APPENDIX S

Physical Data for Hoop Net Sites

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APPENDIX
HOOPNET STATION PHYSICAL DA TA

DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
5/23/83	ST. CLAIR	STAG	1	3.0	SILT & CLAY	SET	8.8	1.2	3500	497412
						LIFT	8.2	1.0	4699	309041
			2	5.0	SAND	SET	8.8	0.7	5500	497403
						LIFT	8.0	0.9	3600	309035
			3	3.0	SAND	SET	8.9	1.9	4800	497423
						LIFT	9.1	0.4	4500	309068
			4	3.0	SAND	SET	8.9	1.8	4500	497428
						LIFT	8.8	1.1	4300	309075
		FAWN	1	3.0	SAND	SET	8.4	1.5	699	498270
						LIFT	8.8	1.4	100	309581
			2	3.0	SAND	SET	8.4	1.2	199	498272
						LIFT	8.9	0.6	199	309592
			3	4.0	SAND	SET	8.7	1.1	399	498284
						LIFT	9.0	0.5	250	309620
			4	3.8	SAND	SET	8.7	1.2	450	498285
						LIFT	8.9	0.5	150	309620
		RUSSELL	1	4.0	SILT & CLAY	SET	8.4	1.6	350	498666
						LIFT	8.8	1.2	150	309975
			2	4.0	SAND	SET	8.4	1.5	300	498665
						LIFT	8.9	0.7	150	309974
			3	3.0	SAND	SET	8.2	0.5	550	498666
						LIFT	8.9	0.8	230	309958
			4	4.0	SILT & CLAY	SET	8.2	1.4	530	498666
						LIFT	8.9	0.7	250	309955
	DETROIT	BELLE	1	6.0	RUBBLE	SET	11.3	1.2	430	499954
						LIFT	11.0	0.8	1999	312761
			2	3.0	RUBBLE	SET	11.5	1.1	439	499955
						LIFT	11.0	0.8	3000	312760
			3	5.0	SILT & CLAY	SET	12.5	0.2	610	499995
						LIFT	10.8	0.0	3000	312841
			4	5.0	SILT & CLAY	SET	12.3	0.2	630	499994
						LIFT	10.9	0.0	3000	312840
		HENNEPIN	1	6.0	SAND	SET	11.4	0.6	4500	500701
						LIFT	11.6	0.5	3000	314073
			2	6.0	SAND	SET	11.3	0.6	4500	500701
						LIFT	11.6	0.5	3000	314076
			3	6.0	SILT & CLAY	SET	11.8	0.4	1500	500710
						LIFT	11.5	0.4	3500	314081
			4	6.0	SILT & CLAY	SET	11.8	0.5	1500	500710
						LIFT	11.5	0.4	3500	314081

5/23/83	DETROIT	STONY	1	4.0	SILT & CLAY	SET	11.8	0.2		1000	500991
						LIFT	11.7	0.5		3500	314230
			2	4.0	SILT & CLAY	SET	11.9	0.3		1999	500987
						LIFT	11.7	0.5		3500	314227
			3	5.0	RUBBLE	SET	12.0	1.6		1000	501003
						LIFT	12.0	1.6		4500	314253
			4	3.0	RUBBLE	SET	12.0	1.5		1000	501004
						LIFT	12.0	1.6		4500	314252

APPENDIX
HOOPNET STATION PHYSICAL DA TA

DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
6/20/83	ST. CLAIR	STAG	1	4.5	SAND	SET	14.7	2.1	4000	497398
						LIFT	15.0	2.4	1999	309033
			2	5.0	SAND	SET	14.9	2.0	3999	497401
						LIFT	15.0	2.0	1999	309034
			3	4.0	SAND	SET	15.0	0.5	4500	497414
						LIFT	15.0	0.3	2500	309049
			4	4.5	SAND	SET	14.9	0.8	4000	497413
						LIFT	15.0	0.4	2199	309048
		FAWN	1	3.0	SAND	SET	15.2	1.1	3999	498269
						LIFT	15.5	0.9	3500	309583
			2	3.0	SAND	SET	15.2	1.2	3999	498269
						LIFT	15.3	1.0	3600	309586
			3	4.0	SAND	SET	15.6	1.3	3500	498288
						LIFT	15.3	1.1	3800	309623
			4	4.5	SAND	SET	15.5	1.2	3500	498286
						LIFT	15.3	1.2	4000	309622
		RUSSELL	1	5.0	SAND	SET	15.5	1.2	4500	498668
						LIFT	16.0	1.2	1999	309951
			2	5.0	SAND	SET	15.3	1.2	4300	498666
						LIFT	16.1	1.3	1999	309951
			3	4.0	SAND	SET	16.0	1.7	4399	498667
						LIFT	16.0	1.8	1699	309968
			4	4.5	SAND	SET	16.1	1.5	4300	498667
						LIFT	16.0	1.8	1800	309971
	DETROIT	BELLE	1	3.0	RUBBLE	SET	21.0	0.1	1500	499981
						LIFT	21.0	0.5	450	312804
			2	3.0	RUBBLE	SET	21.0	0.1	1399	499982
						LIFT	21.0	0.5	450	312804
			3	5.0	SILT & CLAY	SET	22.0	0.0	1500	499993
						LIFT	20.7	0.1	160	312847
			4	4.0	SILT & CLAY	SET	20.7	0.0	1399	499993
						LIFT	20.7	0.1	160	312847
		HENNEPIN	1	3.0	SAND	SET	20.0	0.3	3999	500689
						LIFT	20.9	0.3	1999	314069
			2	3.0	SILT & CLAY	SET	20.0	0.3	3999	500693
						LIFT	20.9	0.4	2500	314069
			3	3.0	SILT & CLAY	SET	20.5	0.2	4500	500713
						LIFT	20.8	0.3	1300	314086
			4	3.0	SILT & CLAY	SET	20.5	0.2	4500	500716
						LIFT	20.8	0.2	1199	314088

6/20/83	DETROIT	STONY	1	3.0	RUBBLE	SET	20.1	0.7		4600	500988
						LIFT	21.0	0.6		1800	314229
			2	4.0	RUBBLE	SET	20.1	0.7		4600	500990
						LIFT	21.0	0.7		1500	314231
			3	5.0	RUBBLE	SET	21.0	1.3		4199	500997
						LIFT	21.0	1.2		1999	314241
			4	6.0	RUBBLE	SET	21.0	1.4		4199	500999
						LIFT	21.0	1.5		1999	314247

APPENDIX
HOOPNET STATION PHYSICAL DA TA

DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
7/25/83	ST. CLAIR	STAG	1	4.5	SAND	SET	20.0	1.7	3500	497394
						LIFT	19.8	2.2	2699	309026
			2	4.2	SAND	SET	20.0	1.7	3500	497390
						LIFT	19.8	2.1	2899	309036
			3	4.0	SAND	SET	20.0	1.5	3800	497388
						LIFT	19.8	1.9	2800	309028
			4	4.0	SAND	SET	20.0	1.5	3600	497399
						LIFT	19.8	2.0	2699	309034
		FAWN	1	3.0	RUBBLE	SET	20.5	0.6	4000	498268
						LIFT	20.0	0.6	3899	309585
			2	3.1	RUBBLE	SET	20.5	0.6	3800	498267
						LIFT	20.0	0.6	3899	309583
			3	3.5	RUBBLE	SET	20.5	0.7	3600	498270
						LIFT	20.5	0.7	4000	309592
			4	3.0	SILT & CLAY	SET	20.5	0.6	3500	498273
						LIFT	20.5	0.7	3899	309594
		RUSSELL	1	4.6	SAND	SET	20.5	1.3	2899	498862
						LIFT	20.2	1.0	3899	310162
			2	4.7	SAND	SET	20.5	1.4	2899	498665
						LIFT	20.2	1.0	3899	310068
			3	5.1	SILT & CLAY	SET	20.5	1.5	2699	498664
						LIFT	20.0	1.1	4000	309964
			4	5.4	SILT & CLAY	SET	20.5	1.4	2600	498664
						LIFT	20.0	1.1	4000	309965
	DETROIT	BELLE	1	4.0	SILT & CLAY	SET	20.5	0.3	2500	499968
						LIFT	20.0	0.2	4000	312783
			2	4.0	SILT & CLAY	SET	20.5	0.3	2500	499970
						LIFT	20.0	0.2	4000	312784
			3	4.0	SILT & CLAY	SET	20.5	0.2	3300	499993
						LIFT	21.0	0.4	4000	312839
			4	4.0	SILT & CLAY	SET	20.5	0.2	3300	499994
						LIFT	21.0	0.4	4000	312842
		HENNEPIN	1	6.0	SILT & CLAY	SET	23.5	0.2	2899	500681
						LIFT	24.0	0.2	350	314067
			2	6.0	SILT & CLAY	SET	23.5	0.2	2800	500678
						LIFT	24.0	0.2	350	414066
			3	5.2	SILT & CLAY	SET	23.5	0.3	3300	500714
						LIFT	24.0	0.1	350	314080
			4	3.7	SILT & CLAY	SET	23.5	0.3	3600	500711
						LIFT	24.0	0.1	350	314086

7/25/83	DETROIT	STONY	1	3.6	RUBBLE	SET	24.0	2.1	4600	500984
						LIFT	24.0	1.7	550	314234
			2	6.0	RUBBLE	SET	24.0	2.0	4600	500988
						LIFT	24.0	1.5	550	314231
			3	5.4	RUBBLE	SET	24.0	1.1	4399	500997
						LIFT	24.0	1.2	600	314249
			4	4.7	RUBBLE	SET	24.0	1.2	4300	501000
						LIFT	24.0	1.2	600	314251

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HOOPNET STATION PHYSICAL DA TA

DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
9/ 6/83	ST. CLAIR	STAG	1	4.7	SAND	SET	22.1	1.5	2500	497394
						LIFT	21.7	1.9	1800	309025
			2	4.9	SAND	SET	22.1	1.6	2500	497391
						LIFT	21.7	1.8	1800	309036
			3	4.5	SAND	SET	22.6	0.6	3699	497386
						LIFT	21.6	0.3	1899	309027
			4	4.0	SAND	SET	22.6	0.5	3699	497400
						LIFT	21.7	0.3	2000	309033
		FAWN	1	3.2	SILT & CLAY	SET	22.9	0.7	3500	498271
						LIFT	22.2	0.3	3399	309593
			2	3.2	SILT & CLAY	SET	22.9	0.7	3500	498271
						LIFT	22.3	0.3	3399	309593
			3	3.1	SILT & CLAY	SET	23.3	0.6	4399	498279
						LIFT	22.4	0.9	3800	309612
			4	3.4	SILT & CLAY	SET	23.3	0.6	4399	498679
						LIFT	22.4	1.0	3899	309612
		RUSSELL	1	4.2	SAND	SET	22.2	0.3	1899	498662
						LIFT	22.1	0.8	3999	309964
			2	5.1	SAND	SET	22.2	0.3	1899	498666
						LIFT	22.1	0.7	3899	309961
			3	3.8	SILT & CLAY	SET	22.3	0.7	1899	498661
						LIFT	22.4	0.4	4500	309970
			4	3.1	SILT & CLAY	SET	22.3	0.7	1899	498658
						LIFT	22.4	0.5	4500	309974
	DETROIT	BELLE	1	4.6	RUBBLE	SET	22.9	0.5	2500	499968
						LIFT	22.8	0.2	2500	312782
			2	5.2	RUBBLE	SET	22.9	0.5	2500	499971
						LIFT	22.8	0.2	2500	312784
			3	3.6	SILT & CLAY	SET	23.1	0.4	3899	499991
						LIFT	23.0	0.2	2500	312839
			4	3.9	SILT & CLAY	SET	23.1	0.4	3899	499993
						LIFT	23.0	0.3	2500	312840
		HENNEPIN	1	5.0	SILT & CLAY	SET	23.6	0.5	3000	500695
						LIFT	23.4	0.7	3800	314084
			2	5.2	SILT & CLAY	SET	23.6	0.5	3000	500698
						LIFT	23.4	0.7	3800	314086
			3	4.1	SILT & CLAY	SET	23.6	0.2	3800	500713
						LIFT	23.1	0.3	3600	314081
			4	3.8	SILT & CLAY	SET	23.6	0.2	3300	500710
						LIFT	23.2	0.3	3600	314087

9/ 6/83	DETROIT	STONY	1	4.8	RUBBLE	SET	23.6	1.5	3399	500984
						LIFT	23.8	1.5	3300	314235
			2	5.6	RUBBLE	SET	23.6	1.6	3399	500987
						LIFT	23.8	1.5	3300	314232
			3	3.9	RUBBLE	SET	23.7	0.7	4000	500996
						LIFT	23.9	0.7	2500	314249
			4	4.1	RUBBLE	SET	23.7	0.7	4000	501000
						LIFT	23.9	0.7	2500	314250

APPENDIX
HOOPNET STATION PHYSICAL DA TA

DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
10/ 4/83	ST. CLAIR	STAG	1	5.1	SAND	SET	18.0	1.8	589	497399
						LIFT	18.0	1.4	48	309034
			2	3.8	SAND	SET	18.0	1.7	589	497386
						LIFT	18.0	1.4	48	309027
			3	4.2	SAND	SET	18.0	0.2	330	497400
						LIFT	18.0	0.1	58	309033
			4	4.0	SAND	SET	18.0	0.2	330	497413
						LIFT	18.0	0.1	58	309048
		FAWN	1	5.5	SILT & CLAY	SET	18.5	0.4	680	498267
						LIFT	18.0	0.7	739	309589
			2	5.0	SILT & CLAY	SET	18.5	0.5	680	498269
						LIFT	18.0	0.7	739	309590
			3	3.1	SILT & CLAY	SET	18.5	0.7	230	498288
						LIFT	18.0	0.6	769	309623
			4	3.4	SILT & CLAY	SET	18.5	0.7	230	498286
						LIFT	18.0	0.6	769	309622
		RUSSELL	1	4.6	SILT & CLAY	SET	18.5	0.4	460	499981
						LIFT	18.0	0.3	539	312804
			2	4.3	SILT & CLAY	SET	18.5	0.5	460	498981
						LIFT	18.0	0.3	539	312806
			3	3.5	SAND	SET	18.5	1.2	530	498666
						LIFT	18.0	0.7	719	309965
			4	3.3	SAND	SET	18.5	1.2	530	498664
						LIFT	18.0	0.7	730	309964
	DETROIT	BELLE	1	5.5	RUBBLE	SET	18.5	1.0	2300	499968
						LIFT	18.0	0.4	500	312782
			2	5.5	RUBBLE	SET	18.5	1.0	2300	499971
						LIFT	18.0	0.4	500	312784
			3	4.0	SILT & CLAY	SET	18.0	0.2	2399	499991
						LIFT	18.5	0.6	450	312839
			4	4.0	SILT & CLAY	SET	18.0	0.2	2399	499993
						LIFT	18.5	0.6	450	312840
		HENNEPIN	1	5.0	SILT & CLAY	SET	18.0	0.4	130	500676
						LIFT	18.0	0.3	3000	814066
			2	5.0	SILT & CLAY	SET	18.0	0.4	130	500678
						LIFT	18.0	0.3	3000	814066
			3	5.0	SILT & CLAY	SET	18.0	0.4	350	500710
						LIFT	18.0	0.5	2800	814079
			4	5.0	SILT & CLAY	SET	18.0	0.4	350	500710
						LIFT	18.0	0.5	2800	814081

10/ 4/83	DETROIT	STONY	1	3.6	SILT & CLAY	SET	19.0	0.4	319	500987
						LIFT	18.0	0.3	3500	314232
			2	3.3	SILT & CLAY	SET	19.0	0.4	319	500991
						LIFT	18.0	0.3	3500	314230
			3	5.1	RUBBLE	SET	19.0	1.5	189	500996
						LIFT	18.0	1.6	400	314249
			4	4.6	RUBBLE	SET	19.0	1.5	189	500996
						LIFT	18.0	1.6	400	314249

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DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
5/21/84	ST. CLAIR	STAG	1	5.0	SAND	SET	9.0	1.9	4000	0
						LIFT	9.0	1.4	1399	0
			2	5.0	SAND	SET	9.0	1.9	4000	0
						LIFT	9.0	1.4	1399	0
			3	5.5	SAND	SET	9.0	0.5	4000	0
						LIFT	9.5	0.4	650	0
			4	5.5	SAND	SET	9.0	0.5	4000	0
						LIFT	9.5	0.4	650	0
		FAWN	1	4.0	SAND	SET	9.0	1.7	4000	0
						LIFT	9.5	0.7	2800	0
			2	4.0	SAND	SET	9.0	1.7	4000	0
						LIFT	9.5	0.7	2800	0
			3	3.0	SAND	SET	9.5	1.2	4000	0
						LIFT	10.0	0.4	1800	0
			4	3.0	SAND	SET	9.5	1.2	4000	0
						LIFT	10.0	0.4	1800	0
		RUSSELL	1	4.0	SAND	SET	9.5	1.9	4899	0
						LIFT	10.0	1.5	3399	0
			2	4.0	SAND	SET	9.5	1.9	4899	0
						LIFT	10.0	1.5	3399	0
			3	6.0	SAND	SET	9.5	1.8	1000	0
						LIFT	10.0	1.8	3399	0
			4	6.0	SAND	SET	9.5	1.8	1000	0
						LIFT	10.0	1.8	3399	0
	DETROIT	BELLE	1	4.0	SILT & CLAY	SET	12.0	0.0	2600	0
						LIFT	12.0	0.4	3300	0
			2	4.0	SILT & CLAY	SET	12.0	0.0	2600	0
						LIFT	12.0	0.4	3300	0
			3	6.0	RUBBLE	SET	11.5	1.1	2800	0
						LIFT	12.0	0.2	3800	0
			4	6.0	RUBBLE	SET	11.5	1.1	2800	0
						LIFT	12.0	0.2	3800	0
		HENNEPIN	1	5.0	RUBBLE	SET	12.0	0.7	3800	0
						LIFT	12.5	0.5	2600	0
			2	5.0	RUBBLE	SET	12.0	0.7	3800	0
						LIFT	12.5	0.5	2600	0
			3	5.0	SILT & CLAY	SET	12.5	0.6	4000	0
						LIFT	12.5	0.8	2800	0
			4	5.0	SILT & CLAY	SET	12.5	0.6	4000	0
						LIFT	12.5	0.8	2800	0

5/21/84	DETROIT	STONY	1	6.0	RUBBLE	SET	12.5	1.7	4000	0
						LIFT	12.0	1.9	4000	0
			2	6.0	RUBBLE	SET	12.5	1.7	4000	0
						LIFT	12.0	1.9	4000	0
			3	4.0	SILT & CLAY	SET	12.5	1.5	4000	0
						LIFT	12.5	2.1	4000	0
			4	4.0	SILT & CLAY	SET	12.5	1.5	4000	0
						LIFT	12.5	2.1	4000	0

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HOOPNET STATION PHYSICAL DA TA

DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
6/12/84	ST. CLAIR	STAG	1	4.0	SAND	SET	11.5	1.9	3000	0
						LIFT	11.0	1.1	1800	0
			2	4.0	SAND	SET	11.5	1.9	3000	0
						LIFT	11.0	1.1	1800	0
			3	4.0	SAND	SET	12.0	0.4	3399	0
						LIFT	11.0	0.0	1399	0
			4	4.0	SAND	SET	12.0	0.4	3399	0
						LIFT	11.0	0.0	1399	0
		FAWN	1	3.0	SAND	SET	12.0	1.6	4500	0
						LIFT	11.5	1.4	4000	0
			2	3.0	SAND	SET	12.0	1.6	4500	0
						LIFT	11.5	1.4	4000	0
			3	3.0	SAND	SET	12.0	1.1	4500	0
						LIFT	11.5	1.1	3199	0
			4	3.0	SAND	SET	12.0	1.1	4500	0
						LIFT	11.5	1.1	3199	0
		RUSSELL	1	4.0	SAND	SET	12.0	1.5	3600	0
						LIFT	12.0	2.1	4500	0
			2	4.0	SAND	SET	12.0	1.5	3600	0
						LIFT	12.0	2.1	4500	0
			3	3.0	SAND	SET	12.0	1.7	3600	0
						LIFT	12.0	1.8	4000	0
			4	3.0	SAND	SET	12.0	1.7	3600	0
						LIFT	12.0	1.8	4000	0
	DETROIT	BELLE	1	5.0	RUBBLE	SET	18.0	0.3	1000	499968
						LIFT	17.9	0.3	1899	312778
			2	5.0	RUBBLE	SET	18.0	0.3	1000	0
						LIFT	17.9	0.3	1899	0
			3	4.0	SILT & CLAY	SET	18.0	0.3	4399	499992
						LIFT	17.9	0.2	1000	312838
			4	4.0	SILT & CLAY	SET	18.0	0.3	4399	0
						LIFT	17.9	0.2	1000	0
		HENNEPIN	1	5.5	SILT & CLAY	SET	18.8	0.3	4000	0
						LIFT	19.5	0.2	3699	0
			2	5.4	SILT & CLAY	SET	18.8	0.3	4000	0
						LIFT	19.5	0.2	3699	0
			3	5.8	SILT & CLAY	SET	18.9	0.5	4100	0
						LIFT	19.5	0.6	4000	0
			4	5.7	SILT & CLAY	SET	18.9	0.5	4100	0
						LIFT	19.5	0.6	4000	0

6/12/84	DETROIT	STONY	1	4.5	RUBBLE	SET	18.5	1.5	4300	0
						LIFT	19.0	1.5	2899	0
			2	4.8	RUBBLE	SET	18.5	1.5	4300	0
						LIFT	19.0	1.5	2899	0
			3	5.0	RUBBLE	SET	18.8	2.4	3199	0
						LIFT	19.0	2.8	3399	0
			4	5.0	RUBBLE	SET	18.8	2.4	3199	0
						LIFT	19.0	2.8	3399	0

APPENDIX
HOOPNET STATION PHYSICAL DA TA

DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
7/23/84	ST. CLAIR	STAG	1	4.0	SAND	SET	19.0	2.3	910	0
						LIFT	18.8	2.3	380	0
			2	3.0	SAND	SET	19.0	2.3	910	0
						LIFT	18.8	2.3	380	0
			3	3.0	SAND	SET	19.2	0.3	2699	0
						LIFT	19.7	0.1	619	0
			4	4.0	SAND	SET	19.2	0.3	2699	0
						LIFT	19.7	0.1	619	0
		FAWN	1	3.0	SAND	SET	19.7	0.6	3000	0
						LIFT	20.0	0.6	839	0
			2	3.0	SAND	SET	19.7	0.6	3000	0
						LIFT	20.0	0.6	839	0
			3	4.0	SAND	SET	19.7	1.1	4000	0
						LIFT	20.0	1.1	1000	0
			4	4.0	SAND	SET	19.7	1.1	4000	0
						LIFT	20.0	1.1	1000	0
		RUSSELL	1	4.0	SAND	SET	20.0	0.4	4300	0
						LIFT	20.0	0.6	5100	0
			2	4.0	SAND	SET	20.0	0.4	4300	0
						LIFT	20.0	0.6	5100	0
			3	5.0	SAND	SET	20.0	1.1	4300	0
						LIFT	20.0	0.9	5100	0
			4	4.0	SAND	SET	20.0	1.1	4300	0
						LIFT	20.0	0.9	5100	0
	DETROIT	BELLE	1	5.0	SILT & CLAY	SET	20.0	0.2	4699	0
						LIFT	25.0	0.2	4500	0
			2	5.0	SILT & CLAY	SET	20.0	0.2	4699	0
						LIFT	25.0	0.2	4500	0
			3	6.0	RUBBLE	SET	20.0	0.5	5000	0
						LIFT	24.2	0.3	2699	0
			4	6.0	RUBBLE	SET	20.0	0.5	5000	0
						LIFT	24.2	0.3	2699	0
		HENNEPIN	1	5.0	SILT & CLAY	SET	20.0	0.1	3000	0
						LIFT	25.0	0.0	3500	0
			2	5.0	SILT & CLAY	SET	20.0	0.1	3000	0
						LIFT	25.0	0.0	3500	0
			3	5.0	SILT & CLAY	SET	20.0	0.1	3899	0
						LIFT	25.0	0.1	3300	0
			4	5.0	SILT & CLAY	SET	20.0	0.1	3899	0
						LIFT	25.0	0.1	3300	0

7/23/84	DETROIT	STONY	1	5.0	RUBBLE	SET	20.0	1.6	4500	0
						LIFT	24.0	1.9	3800	0
			2	5.0	RUBBLE	SET	20.0	1.6	4500	0
						LIFT	24.0	1.9	3800	0
			3	4.0	RUBBLE	SET	20.0	2.2	4800	0
						LIFT	24.0	2.2	4399	0
			4	4.0	RUBBLE	SET	20.0	2.2	4800	0
						LIFT	24.0	2.2	4399	0

APPENDIX
HOOPNET STATION PHYSICAL DA TA

DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
9/ 4/84	ST. CLAIR	STAG	1	3.0	SAND	SET	22.0	1.7	3699	0
						LIFT	22.0	2.1	2500	0
			2	3.0	SAND	SET	22.0	1.7	3699	0
						LIFT	22.0	2.1	2500	0
			3	3.0	SAND	SET	22.0	0.5	8600	0
						LIFT	21.0	0.8	3600	0
			4	3.0	SAND	SET	22.0	0.5	8600	0
						LIFT	21.0	0.8	3600	0
		FAWN	1	3.0	SILT & CLAY	SET	22.0	0.7	2500	0
						LIFT	22.0	0.9	1300	0
			2	3.0	SILT & CLAY	SET	22.0	0.7	2500	0
						LIFT	22.0	0.9	1300	0
			3	3.0	SAND	SET	22.0	0.7	4000	0
						LIFT	22.0	0.9	4500	0
			4	3.0	SAND	SET	22.0	0.7	4000	0
						LIFT	22.0	0.9	4500	0
		RUSSELL	1	3.0	SILT & CLAY	SET	22.0	0.7	3399	0
						LIFT	22.0	0.5	1600	0
			2	4.0	SILT & CLAY	SET	22.0	0.7	3399	0
						LIFT	22.0	0.5	1600	0
			3	3.0	SILT & CLAY	SET	22.0	0.9	3199	0
						LIFT	22.0	0.1	1300	0
			4	3.0	SILT & CLAY	SET	22.0	0.9	3199	0
						LIFT	22.0	0.1	1300	0
	DETROIT	BELLE	1	6.0	RUBBLE	SET	21.0	0.1	700	0
						LIFT	21.0	0.2	4300	0
			2	6.0	RUBBLE	SET	21.0	0.1	700	0
						LIFT	21.0	0.2	4300	0
			3	5.0	SILT & CLAY	SET	21.0	0.0	1899	0
						LIFT	21.0	0.2	3699	0
			4	5.0	SILT & CLAY	SET	21.0	0.0	1899	0
						LIFT	21.0	0.2	3699	0
		HENNEPIN	1	6.0	SILT & CLAY	SET	21.0	0.6	500	0
						LIFT	21.0	0.3	569	0
			2	6.0	SILT & CLAY	SET	21.0	0.6	500	0
						LIFT	21.0	0.3	569	0
			3	6.0	SILT & CLAY	SET	21.0	0.2	130	0
						LIFT	21.0	0.2	460	0
			4	6.0	SILT & CLAY	SET	21.0	0.2	130	0
						LIFT	21.0	0.2	460	0

9/ 4/84	DETROIT	STONY	1	6.0	RUBBLE	SET	21.0	0.8	610	0
						LIFT	21.0	1.7	130	0
			2	6.0	RUBBLE	SET	21.0	0.8	610	0
						LIFT	21.0	1.7	130	0
			3	6.0	RUBBLE	SET	21.0	0.9	450	0
						LIFT	21.0	1.0	150	0
			4	6.0	RUBBLE	SET	21.0	0.9	450	0
						LIFT	21.0	1.0	150	0

APPENDIX
HOOPNET STATION PHYSICAL DA TA

DATE	RIVER	LOCATION	STA. NO.	DEPTH (FT.)	BOTTOM TYPE	NET	TEMP. (C.)	WATER VEL. (FT./SEC)	LIGHT (FT.-CANDLES)	LORAN COORD. (UPPER/ LOWER)
10/ 2/84	ST. CLAIR	STAG	1	4.0	SAND	SET	14.0	1.6	2600	0
						LIFT	14.0	1.0	1199	0
			2	3.0	SAND	SET	14.0	1.6	2600	0
						LIFT	14.0	1.0	1199	0
			3	6.0	SILT & CLAY	SET	15.0	0.3	4199	0
						LIFT	14.0	0.3	1199	0
			4	5.0	SILT & CLAY	SET	15.0	0.3	4199	0
						LIFT	14.0	0.3	1199	0
		FAWN	1	5.0	SAND	SET	15.0	0.8	4699	0
						LIFT	14.0	0.5	3100	0
			2	4.0	SAND	SET	15.0	0.8	4699	0
						LIFT	14.0	0.5	3100	0
			3	4.0	SAND	SET	15.0	0.5	3500	0
						LIFT	14.0	0.5	3100	0
			4	4.0	SAND	SET	15.0	0.5	3500	0
						LIFT	14.0	0.5	3100	0
		RUSSELL	1	5.0	SILT & CLAY	SET	15.0	0.8	4399	0
						LIFT	14.0	0.4	3899	0
			2	5.0	SILT & CLAY	SET	15.0	0.8	4399	0
						LIFT	14.0	0.4	3899	0
			3	5.0	SILT & CLAY	SET	15.0	1.1	4199	0
						LIFT	14.0	1.1	3199	0
			4	5.0	SILT & CLAY	SET	15.0	1.1	4199	0
						LIFT	14.0	1.1	3199	0
	DETROIT	BELLE	1	5.0	RUBBLE	SET	14.0	0.8	3399	0
						LIFT	14.0	0.5	4500	0
			2	5.0	RUBBLE	SET	14.0	0.8	3399	0
						LIFT	14.0	0.5	4500	0
			3	3.0	SILT & CLAY	SET	14.0	0.2	2500	0
						LIFT	15.0	0.2	3199	0
			4	3.0	SILT & CLAY	SET	14.0	0.2	2500	0
						LIFT	15.0	0.2	3199	0
		HENNEPIN	1	5.0	SILT & CLAY	SET	13.0	0.1	1000	0
						LIFT	14.0	0.4	1899	0
			2	4.0	SILT & CLAY	SET	13.0	0.1	1000	0
						LIFT	14.0	0.4	1899	0
			3	3.0	SILT & CLAY	SET	14.0	0.2	1699	0
						LIFT	14.0	0.3	1899	0
			4	4.0	SILT & CLAY	SET	14.0	0.2	1699	0
						LIFT	14.0	0.3	1899	0

10/ 2/84	DETROIT	STONY	1	3.0	RUBBLE	SET	14.0	1.1	2699	0
						LIFT	13.0	1.1	1300	0
			2	4.0	RUBBLE	SET	14.0	1.1	2699	0
						LIFT	13.0	1.1	1300	0
			3	4.0	RUBBLE	SET	14.0	1.5	2600	0
						LIFT	13.0	2.2	1100	0
			4	5.0	RUBBLE	SET	14.0	1.5	2600	0
						LIFT	13.0	2.2	1100	0