4950	2145	90	6352	DS-AF	28	23	66" Line Pipe Core @ 3:15 P.M.
TESTS CONDUCTED AT WICHITA											
No. 944	1/4	4"	4110	4950	2145	90	5250	RC-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 945	1/4	4"	4110	4950	2145	90	5900	RC-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 946	1/4	4"	4110	4950	2145	90	5650	DS-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Consolidated Victor

AF—aggregate failure.

Admixture: None

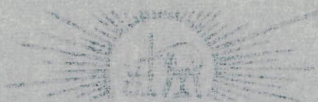
Fine Aggregate: Dolene Concrete Sand

Coarse Aggregate: Holine Limestone

Mixed Aggregate: None

WICHITA CHEMICAL & TESTING LABORATORIES

By: [Signature]



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21/10/1942

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 901114

Date: January 11, 1956

Report No. 130 114

(Refer to This Number)

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Block & Tatch

Structure: Water Line

Owner: City of Tohila

Date Submitted at Lab: 12/17/5 & 12/19 & 1/6

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 837	12/13	4 1/2	4110	4950	2145	90	6335	DS-AF	28	24	66" Line Pipe Core @ 2:15 P.M.
No. 838	12/13	4 1/2	4110	4950	2145	90	6365	DS-AF	28	24	66" Line Pipe Core @ 2:15 P.M.
No. 839	12/13	4 1/2	4110	4950	2145	90	6777	RC-AF	28	24	66" Line Pipe Core @ 2:15 P.M.
No. 845	12/14	4 1/2	4110	4950	2145	90	5859	VS-AF	28	23	66" Line Pipe Core @ 2:30 P.M.
No. 846	12/14	4 1/2	4110	4950	2145	90	6019	RC-AF	28	23	66" Line Pipe Core @ 2:30 P.M.
No. 847	12/14	4 1/2	4110	4950	2145	90	5895	DS-AF	28	23	66" Line Pipe Core @ 2:30 P.M.
TESTS CONDUCTED AT WICHITA											
No. 937	1/3	5"	4110	4950	2145	90	4550	RC-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
No. 938	1/3	5"	4110	4950	2145	90	5200	RC-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
No. 9431	1/3	5 1/2	4110	4950	2145	90	5250	RC-AF	7	0	66" Line Pipe Core @ 2:30 P.M.

TESTS CONDUCTED AT FIELD LABORATORY Required 28 day strength: 1500 P.S.I.
TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement: Consolidated Victor

AF-aggregate failure.

Admixture: None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: Dolere Concrete Sand

Coarse Aggregate: Moline Limestone

Mixed Aggregate: None

By

[Signature]
PROFESSIONAL ENGINEER

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 901101
(Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Vortch
Owner: City of Wichita
Date Submitted at Lab: 1/5/56

Date January 10, 1956
Report No. LJC 113
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 929	1/2	5"	4110	4950	2145	90	5200	RC-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
No. 930	1/2	5"	4110	4950	2145	90	5200	DS-AF	7	0	66" Line Pipe Core @ 2:30 P.M.
No. 935	1/2	5 1/2"	4110	4950	2145	90	4800	RC-AF	7	0	66" Line Pipe Core @ 4:15 P.M.

TESTS CONDUCTED AT FIELD LABORATORY

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolese Concrete Sand

Coarse Aggregate Woline Limestone

Mixed Aggregate None

By R. L. Phillips

R. L. Phillips

TESTS CONDUCTED AT FIELD LABORATORY

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 901081
Lines (Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Co.
Architect: Black & Veatch
Owner: City of Wichita
Date Submitted at Lab: 12/14 & 12/15/55

Date: January 9, 1956
Report No. LJC 112
Specimens
Made by: Laboratory
Structure: Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE / 3 yards				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
			1b.	1b.	1b.	Gal.					
No. 823	12/10	15"	4110	4950	2145	90	6811	RC-AF	28	24	66" Line Pipe Core @ 1:30 P.M.
No. 824	12/10	5"	4110	4950	2145	90	5310	DS-AF	28	24	66" Line Pipe Core @ 1:30 P.M.
No. 825	12/10	5"	4110	4950	2145	90	6689	DS-AF	28	24	66" Line Pipe Core @ 1:30 P.M.
No. 829	12/12	4 1/2"	4110	4950	2145	90	8030*	DS-AF	28	25	66" Line Pipe Core @ 3:30 P.M.
No. 830	12/12	4 1/2"	4110	4950	2145	90	6424	RC-AF	28	25	66" Line Pipe Core @ 3:30 P.M.
No. 831	12/12	4 1/2"	4110	4950	2145	90	6618	DS-AF	28	25	66" Line Pipe Core @ 3:30 P.M.

* Broken on new Compression Machine

TYPE FRACTURE: RC—regular cone, VS—vertical shear, DS—diagonal shear, HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Monarch

AF—aggregate failure.

Admixture: None

Fine Aggregate: Dolase Concrete Sand

Coarse Aggregate: Helene 3/4" Limestone

Mixed Aggregate: None

WICHITA CHEMICAL & TESTING LABORATORIES

By: [Signature]

A. L. Hill, Jr.
Professional Engineer



100

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Trans. Line Lab. No. 901080
(Refer to This Number)

Date January 9, 1956

Report No. LJC 111

Specimens

Made by: Laboratory

Structure: Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita

Date Submitted at Lab: 1/4 & 1/6/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE / 3 yards				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 922	12/30	5"	1b.	1b.	1b.	Gal.	5650	DS-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 923	12/30	5"	4110	4950	2145	90	5800	DS-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 924	12/30	5"	4110	4950	2145	90	5700	RC-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 936	1/3	6"	4110	4950	2145	90	4450	RC-AF	3	0	66" Line Pipe Core @ 2:30 P.M.
No. 942	1/3	5 1/2"	4110	4950	2145	90	4500	RC-AF	3	0	66" Line Pipe Core @ 3:30 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement: Consolidated Victor

AF—aggregate failure.

Admixture: None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate: Dolose Concrete Sand

Coarse Aggregate: Weline 3/4" Limestone

Mixed Aggregate: None

By: [Signature]

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 901062
(Refer to This Number)

Date January 6, 1956

Report No. LJO 110

Location: Colwich, Kansas

Specimens

Contractor: Lock Joint Pipe Co.

Made by: Laboratory

Architect: Black & Ventch

Structure Water Line

Owner: City of Wichita

Date Submitted at Lab: 12/13 & 17 & 1/4/56

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 817	12/9	5 1/2	4110	4950	2145	90	6265	RC-AF	28	24	66" Line Pipe Core @ 3:30 P.M.
No. 818	12/9	5 1/2	4110	4950	2145	90	6495	DS-AF	28	24	66" Line Pipe Core @ 3:30 P.M.
No. 819	12/9	5 1/2	4110	4950	2145	90	6406	RC-AF	28	24	66" Line Pipe Core @ 3:30 P.M.
TESTS CONDUCTED AT WICHITA											
No. 916	12/29	3 1/2	4110	4950	2145	90	5900	DS-AF	7	0	66" Line Pipe Core @ 3:00 P.M.
No. 917	12/29	3 1/2	4110	4950	2145	90	6050	RC-AF	7	0	66" Line Pipe Core @ 3:00 P.M.
No. 918	12/29	3 1/2	4110	4950	2145	90	5650	RC-AF	7	0	66" Line Pipe Core @ 3:00 P.M.
No. 928	1/2	5"	4110	4950	2145	90	4750	RC-AF	3	0	66" Line Pipe Core @ 2:30 P.M.
No. 934	1/2	5 1/2	4110	4950	2145	90	4950	RC-AF	3	0	66" Line Pipe Core @ 4:15 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength:							4500 P. S. I.				

TYPE FRACTURE: RC-regular cone; VS-vertical shear; DS-diagonal shear; HS-horizontal rupture; MB-mortar bond failure;

Brand of Cement Consolidated Victor

AF-aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolere Concrete Sand

By R. L. [Signature]

Coarse Aggregate Woline 3/4" Limestone

Mixed Aggregate None



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PHONE HD 4-3945
WICHITA 4, KANSAS

FLEXURE AND COMPRESSION TEST REPORT

Project No. _____ Lab. No. _____
(Refer to This Number)
Location _____
Contractor _____
Architect _____
Owner _____
Date Submitted at Lab. _____

Date _____
Report No. _____
Specimens _____
Made by _____
Specimens _____

SPECIMEN NUMBER	DATE MADE	JUMP INCHES	Type Aggregate	MIXTURE		Compressive Strength P.S.I.	Type Pressure	Age in Days	Days and Cured Conditions	Remarks and Location of Test
				Coarse Aggregate	Cement					
100-1	1-15-35	1.0	1/2"	100	100	100	100	1	100	100
100-2	1-15-35	1.0	1/2"	100	100	100	100	1	100	100
100-3	1-15-35	1.0	1/2"	100	100	100	100	1	100	100
100-4	1-15-35	1.0	1/2"	100	100	100	100	1	100	100
100-5	1-15-35	1.0	1/2"	100	100	100	100	1	100	100
100-6	1-15-35	1.0	1/2"	100	100	100	100	1	100	100
100-7	1-15-35	1.0	1/2"	100	100	100	100	1	100	100
100-8	1-15-35	1.0	1/2"	100	100	100	100	1	100	100
100-9	1-15-35	1.0	1/2"	100	100	100	100	1	100	100
100-10	1-15-35	1.0	1/2"	100	100	100	100	1	100	100

TESTS CONDUCTED AT FIELD LABORATORY

TESTS CONDUCTED AT WICHITA

TYPE FRACTURE: RC - regular cone; VS - vertical shear; DS - diagonal shear; HS - horizontal rupture; MS - bond failure;
Grade of Cement _____
Fine Aggregate _____
Coarse Aggregate _____
Mixed Aggregate _____
WICHITA CHEMICAL & TESTING LABORATORIES
by _____



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2 Weller
1 Knoll
1 Hess

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WICHITA 4, KANSAS

File:

1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Lab. No. 901053

(Refer to This Number)

Date January 5, 1956Report No. LJC # 109

Specimens

Made by: LaboratoryStructure Water LineLocation: Colwich, KansasContractor: Lock Joint Pipe Co.Architect: Black & VeatchOwner: City of WichitaDate Submitted at Lab: 12/12 & 12/30/55

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE / 3 yard				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
			1b	1b	1b	Gal					
No. 811	12/8	5"	4110	4950	2145	90	6406	DS-AF	28	24	66" Line Pipe Core @ 3:30 P.M.
No. 812	12/8	5"	4110	4950	2145	90	6495	DS-AF	28	24	66" Line Pipe Core @ 3:30 P.M.
No. 813	12/8	5"	4110	4950	2145	90	6618	DS-AF	28	24	66" Line Pipe Core @ 3:30 P.M.
TESTS CONDUCTED AT WICHITA											
No. 909	12/28	5 1/2"	4110	4950	2145	90	5300		7	0	66" Line Pipe Core @ 2:15 P.M.
No. 910	12/28	5 1/2"	4110	4950	2145	90	5100		7	0	66" Line Pipe Core @ 2:15 P.M.
No. 915	12/28	3"	4110	4950	2145	90	5250		7	0	66" Line Pipe Core @ 4:00 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Victor

AF—aggregate failure.

Admixture NoneFine Aggregate Deloce Concrete SandCoarse Aggregate Woline 3/4" LimestoneMixed Aggregate None

WICHITA CHEMICAL & TESTING LABORATORIES

By

R. L. Phillips

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File:

1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Transmission Line Lab. No. 901036

(Refer to This Number)

Date January 5, 1956

Report No. LJC # 108

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch

Owner: City of Wichita,

Date Submitted at Lab: 12/10 & 12/31/55

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE / 3 yard				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
			1b	1b	1b	Gal					
No. 803	12/7	3 1/2	4110	4950	2145	90	6865	RC-AF	28	25	66" Water Line @ 1:30 P.M.
No. 804	12/7	3 1/2	4110	4950	2145	90	6724	RC-AF	28	25	66" Line Pipe Core @ 1:30 P.M.
No. 805	12/7	3 1/2	4110	4950	2145	90	6671	RC-AF	28	25	66" Line Pipe Core @ 1:30 P.M.
TESTS CONDUCTED AT WICHITA											
No. 901	12/27	3 1/2	4110	4950	2145	90	6250	DS-AF	7	0	66" Line Pipe Core @ 3:15 P.M.
No. 902	12/27	3 1/2	4110	4950	2145	90	5650	RC-AF	7	0	66" Line Pipe Core @ 3:15 P.M.
No. 907	12/27	5"	4110	4950	2145	90	5700	RC-AF	7	0	66" Line Pipe Core @ 5:00 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolese Concrete Sand

Coarse Aggregate Woline 3/4" Limestone

Mixed Aggregate None

By

H. L. Phillips

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FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Trans. Line Lab. No. 901009
(Refer to This Number)

Date January 3, 1956

Report No. LJO #107

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch, Cons. Engrs.

Owner: City of Wichita

Date Submitted at Lab: 12/28 & 12/29/55

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 892	12/23	5"	4110	4950	2145	90	6250	DS-AF	7	0	66" Water Pipe Core @ 2:15 P.M.
No. 893	12/23	5"	4110	4950	2145	90	6100	RC-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 894	12/23	5"	4110	4950	2145	90	6300	RC-AF	7	0	66" Line Pipe Core @ 2:15 P.M.
No. 886	12/22	5"	4110	4950	2145	90	5400	RC-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 887	12/22	5"	4110	4950	2145	90	5750	RC-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
No. 888	12/22	5"	4110	4950	2145	90	5900	RC-AF	7	0	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT FIELD LABORATORY											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Delese Concrete Sand

Coarse Aggregate Woline 3/4" Limestone

Mixed Aggregate None

By

R. L. Phillips



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FLEXURE AND COMPRESSION TEST REPORT

Proposed by: _____ (Refer to this Number)
Location: _____
Contractor: _____
Architect: _____
Owner: _____
Date Submitted at Laboratories: _____
Specimens: _____
Made by: _____
Structure: _____
Date: _____
Report No.: _____

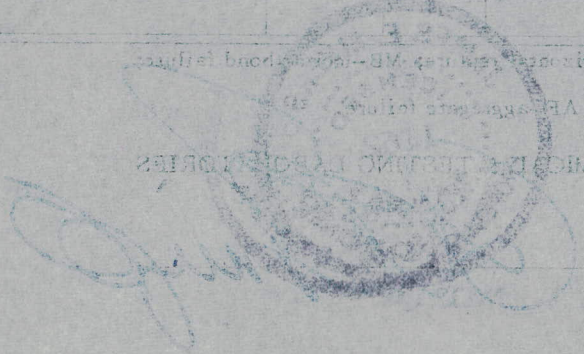
Specimen Number	Date Made	Silv. Lehrs	Type Aggregate	Coarse Aggregate	Content	MIXTURE		Compressive Strength P.S.I.	Type Pressure	Age in Days	Test Standard Conditions	Remarks and Location of Point
						Total	Water					
10-101	10-10-35	100	100	100	100	100	100	100	100	100	100	100
10-102	10-10-35	100	100	100	100	100	100	100	100	100	100	100
10-103	10-10-35	100	100	100	100	100	100	100	100	100	100	100
10-104	10-10-35	100	100	100	100	100	100	100	100	100	100	100
10-105	10-10-35	100	100	100	100	100	100	100	100	100	100	100
10-106	10-10-35	100	100	100	100	100	100	100	100	100	100	100
10-107	10-10-35	100	100	100	100	100	100	100	100	100	100	100
10-108	10-10-35	100	100	100	100	100	100	100	100	100	100	100
10-109	10-10-35	100	100	100	100	100	100	100	100	100	100	100
10-110	10-10-35	100	100	100	100	100	100	100	100	100	100	100

TESTS CONDUCTED AT FIELD LABORATORY

TEST FRACTURE: RC - regular cone; VS - vertical shear; DS - diagonal shear; HS - horizontal shear; MB - bond failure.

Stand of Cement: _____

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project: 66" Water Trans. Line Lab. No. 901008
(Refer to This Number)

Date January 3, 1956

Report No. LJC #106

Specimens

Made by: Laboratory

Structure Water Line

Location: Colwich, Kansas

Contractor: Lock Joint Pipe Co.

Architect: Black & Veatch, Cons. Engrs.

Owner: City of Wichita

Date Submitted at Lab: 12/8 & 12/9/55

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 789	12/5	5 1/2	4110	4950	2145	90	6388	DS-AF	28	25	66" Line Pipe Core @ 6:00 P.M.
No. 790	12/5	5 1/2	4110	4950	2145	90	6318	DS-AF	28	25	66" Line Pipe Core @ 6:00 P.M.
No. 791	12/5	5 1/2	4110	4950	2145	90	6335	DS-AF	28	25	66" Line Pipe Core @ 6:00 P.M.
No. 795	12/6	4"	4110	4950	2145	90	6689	DS-AF	28	25	66" Line Pipe Core @ 2:00 P.M.
No. 796	12/6	4"	4110	4950	2145	90	5895	RC-AF	28	25	66" Line Pipe Core @ 2:00 P.M.
No. 797	12/6	4"	4110	4950	2145	90	5913	DS-AF	28	25	66" Line Pipe Core @ 2:00 P.M.
TESTS CONDUCTED AT WICHITA											
Required 28 day strength: 4500 P. S. I.											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Monarch

AF—aggregate failure.

Admixture None

WICHITA CHEMICAL & TESTING LABORATORIES

Fine Aggregate Dolose Concrete Sand

By

Coarse Aggregate Woline 3/4" Limestone

R. L. Hill

Mixed Aggregate None

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File: 1

FLEXURE AND COMPRESSION TEST REPORT

Project 66" Water Trans. Lines Lab. No. 901007
Colwich, Kansas (Refer to This Number)
Location: Colwich, Kansas
Contractor: Lock Joint Pipe Company
Architect: Black & Veatch, Consulting Engineers
Owner: City of Wichita
Date Submitted at Lab: 12/7 & 12/30 & 1/2/56

Date January 3, 1956
Report No. LJC # 105
Specimens
Made by: Laboratory
Structure Water Line

SPECIMEN NUMBER	DATE MADE	SLUMP INCHES	MIXTURE				Compressive Strength P.S.I.	Type Fracture	Age In Days	Days Lab. Cured, Standard Conditions	Remarks and Location of Pour
			Fine Aggregate	Coarse Aggregate	Cement	Total Water					
No. 783	12/2	5 1/2	4110	4950	2145	90	6865*		28	23	66" Line Pipe Core @ 2:00 P.M.
No. 784	12/2	5 1/2	4110	4950	2145	90	6865*		28	23	66" Line Pipe Core @ 2:00 P.M.
No. 785	12/2	5 1/2	4110	4950	2145	90	6865*		28	23	66" Line Pipe Core @ 2:00 P.M.
No. 908	12/28	5 1/2	4110	4950	2145	90	4180	RC-AF	3	1	66" Line Pipe Core @ 2:15 P.M.
No. 914	12/28	3"	4110	490	2145	90	4730	DS-AF	3	1	66" Line Pipe Core @ 4:00 P.M.
* Beyond Capacity of Machine Required 28 day strength: 4500 P. S. I.											
TESTS CONDUCTED AT WICHITA											

TYPE FRACTURE: RC—regular cone; VS—vertical shear; DS—diagonal shear; HS—horizontal rupture; MB—mortar bond failure;

Brand of Cement Consolidated Vieter

AF—aggregate failure.

Admixture NoneFine Aggregate Dolene Concrete SandCoarse Aggregate Woline 3/4" LimestoneMixed Aggregate None

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R. L. Phillips

