

24 hour pump test

Q ≈ 555 GPM

TABLE 6

AQUIFER COEFFICIENTS FROM DATA
COLLECTED FROM OBSERVATION WELLS
DURING DRAWDOWN TEST OF PRODUCTION WELL 13
 JUPITER WATER SYSTEM
 JUPITER, FLORIDA

<u>Well #</u>	<u>Transmissivity (gpd/ft)</u>	<u>Storage Coefficient</u>	<u>Specific Yield</u>
OB-1	98,100	7.1×10^{-4}	Not calculated
OB-2	33,300	1.5×10^{-4}	Not calculated
OB-3	39,800	3.6×10^{-4}	0.02
TW-1	125,000	1.6×10^{-3}	Not calculated
TW-3	85,600	1.5×10^{-3}	Not calculated

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TABLE 7

AQUIFER COEFFICIENTS FROM DATA
COLLECTED FROM OBSERVATION WELLS
DURING RECOVERY TEST OF PRODUCTION WELL 13
JUPITER WATER SYSTEM
JUPITER, FLORIDA

<u>Well #</u>	<u>Transmissivity</u> <u>(gpd/ft)</u>	<u>Storage</u> <u>Coefficient</u>
OB-1	103,000	5.7×10^{-4}
OB-2	42,400	8.7×10^{-5}
TW-3	114,000	1.2×10^{-3}

TABLE 3

WATER LEVELS IN WELLS LOCATED IN
SECTION 10
JUPITER WATER SYSTEM
JUPITER, FLORIDA

<u>Monitoring Location</u>	<u>Elevation of Measuring Point (Feet above MSL)</u>	<u>Elevation of Water Level Prior to Tests of Production Wells (Feet above MSL) ^{a/}</u>		
		<u>PW-12 Test</u>	<u>PW-13 Test</u>	<u>PW-14 Test</u>
TW-1	11.77	--	5.21	6.00
TW-2	11.85	--	5.91	--
TW-3	11.83	4.27	5.03	6.13
OB-1	14.16	7.24	6.04	7.56
OB-2	13.82	--	6.91	8.29
OB-3	13.63	--	5.66	6.85
OB-4	12.59	--	6.61	--
OB-5	<u>b/</u> 11.75	--	--	4.55
OB-6	<u>c/</u> 12.33	6.59	--	--
PW-13	14.77	6.48	5.70	7.18
Stream	<u>d/</u> 12.14	--	--	1.68

a/ Water levels measured immediately prior to pumping tests of Production Wells 12, 13, and 14

b/ Estimated elevation relative to TW-1

c/ Estimated elevation relative to TW-3

d/ Elevation approximated to pipe center

TABLE 2
CONSTRUCTION DETAILS OF TWELVE-INCH-
DIAMETER PRODUCTION WELLS
JUPITER WATER SYSTEM
JUPITER, FLORIDA

<u>Well Number</u>	<u>Completion Date</u>	<u>Casing Depth (Feet below Land Surface)</u>	<u>Completed Well Depth (Feet below Land Surface)</u>
PW-12	January, 1979	130	201
PW-13	December, 1978	136	200
PW-14	January, 1979	117	201

TABLE 1

Construction Details of Test Wells
and Observation Wells in Section 10
Jupiter Water System
Jupiter, Florida

<u>Well Number</u>	<u>Casing Depth (Feet below land surface)</u>	<u>Completed Well Depth (Feet below land surface)</u>
TW-1	124	155
TW-2	125	165
TW-3	126	160
OB-1	124	145
OB-2	129	145
OB-3	124	145
OB-4*	25	30
OB-5*	25	30
OB-6*	25	30

* Well removed after testing

TABLE 4

DISTANCES FROM PRODUCTION WELLS
TO VARIOUS OBSERVATION WELLS

JUPITER WATER SYSTEM
JUPITER, FLORIDA

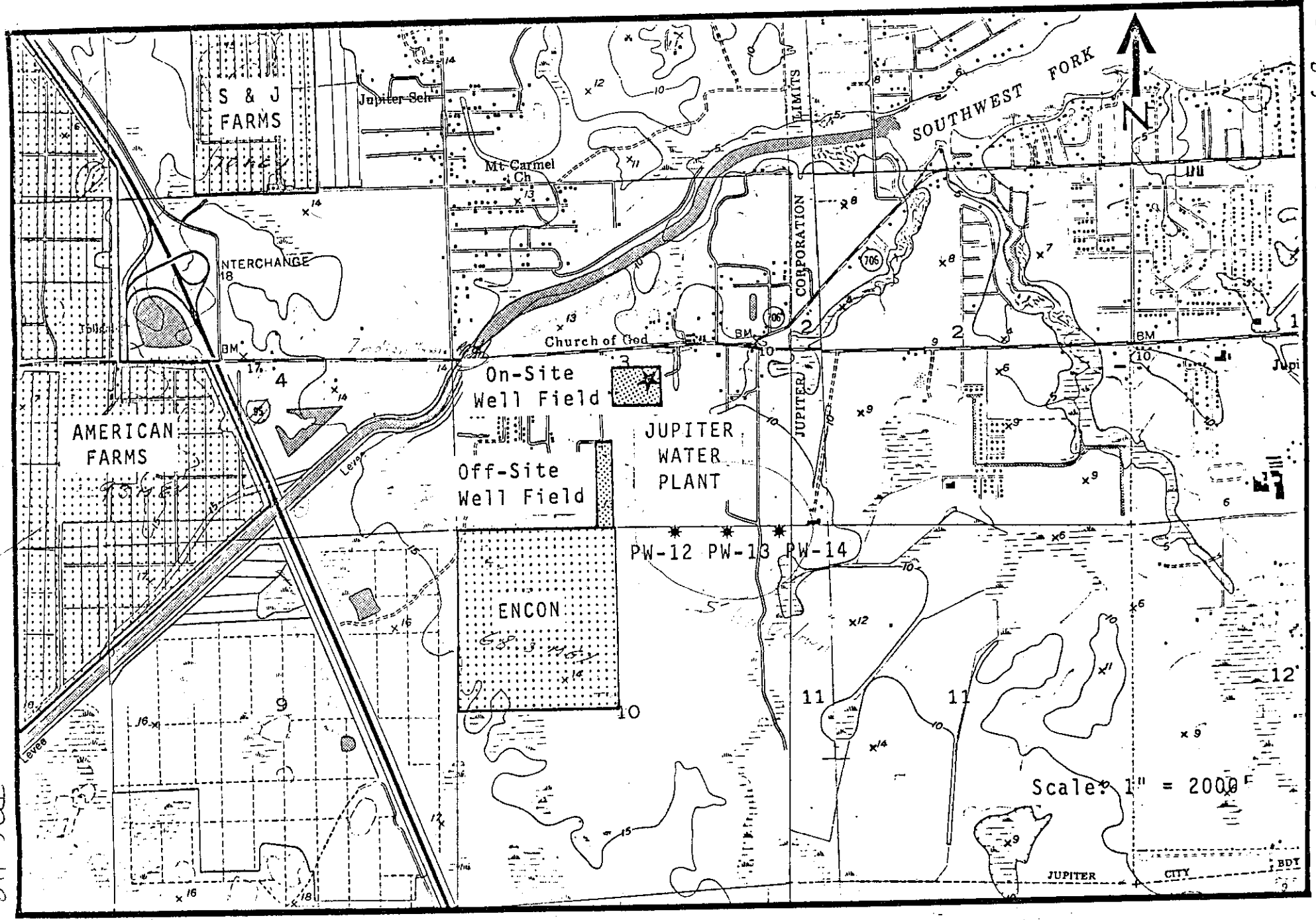
	<u>PW-12</u>	<u>PW-13</u>	<u>PW-14</u>
TW-1	<u>11630</u>	807	76
TW-2	<u>820</u>	75	<u>820</u>
TW-3	8	810	<u>1620</u>
OB-1	399	408	<u>1220</u>
OB-2	931	400	894
OB-3	<u>1240</u>	402	402
OB-4	---	76	---
OB-5	---	---	77
OB-6	13	---	---
PW-12	---	810	1615
PW-13	810	---	805
PW-14	1615	805	---

NOTE: Distances measured in feet.

TABLE 5

DATA COLLECTED DURING STEP-DRAWDOWN TESTS
 PERFORMED ON PRODUCTION WELLS 12, 13, AND 14
 JUPITER WATER SYSTEM
 JUPITER, FLORIDA

	<u>Time Since Commencement of Pumping (minutes)</u>		<u>Pumping Rate (gpm)</u>		<u>Depth to Water (feet)</u>	
PW-12	0		0		10.00	
	30	53,904	280	403,200	17.25	0.0259
	60	77,005	400	576,000	21.33	0.0283
	90	119,358	620	842,800	28.08	0.0292
	120	136,685	710	1,022,400	31.17	0.0298
PW-13	0		0		9.00	
	30		440		22.94	0.0317
	60		600		35.39	0.0439
	90		800		42.29	0.0416
	120		1000		53.92	0.0449
PW-14	0		0		10.03	
	30	38,503	200	7.05	17.08	0.0352
	59	77,005	400	11.64	21.67	0.0291
	89	115,508	600	20.14	30.17	0.0336
	119	154,010	800	27.14	37.17	0.0339
	149	192,513	1000	33.64	43.67	0.0336



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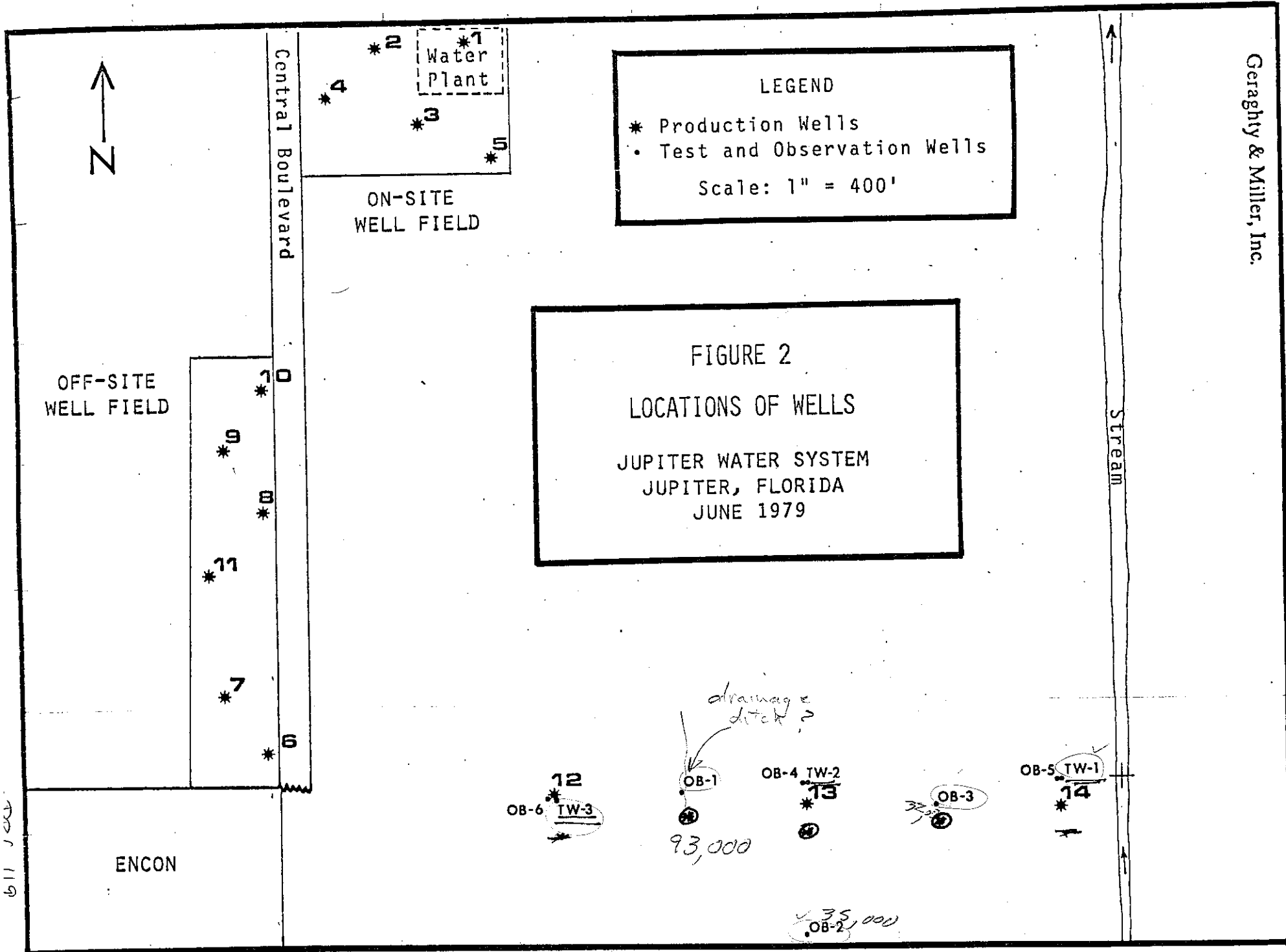
FIGURE 1 - LOCATION MAP OF MAJOR DIVERSIONS IN THE VICINITY OF JUPITER WATER PLANT

LEGEND

- * Production Wells
- Test and Observation Wells

Scale: 1" = 400'

FIGURE 2
LOCATIONS OF WELLS
JUPITER WATER SYSTEM
JUPITER, FLORIDA
JUNE 1979



WELL LOGPROJECT: DUS-Jupiter DATE: 11/9/78 SHEET: 1 OF 2LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Production Well 13 (PW-13) DRILLING METHOD: Cable-toolSAMPLE DESCRIBED BY: Witt SAMPLING METHOD: Bailed and airlift

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, dk brown, medium- to fine-grained, trace of gray silty clay, trace of fine to medium shell fragments	0 - 17	17
SAND, brown, medium- to fine-grained, trace of shell fragments and organics	17 - 20	3
SAND, lt brown, medium- to fine-grained, trace of shell fragments and organics	20 - 25	5
SAND, gray, medium- to fine-grained, clear quartz grains, trace shell fragments, white, angular, medium- to fine-grained sand, light gray in color	25 - 30	5
SAND, brown to gray, fine- to very fine-grained, trace of shell fragments	30 - 35	5
CONGLOMERATE, pebble-size shell fragments, trace of fines, unconsolidated	35 - 40	5
SAND, lt gray, fine- to very fine-grained, trace of shell fragments	40 - 45	5
SAND, lt gray, fine- to medium-grained, 10% shell fragments	45 - 50	5
SAND, lt gray, fine- to very fine-grained, trace of silt and clay, 15% shell fragments	50 - 60	10
SAND, lt gray, very fine-grained, 15% silt and clay, 15% medium to very fine shell fragments	60 - 80	20
SAND, lt gray, fine- to medium-grained, 15% medium shell fragments, trace of silt and clay	80 - 90	10
SAND, lt gray, fine- to medium-grained, 40% medium to fine shell fragments	90 - 95	5
SAND, lt gray, coarse-grained, consisting of shell fragments	95 - 100	5
SAND, lt gray, medium- to very fine-grained with coarse shell fragments, trace of silt	100 - 105	5
SAND, lt gray, very fine- to fine medium-grained, consisting of shell fragments with 20% silt and clay	105 - 115	10

Top Bz

WELL LOG

PROJECT: DUS-Jupiter DATE: 11/9/78 SHEET: 2 OF 2

LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. Maxson

WELL NUMBER: Production Well 13 (PW-13) DRILLING METHOD: Cable-tool

SAMPLE DESCRIBED BY: Witt SAMPLING METHOD: Bailed and airlift

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, lt gray, medium- to very fine-grained, consisting of shell fragments, trace of silt and clay-size particles	115 - 125	10
SANDSTONE, lt gray, fine to very-fine grained, with dk gray limestone consisting of shell fragments	125 - 173	48
LIMESTONE, shell hash, lt. gray	173 - 180	7
LIMESTONE, lt. gray, oolitic, shell fragments, quartz	180 - 190	10
LIMESTONE, lt. gray, shell hash	190 - 197	7
SANDSTONE, gray, fine- to very fine-grained, consisting of shell fragments	197 - 199	2
LIMESTONE, buff, dense, hard	199 - 200	1+
Total depth 200 feet		

Base - Pz

WELL LOG

PROJECT: DUS-Jupiter DATE: 11/13/78 SHEET: 1 OF 2
 LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. Maxson
 WELL NUMBER: Observation Well 1 (OB-1) DRILLING METHOD: Drive-wash
 SAMPLE DESCRIBED BY: G. M. Witt SAMPLING METHOD: Wash

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, brown, fine- to very fine-grained, trace organics	0 - 10	10
SAND, lt. brown, fine- to medium-grained	10 - 20	10
SAND, white, fine- to very fine-grained	20 - 25	5
SAND, lt. gray, fine- to medium-grained, with trace of white shell fragments	25 - 30	5
SAND, lt. gray, coarse- to very fine-grained, consisting of shell fragments	30 - 40	10
SAND, lt. gray, coarse- to very fine-grained with large, coarse shell fragments	40 - 45	5
SAND, lt. gray, very fine- to medium-grained	45 - 55	10
SAND, gray, very fine- to fine-grained, trace of shell fragments of same grain size	55 - 65	10
SAND, gray, very fine- to fine-grained, trace of silt and clay particles	65 - 70	5
SAND, gray, coarse- to very fine-grained, consisting of shell fragments	70 - 75	5
SAND, gray, very fine- to fine-grained, subrounded grained, trace of shell fragments, silt and clay size particles	75 - 80	5
SAND, gray, medium- to fine-grained, clear, consisting of shell fragments	80 - 90	10
SAND, gray, medium- to coarse-grained, consisting of shell fragments, with 15% coarse shell fragments well sorted	90 - 95	5
SAND, gray, medium- to very fine-grained, with 20% large, coarse shell fragments	95 - 100	5
SAND, gray, medium- to very fine-grained, consisting of shell fragments	100 - 120	20

WELL LOG

PROJECT: DUS-Jupiter DATE: 11/13/78 SHEET: 2 OF 2LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Observation Well 1 (OB-1) DRILLING METHOD: Drive-WashSAMPLE DESCRIBED BY: G. M. Witt SAMPLING METHOD: Wash

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SANDSTONE, tan to gray, fair consolidation, with large coarse shell fragments, unconsolidated	120 - 125	5
SAND, gray, very fine- to medium-grained	125 - 135	10
SAND, gray, medium- to very fine-grained, consisting of shell fragments, 10% phosphate	135 - 145	10+
Total Depth 145 feet		

WELL LOGPROJECT: DUS-Jupiter DATE: 11/14/78 SHEET: 1 OF 1LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Observation Well 2 (OB-2) DRILLING METHOD: Drive-washSAMPLE DESCRIBED BY: G. M. Witt SAMPLING METHOD: Wash

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, brown, fine- to very fine-grained, trace of organic silt and clay	0 - 10	10
SAND, tan, fine medium- to fine-grained	10 - 25	15
SAND, gray, medium- to fine-grained	25 - 30	5
SAND, medium- to fine-grained, with coarse shell fragments	30 - 36	6
SAND, coarse- to fine-grained, consisting of shell fragments	36 - 40	4
SAND, gray, coarse- to fine-grained, consisting of shell fragments	40 - 55	15
SAND, gray, very fine- to fine-grained, trace of coarse shell fragments	55 - 75	20
SAND, gray, very fine- to fine-grained, trace of shell fragments	75 - 85	10
SAND, gray, very fine- to fine-grained, with 30% shell fragments, medium-grained	85 - 95	10
SAND, gray, medium- to fine-grained, consisting of shell fragments	95 - 110	15
SAND, tan, medium- to fine-grained, consisting of shell fragments, trace of coarse shell fragments, 20% fine- to very fine-grained sand	110 - 120	10
SAND, medium- to fine-grained, consisting of phosphate and shell fragments, with 10% fine- to very fine-grained sand	120 - 145	25+
Total depth 145 feet		

WELL LOG

PROJECT: DUS-Jupiter DATE: 11/16/78 SHEET: 1 OF 2
 LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. Maxson
 WELL NUMBER: Observation Well 3 (OB-3) DRILLING METHOD: Drive-Wash
 SAMPLE DESCRIBED BY: G. M. Witt SAMPLING METHOD: Wash

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, dark brown, medium- to very fine-grained, trace organics	0 - 10	10
SAND, lt. brown, medium- to very fine-grained, trace of organics	10 - 20	10
SAND, light brown, medium- to fine-grained	20 - 25	5
SAND, gray, medium- to fine-grained, trace of shell fragments, trace of lt. brown-tan clay	25 - 30	5
SAND, gray, coarse- to fine-grained	30 - 35	5
SAND, gray, coarse- to fine-grained, with trace of very fine shell fragments	35 - 40	5
SAND, gray, coarse- to fine-grained, with coarse shell fragments	40 - 50	10
SAND, gray, medium- to fine-grained, 40% shell fragments, coarse- to very fine-grained	50 - 55	5
SAND, gray, coarse- to medium-grained, shell fragments, trace fine sand and shell fragments	55 - 60	5
SAND, gray, fine- to very fine-grained, 20% silt-size grains, trace of medium-size shell fragments	60 - 70	10
SAND, gray, medium-grained, trace coarse shell fragments, with 25% fine- to very fine-grained sand, and shell fragments, fine to very fine	70 - 75	5
SAND, gray, coarse- to medium-grained, consisting of shell fragments, gray	75 - 80	5
SAND, gray, fine- to very fine-grained, silty	80 - 85	5
SAND, tan, medium- to very fine-grained, consisting of shell fragments	85 - 90	5
SAND, medium- to very fine-grained, consisting of shell fragments	90 - 95	5
SANDSTONE, gray, poor cementation, fine- to very fine-grained with unconsolidated sand and shell fragments	95 - 100	5

WELL LOGPROJECT: DUS-Jupiter DATE: 11/16/78 SHEET: 2 OF 2LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Observation Well 3 (OB-3) DRILLING METHOD: Drive-WashSAMPLE DESCRIBED BY: G. M. Witt SAMPLING METHOD: Wash

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SANDSTONE, gray, good cementation, fine- to medium-grained, with large shell fragments, unconsolidated	100 - 105	5
SAND, gray, medium- to coarse-grained, consisting of shell fragments	105 - 115	10
SANDSTONE, tan, good cementation, consisting of shell fragments of medium to coarse grain, 60% sample cemented	115 - 125	10
SAND, fine- to very fine-grained, consisting of phosphate	125 - 130	5
SAND, medium-grained, consisting of shell fragments, fine- to very fine-grained sand	130 - 145	15+
Total depth 145 feet		

WELL LOG

PROJECT: DUS-Jupiter DATE: 1/5/79 SHEET: 1 OF 2LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Production Well 12 (PW-12) DRILLING METHOD: Cable-toolSAMPLE DESCRIBED BY: Witt/Lawrence SAMPLING METHOD: Bailed and Airlift

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, dk brown, medium- to fine-grained with organics	0 - 5	5
SAND, lt brown, medium- to fine-grained	5 - 15	10
SAND, brown, fine- to medium-grained with organics	15 - 21.5	6.5
SAND, gray, fine-grained, trace of organics	21.5 - 30	8.5
SAND, gray, medium-grained, trace of shell fragments	30 - 50	20
SAND, gray, fine-grained, appreciable organics, trace of shell fragments	50 - 55	5
SAND, gray, fine- to very fine-grained, appreciable organics, trace of coarse shell fragments	55 - 62	7
SAND, gray, very fine-grained, trace of silt and organics	62 - 75	13
SAND, gray, fine- to very fine-grained, with shell fragments	75 - 83	8
SAND, gray, fine- to medium-grained, 50% coarse-grained shell fragments	83 - 100	17
SAND, gray, fine- to medium-grained, with 30% coarse to medium shell fragments	100 - 105	5
SAND, gray, medium- to very fine-grained and trace of shell fragments	105 - 110	5
SAND, gray, very fine- to medium-grained, trace of shell fragments	110 - 115	5
SAND, gray, very fine- to fine-grained	115 - 117	2
SAND, gray, medium- to very fine-grained, with 30% shell fragments, trace pebble-sized limestone chips	117 - 125	8
SAND, lt gray, medium- to fine-grained, with 30% shell fragments, trace of limestone	125 - 144	19
SAND, gray, medium- to fine-grained, some coarse to very fine shell fragments	144 - 150	6
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WELL LOGPROJECT: DUS-Jupiter DATE: 1/5/79 SHEET: 2 OF 2LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Production Well 12 (PW-12) DRILLING METHOD: Cable-toolSAMPLE DESCRIBED BY: Witt/Lawrence SAMPLING METHOD: Bailed

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
LIMESTONE, consisting of loosely-cemented shell fragments with trace of fine-grained sand Total depth 200 feet	150 - 200	50+

WELL LOGPROJECT: DUS-Jupiter DATE: 12/14/78 SHEET: 1 OF 2LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Production Well 14 (PW-14) DRILLING METHOD: Cable-toolSAMPLE DESCRIBED BY: G. M. Witt SAMPLING METHOD: Bailed and airlift

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, dk brown, medium- to fine-grained, with organics	0 - 10	10
SAND, lt. brown, medium- to very fine-grained, clear	10 - 20	10
SAND, tan-white, medium- to fine-grained	20 - 25	5
SAND, tan-white, medium- to very fine-grained, trace of shell fragments	25 - 30	5
SAND, lt. gray, medium fine- to very fine-grained, 30% shell fragments	30 - 35	5
SAND, lt. gray, medium- to very fine-grained, 20% shell fragments	35 - 40	5
SAND, lt. gray, medium- to very fine-grained, trace of shell fragments	40 - 55	15
SAND, lt. gray, fine- to medium fine-grained, trace of silt, 40% coarse shell fragments	55 - 70	15
SAND, lt. gray, very fine-grained, trace of silt, clay and shell fragments	70 - 90	20
LIMESTONE, hard, fine-grained, poor porosity, with shell fragments	90 - 95	5
SAND, very fine-grained, consisting of shell fragments, trace silt and clay	95 - 100	5
SAND, fine-grained, with shell fragments, trace of silt	100 - 110	10
SANDSTONE, medium-grained, consisting of shell fragments	110 - 115	5
NO SAMPLE	115 - 127	12
SANDSTONE, lt. gray, fine- to very fine-grained with shell fragments	127 - 130	3
SANDSTONE, lt. gray, medium- to very fine-grained, with shell fragments	130 - 160	30
LIMESTONE, cream-lt. gray, with shell fragments	160 - 165	5

WELL LOG

PROJECT: DUS-Jupiter DATE: 12/14/78 SHEET: 2 OF 2LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Production Well 14 (PW-14) DRILLING METHOD: Cable-toolSAMPLE DESCRIBED BY: G. M. Witt SAMPLING METHOD: Bailed and airlift

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SANDSTONE, lt. gray-lt. brown, fine- to very fine-grained, with trace of shell fragments	165 - 180	15
LIMESTONE, buff, with 30% sand, fine- to very fine-grained, trace of shell fragments	180 - 198	18
CLAY, gray, with some sand	198 - 199	1+
Total depth 199 feet		

WELL LOG

PROJECT: DUS-Jupiter DATE: 9/18/78 SHEET: 1 OF 1
 LOCATION: Jupiter- Florida DRILLING CONTRACTOR: C. B. Maxson
 WELL NUMBER: Test Well 1 (TW-1) DRILLING METHOD: Drive-wash
 SAMPLE DESCRIBED BY: Wheatley SAMPLING METHOD: Wash

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, brown, medium-grained, with dk. brown organic matter	0 - 10	10
SAND, tan, fine-grained	10 - 20	10
SAND, lt. gray, medium- to fine-grained, with 5% gray clay	20 - 35	15
SAND, gray, medium- to coarse-grained, with 20% shell fragments	35 - 55	20
SHELL HASH, gray, medium fragments, with 20% medium- to coarse-grained gray sand	55 - 60	5
SAND, gray, very fine-grained, trace of medium shell fragments	60 - 70	10
SAND, gray, very fine-grained, with 30% fine shell fragments	70 - 75	5
SAND, gray, very fine-grained, trace of shell fragments	75 - 95	20
LIMESTONE, gray, with very fine-grained sand, gray, trace of shell fragments	95 - 105	10
LIMESTONE, tan, with 40% medium- to coarse-grained gray sand and shell fragments	105 - 110	5
LIMESTONE, tan, trace of blue-gray shell fragments	110 - 120	10
LIMESTONE, brown, with 30% medium- to coarse-grained sand, trace of shell fragments	120 - 125	5
LIMESTONE, tan, granular, soft, medium-grained	125 - 135	10
SAND, with 30% blue-gray sand and shell fragments	135 - 140	5
SANDSTONE, calcareous, blue-gray, with fine shell fragments	140 - 155	15+
Total depth 155 feet		

WELL LOG

PROJECT: DUS-Jupiter DATE: 9/16/78 SHEET: 1 OF 2
 LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. Maxson
 WELL NUMBER: Test Well 2 (TW-2) DRILLING METHOD: Drive-wash
 SAMPLE DESCRIBED BY: Wheatley SAMPLING METHOD: Wash

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, white, medium-grained, with 40% dark brown organic material	0 - 5	5
SAND, tan, medium-grained	5 - 10	5
SAND, tan, fine-grained	10 - 15	5
SAND, white, medium-grained, with trace of gray clay	15 - 20	5
SAND, brown to white, fine-grained, with fine organics	20 - 25	5
Sand, white, fine-grained	25 - 30	5
SAND, white to gray, medium-grained with 10% to 15% white, tan, gray, thin, fine shell fragments	30 - 35	5
SHELL HASH, gray, tan, and white, thin to thick, fine fragments (60%); 40% fine to medium gray to black sand	35 - 40	5
SAND, gray to black, fine-grained, with 20% shell fragments, thin, fine gray to white	40 - 45	5
SAND, gray to black, fine-grained, less than 10% shell and shell fragments	45 - 50	5
SAND, gray, fine- to medium-grained, with 10% fine shell fragments	50 - 62	12
SAND, gray, fine-grained, less than 10% fine shell fragments	62 - 79	17
SHELL HASH, fine- to medium-grained, with 40% fine gray sand	79 - 88	9
SAND, gray, fine- to medium-grained, with less than 15% fine, thin shell fragments	88 - 92	4
SAND, gray, fine- to medium-grained, with 30% fine shell fragments	92 - 97	5
SHELL HASH, fragments, fine to medium, thin, with 50% fine- to medium-grained, gray sand	97 - 101	4

WELL LOGPROJECT: DUS-Jupiter DATE: 9/16/78 SHEET: 2 OF 2LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Test Well 2 (TW-2) DRILLING METHOD: Drive-washSAMPLE DESCRIBED BY: Wheatley SAMPLING METHOD: wash

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, gray, fine- to medium-grained, with 30% shells and shell fragments	101 - 111	10
SAND, gray, to buff, very fine-grained	111 - 117	6
SHELL HASH, gray, fine and lithified, with 20% fine-grained gray and black sand	117 - 125	8
LIMESTONE, tan to gray, with 30% shell fragments	125 - 135	10
LIMESTONE, tan to gray, with gray, fine-grained sand and black phosphatic sand	135 - 143	8
SANDSTONE, gray, with black sand and fine shell fragments	143 - 156	13
SAND, gray, very fine-grained, with thin fine shell fragments	156 - 165	9+
Total depth 165 feet		

WELL LOGPROJECT: DUS-Jupiter DATE: 9/16/78 SHEET: 1 OF 1LOCATION: Jupiter, Florida DRILLING CONTRACTOR: C. B. MaxsonWELL NUMBER: Test Well 3 (TW-3) DRILLING METHOD: Drive-washSAMPLE DESCRIBED BY: Wheatley SAMPLING METHOD: Wash

SAMPLE DESCRIPTION	DEPTH INTERVAL (FEET)	THICKNESS (FEET)
SAND, brown, medium-grained, with organic matter	0 - 10	10
SAND, tan, very fine-grained	10 - 15	5
SAME, with trace of gray clay	15 - 20	5
SAND, tan, very fine-grained, trace of gray clay and organic material	20 - 25	5
SAND, lt. gray, fine-grained, trace of gray clay	25 - 30	5
SAND, gray, fine-grained, with 30% fine shell fragments	30 - 50	20
SAND, gray, medium-grained, with 30% medium shell fragments	50 - 55	5
SAND, gray, very fine-grained, trace very fine shell fragments	55 - 80	25
SAND, gray, medium- to fine-grained, with 30% medium shell fragments	80 - 95	15
SAND, gray, very fine-grained, with 30% medium to fine shell fragments	95 - 115	20
LIMESTONE, gray, 40% shell fragments and medium- to fine-grained sand (lime sand)	115 - 120	5
SAND (Lime sand), coarse- to fine-grained, 5% limestone, gray to white	120 - 145	25
Open hole start 126 Lightly cemented		
SAND, gray, fine-grained	145 - 160	15+
Total depth 160 feet		

PUMPING TEST FORM

PROJECT DUS Jupiter WELL TW1 LOCATION Jupiter Water PAGE 1 OF 1

SCREEN _____ M.P. TOC HT. ABOVE G.S. _____ W.L. MEAS. W/ tape

PUMPING WELL PW14 Q _____ ORIFICE _____ WEATHER clear

DRAWDOWN RECOVERY LOCATION SKETCH

TEST START 12/20/78 0900
END 12/20/78 2100

DATE TIME	t	HELD	WET	D.T.W.	s		MANO-METER	Q	WATER TEMP.
12/20 0719	PRE			5.78					
0819	PRE			5.77					
0829	PRE			5.77					
0846	PRE			5.76					
0856	PRE			5.77	0				
0900	0			START	0				
0906	6			14.73	8.96				
0909	9			18.82	13.05				Tape hanging up
0912	12			18.73	12.96				
0924	24			20.70	14.73				
0928	28			21.90	16.13				
0930	30			22.05	16.28				
0932	32			22.23	16.46				
0936	36			22.40	16.63				
0941	41			22.63	16.86				
0946	46			22.87	17.10				
0952	52			23.05	17.28				
0956	56			23.18	17.41				
1001	61			23.31	17.54				
1006	66			23.48	17.71				
1011	71			23.55	17.78				
1021	81			23.76	17.99				
1031	91			23.91	18.14				
1041	101			24.01	18.24				
1051	111			24.09	18.32				
1101	121			24.20	18.43				
1118	138			24.32	18.55				
1134	154			24.51	18.74				
1150	170			24.61	18.84				
1205	185			24.69	18.92				
1219	199			24.76	18.99				
1233	213			24.80	19.03				
1302	242			25.42	19.65				
1336	276			25.65	19.88				
1416	316			25.77	20.00				
1444	341			25.81	20.04				
1509	369			25.86	20.09				

PUMPING TEST FORM

PROJECT DOS-Jupiter WELL PW13 LOCATION Jupiter Water PAGE 1 OF 1

SCREEN _____ M.P. TOC HT. ABOVE G.S. _____ W.L. MEAS. W/ tape

PUMPING WELL PW14 Q _____ ORIFICE _____ WEATHER _____

DRAWDOWN RECOVERY LOCATION SKETCH TEST START 12/20/78 0900 END 12/20/78 2100

DATE TIME	t	HELD	WET	D.T.W.	s			MANO-METER	Q	WATER TEMP.
12/20 0745	PRE			7.59						
0820				7.59						
0847				7.59						
0853				7.59	0					
0900	0			START	0					
	1			7.59	0					
	2			7.59	0					
	3			7.61	.02					
	4			7.63	.04					
0905	5			7.63	.04					
	6			7.65	.06					
	7			7.65	.06					
	8			7.67	.08					
	9			7.68	.09					
	10			7.69	.10					
	12			7.74	.15					
	14			7.76	.17					
	16			7.79	.20					
	18			7.81	.22					
	20			7.85	.26					
	22			7.88	.29					
	24			7.91	.32					
	26			7.95	.36					
	28			7.97	.38					
0930	30			7.99	.40					
	35			8.05	.46					
	40			8.10	.51					
0945	45			8.16	.57					
	50			8.20	.61					
1000	60			8.29	.70					
	70			8.36	.77					
	80			8.41	.82					
1030	90			8.47	.88					
1045	105			8.54	.95					
1100	120			8.59	1.00					
	140			8.66	1.07					
	167			8.75	1.16					

PUMPING TEST FORM

PROJECT DOS-Jupiter WELL PW 12 LOCATION Jupiter Water PAGE 1 OF 1

SCREEN _____ M.P. TOC HT. ABOVE G.S. _____ W.L. MEAS. W/ M-scope + tape

PUMPING WELL PW 12 Q _____ ORIFICE _____ WEATHER _____

DRAWDOWN RECOVERY LOCATION SKETCH TEST START 1/18/79 0830 END 1/18/79 1645

DATE TIME	t	HELD	WET	D.T.W.	s		MANO-METER	Q	WATER TEMP.
1/18 0713	PRE			9.48	0				
0742				9.45					
0751				9.46					
0827				9.49	0		10393140		
0830	0			START					
0831	1			22.50	13.01				
	2			24.38	14.89				
	3			25.48	15.99				
	5			26.29	16.80				
	9			27.61	18.12				
0845	15			28.76	19.27				
0850	20			29.33	19.84				
	25			29.73	20.24				
0900	30			29.96	20.47				
	45			30.53	21.04			730	
0930	60			30.86	21.37				
0940	70			31.05	21.56				
0950	80			31.19	21.70				
1000	90			31.30	21.81				
1015	105			31.53	22.04				
1030	120			31.65	22.16				
1046	136			31.78	22.29				
1100	150			31.80	22.31				
1130	180			32.19	22.70		10525400		
1200	210			32.34	22.85				
1230	240			32.39	22.90		10569100		
1300	270			32.51	23.02				
1330	300			32.57	23.08		10613600		
1400	330			32.62	23.13		10635100		
1430	360			32.66	23.17		10657100		
1500	390			32.70	23.21		10678900		
1530	420			32.68	23.19		10700850		
1600	450			32.71	23.22		10722700		
1630	480			32.72	23.23		10743800		
1644	494			32.74	23.25				
1645	495			END			10755400		

PUMPING TEST FORM

PROJECT DUS Jupiter WELL PW12 LOCATION Jupiter Water PAGE 1 OF 1

SCREEN _____ M.P. TOC HT. ABOVE G.S. _____ W.L. MEAS. W/ M-scope + tape

PUMPING WELL PW12 Q _____ ORIFICE _____ WEATHER _____

DRAWDOWN _____ RECOVERY LOCATION SKETCH _____ TEST START 1/18/79 0830
 END 1/18/79 1645

DATE TIME	t	HELD	WET	D.T.W.	s		MANO-METER	Q	WATER TEMP.
1/18 1645	0			32.74	END				
1646	1			28.54	9.20				
	2			20.00	12.74				
	3			18.87	13.87				
	4			18.00	14.74				
1650	5			17.35	15.39				
	7			16.32	16.42				
	9			15.74	17.00				
	11			15.27	17.46				
	14			14.66	18.08				
	17			14.17	18.57				
1705	20			13.81	18.93				
	23			13.56	19.18				
	26			13.30	19.44				
1715	30			13.08	19.66				
	35			12.73	20.01				
1725	40			12.54	20.20				
1730	45			12.24	20.50				
	50			12.11	20.26				
	55			12.04	20.70				
1745	60			11.84	20.90				
	65			11.71	21.03				
1755	70			11.61	21.13				
	80			11.41	21.33				
	90			11.26	21.48				
	101			11.11	21.68				
	110			11.04	21.70				
1845	120			10.93	21.81				

PUMPING TEST FORM

PROJECT DUS-Jupiter WELL OB 1 LOCATION Jupiter Water PAGE 1 OF 2

SCREEN _____ M.P. ToC HT. ABOVE G.S. _____ W.L. MEAS. W/ Tape

PUMPING WELL PW12 Q _____ ORIFICE _____ WEATHER _____

DRAWDOWN RECOVERY LOCATION SKETCH

TEST START 1/18/79 0830
END 1/18/79 1645

DATE TIME	t	HELD	WET	D.T.W.	s		MANO-METER	Q	WATER TEMP.
1/18 0739	PRE			6.92					
0754				6.92					
0827				6.92	0				
0830	0			START					
0831	1			6.92	0				
	2			6.94	.02				
	3 1/2			7.02	.10				
0835	5			7.15	.23				
	6			7.21	.29				
	7			7.29	.37				
	8			7.37	.45				
	9			7.44	.52				
0840	10			7.52	.60				
	11			7.58	.66				
	12			7.62	.70				
	13			7.69	.77				
0845	15			7.80	.88				
	17			7.87	.95				
	19			7.96	1.04				
	21			8.02	1.10				
	24			8.12	1.20				
	27 1/2			8.19	1.27				
0900	30			8.23	1.31				
	35			8.31	1.39				
0910	40			8.40	1.48				
	46 1/2			8.46	1.54				
	50			8.50	1.58				
0930	60			8.57	1.65				
	70			8.65	1.73				
	84			8.71	1.79				
1005	95			8.75	1.83				
1020	110			8.80	1.88				
1039	129			8.86	1.94				
1107	157			8.90	1.98				
1140	190			8.97	2.05				
1210	220			8.98	2.06				
1249	259			9.05	2.13				

PUMPING TEST FORM

PROJECT DUS-Jupiter WELL TW3 LOCATION Jupiter Water PAGE 1 OF 1

SCREEN _____ M.P. TOC HT. ABOVE G.S. _____ W.L. MEAS. W/ Tape

PUMPING WELL PW12 Q _____ ORIFICE _____ WEATHER _____

DRAWDOWN RECOVERY LOCATION SKETCH

TEST START 1/18/79 0830
END 1/18/79 1645

DATE TIME	t	HELD	WET	D.T.W.	s	$\frac{S^2}{2m}$	MANO-METER	Q	WATER TEMP.
1/18 0720	PRE			7.56					
0734	PRE			7.56					
0747	PRE			7.55	0				
0830	0			START					
0834	4			23.84	16.29	15.70			
	7			24.98	17.43				
	14			26.27	18.72				
	16			26.65	19.10				
	19			26.98	19.43				
	23			27.24	19.69				
	27			27.38	19.83				
	33			27.81	20.26				
	38			27.94	20.39	19.47			
	43			28.08	20.53				
	46			28.21	20.66				
0922	52			28.35	20.80				
	62			28.51	20.96				
	72			28.68	21.13				
	82			28.84	21.29				
1002	92			28.97	21.42				
1012	102			29.05	21.50				
	112			29.20	21.65				
	122			29.24	21.69				
	138			29.34	21.79				
1102	152			29.41	21.86				
	185			29.90	22.35				
1206	216			29.98	22.43				
	247			30.05	22.50				
1305	275			30.17	22.62				
	304			30.21	22.66				
	338			30.27	22.72				
1434	364			30.28	22.73				
	396			30.34	22.79				
1534	424			30.36	22.81				
	457			30.37	22.82				
1632	482			30.37	22.82				

PUMPING TEST FORM

PROJECT DUS-Jupiter WELL TW 3 LOCATION Jupiter Water PAGE 1 OF 1

SCREEN _____ M.P. TOC HT. ABOVE G.S. _____ W.L. MEAS. W/ tape

PUMPING WELL PW 12 Q _____ ORIFICE _____ WEATHER _____

____ DRAWDOWN RECOVERY _____ LOCATION SKETCH _____ TEST START 1/18/79 0830 END 1/18/79 1645

DATE TIME	t	HELD	WET	D.T.W.	s			MANO-METER	Q	WATER TEMP.
1644				30.33	0					
1645				END						
	1/2			20.87	9.46					
	1 1/2			17.79	12.54					
1648	3			16.59	13.74					
1650	5			15.81	14.52					
	6			15.24	15.09					
	7			14.65	15.68					
	8			14.25	16.08					
1655	10			13.76	16.57					
	12			13.21	17.12					
1700	15			12.66	17.67					
	16			12.52	17.81					
	19			12.11	18.22					
1705	20			12.00	18.33					
	22			11.79	18.54					
	24			11.63	18.70					
1710	25			11.52	18.81					
	27			11.31	19.02					
1715	30			11.14	19.19					
	32			10.97	19.36					
1720	35			10.81	19.52					
	38			10.67	19.66					
1725	40			10.59	19.74					
1730	45			10.29	20.04					
	51			10.24	20.09					
	57			10.08	20.25					
	61			9.94	20.39					
	66			9.85	20.48					
	71			9.73	20.60					
	81			9.55	20.78					
1816	91			9.40	20.93					
	102			9.26	21.07					
	111			9.15	21.18					
1847	122			9.05	21.28					

PUMPING TEST FORM

PROJECT DUS-Jupiter WELL OB 6 LOCATION Jupiter Water PAGE 1 OF 2

SCREEN _____ M.P. Top HT. ABOVE G.S. _____ W.L. MEAS. W/ tape

PUMPING WELL PW 12 Q _____ ORIFICE _____ WEATHER _____

DRAWDOWN RECOVERY LOCATION SKETCH

TEST START 1/18/79 0830
END 1/18/79 1645

DATE TIME	t	HELD	WET	D.T.W.	s	MANO-METER	Q	WATER TEMP.
1/18 0724	PRE			5.73				
0735	PRE			5.74				
0746	PRE			5.74				
0831	1			5.66	+0.08			
	2			5.61	+1.13			
	3			5.78	0.04			
	6			6.10	0.36			
	8			6.39	0.65			
0840	10			6.43	0.69			
0842	12			6.53	0.79			
0845	15			6.65	0.91			
0847	17			6.76	1.02			
0848	18			6.78	1.04			
0850	20			6.86	1.12			
	22			6.89	1.15			
	24			6.97	1.23			
	25			6.99	1.25			
	28			7.07	1.33			
0900	30			7.12	1.38			
	32			7.12	1.38			
	37			7.23	1.49			
	40			7.30	1.56			
0915	45			7.37	1.63			
	50			7.43	1.69			
0930	60			7.52	1.78			
0940	70			7.59	1.85			
0950	80			7.66	1.92			
1000	90			7.71	1.97			
1010	100			7.74	2.00			
1020	110			7.78	2.04			
1030	120			7.81	2.07			
1045	135			7.86	2.12			
1100	150			7.88	2.14			
1133	183			7.95	2.21			
1203	213			7.99	2.25			
1235	245			8.03	2.29			
1303	273			8.05	2.31			
1332	302			8.07	2.33			

PUMPING TEST FORM

PROJECT DUS-Jupiter WELL PW 14 LOCATION Jupiter Water PAGE 1 OF 1

SCREEN _____ M.P. TOC HT. ABOVE G.S. _____ W.L. MEAS. W/ tape

PUMPING WELL PW 14 Q _____ ORIFICE _____ WEATHER _____

DRAWDOWN RECOVERY LOCATION SKETCH

TEST START 12/20/78 0900
END 12/20/78 2100

DATE TIME	I	HELD	WET	D.T.W.	s	MANO-METER	Q	WATER TEMP.
12/20 0715	PRE			8.63				
0813				8.60				
0855				8.59		9679500		
0900	0			START	0			
	1/2			27.00	18.41			
	2			27.79	19.20			
	3			29.17	20.58	9682300		
0905	5			29.58	20.99			
	7			29.92	21.33			
	8			30.38	21.79			
	9			30.92	22.33			
0910	10			31.08	22.49			
	13			31.79	23.20			
0915	15			32.17	23.58	9691300		
	17			32.58	23.99	9693000		
	20 1/2			33.42	24.83			
	22			33.25	24.66	9697000		
	25			33.54	24.95			
0930	30			33.96	25.37	9703300		
	35			34.25	25.66			
	40			34.42	25.83			
	45			34.71	26.12			
	50			34.90	26.31	9719700		
	64			35.29	26.70			
	70			35.42	26.83			
	80			35.67	27.08			
1030	90			35.81	27.22	9750800		
	105			35.99	27.40			
1100	120			36.08	27.49			
	135			36.27	27.68	9786500		
	151			36.34	27.75			
1145	165			36.48	27.89	9809100		
1200	180			36.52	27.93			
	195			36.61	28.02			
1230	210			36.70	28.11	9844100		
1300	240			37.67	29.08	9860000		
1330	270			37.80	29.21	9891700		Adj Q

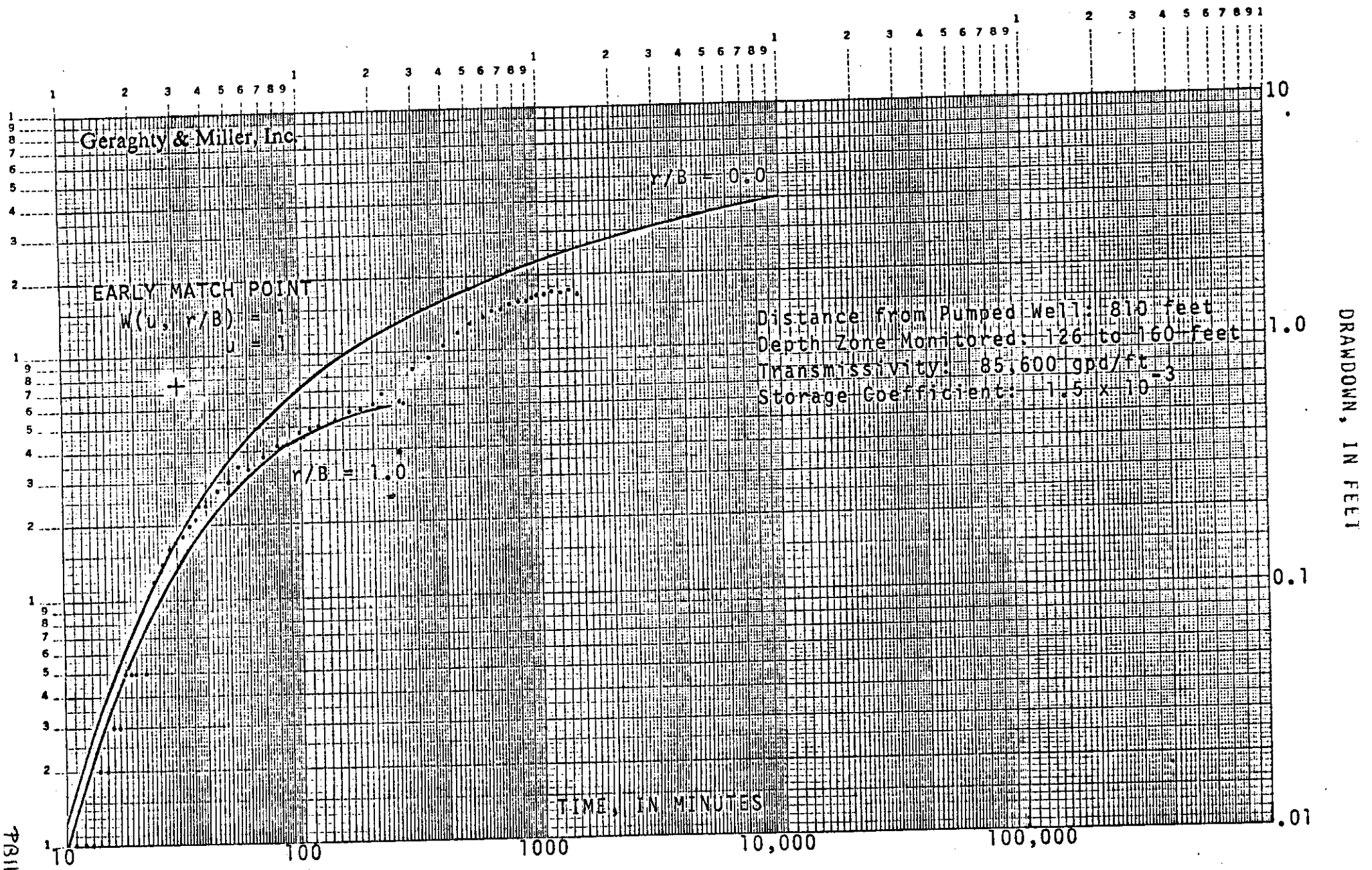


FIGURE 4: DRAWDOWN IN TW-3 AS A RESULT OF PUMPING PRODUCTION WELL 13, JUPITER WATER SYSTEM, JUPITER, FLORIDA, NOVEMBER 29-30, 1978

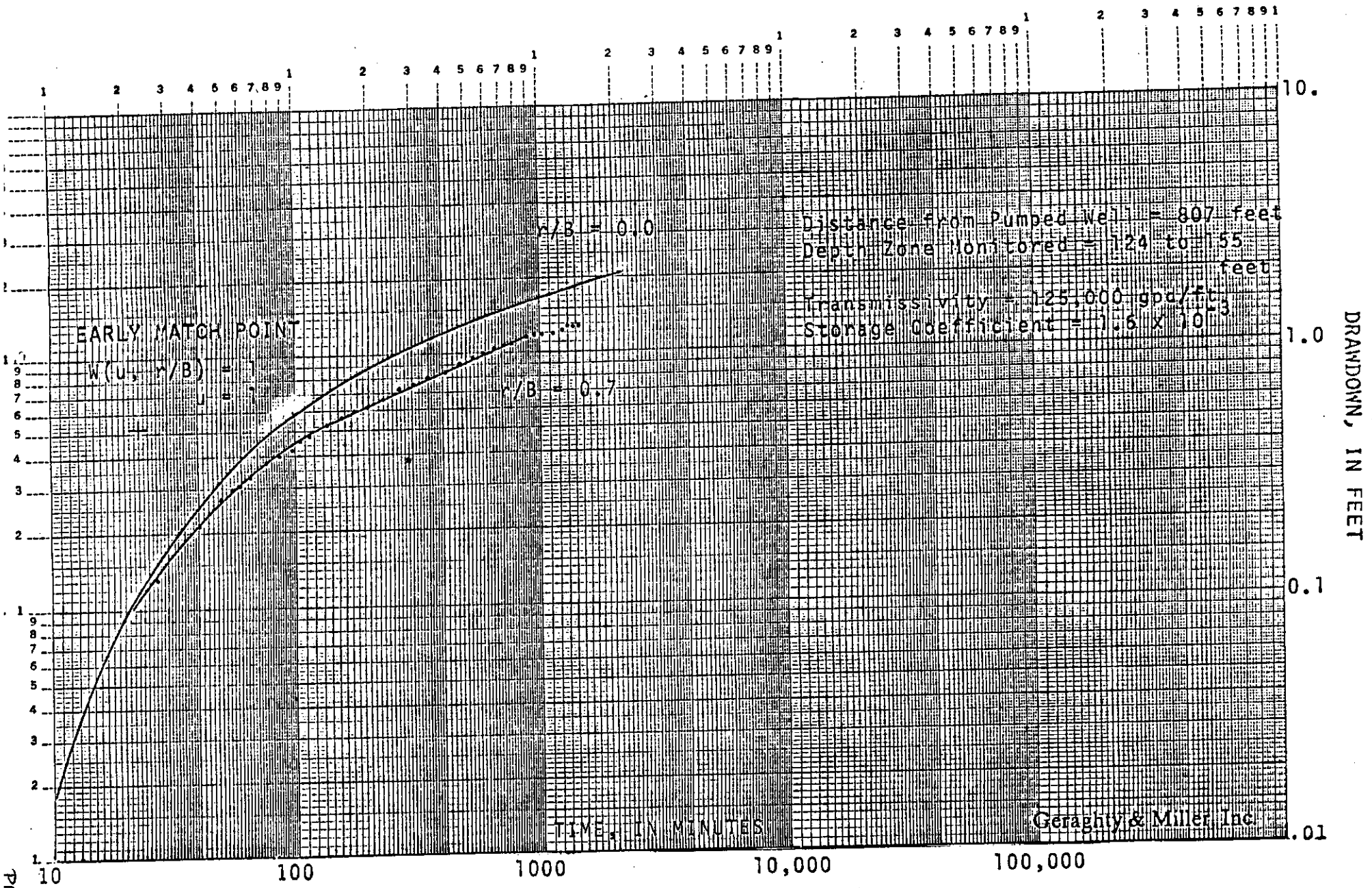
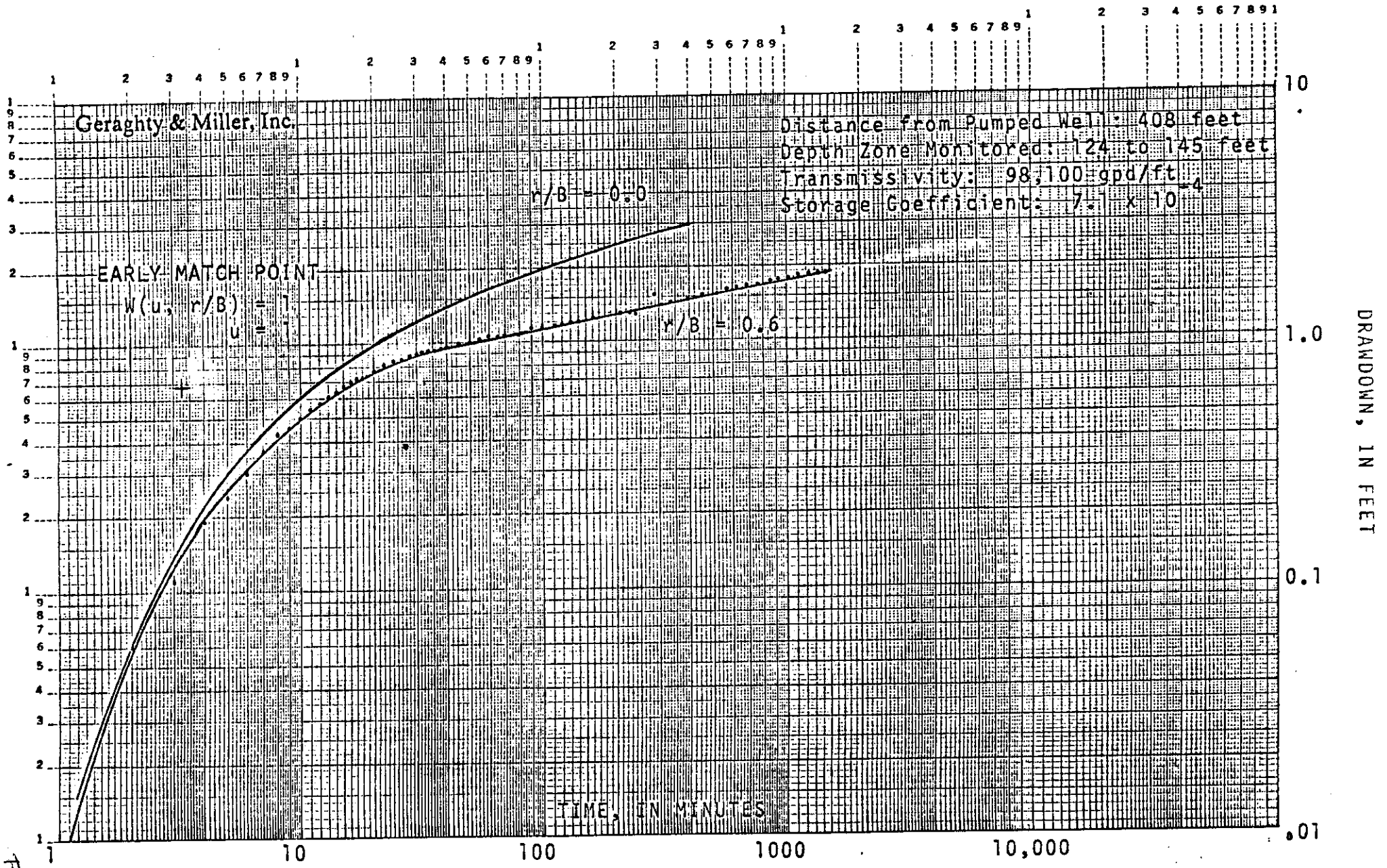


FIGURE 3: DRAWDOWN IN TW-1 AS A RESULT OF PUMPING PRODUCTION WELL 13, JUPITER WATER SYSTEM, JUPITER, FLORIDA, NOVEMBER 29-30, 1978

PR119



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FIGURE 5: DRAWDOWN IN OB-1 AS A RESULT OF PUMPING PRODUCTION WELL 13, JUPITER WATER SYSTEM, JUPITER, FLORIDA, NOVEMBER 29-30, 1978

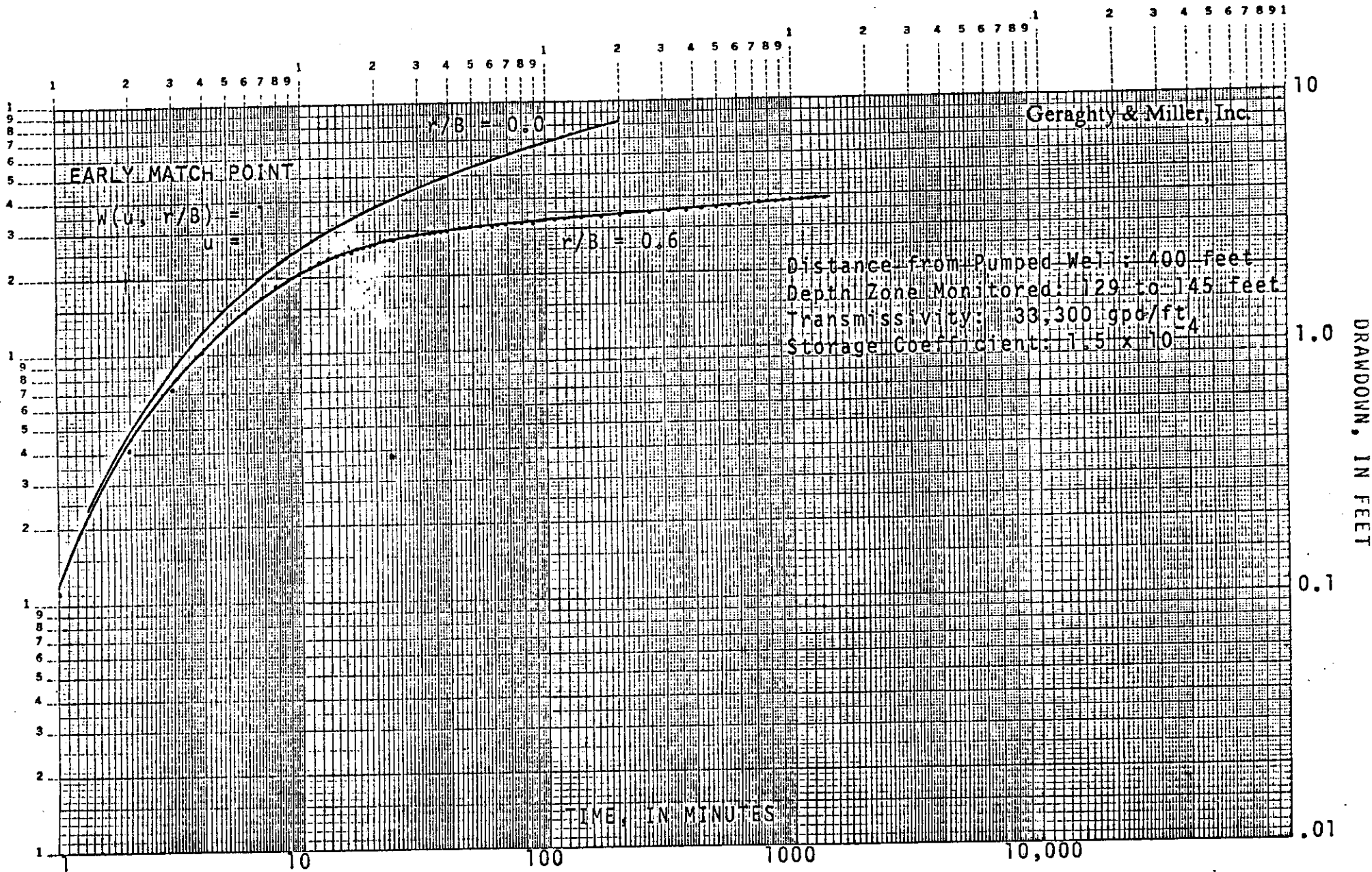


FIGURE 6: DRAWDOWN IN OB-2 AS A RESULT OF PUMPING PRODUCTION WELL 13, JUPITER WATER SYSTEM, JUPITER, FLORIDA, NOVEMBER 29-30, 1978

7B119

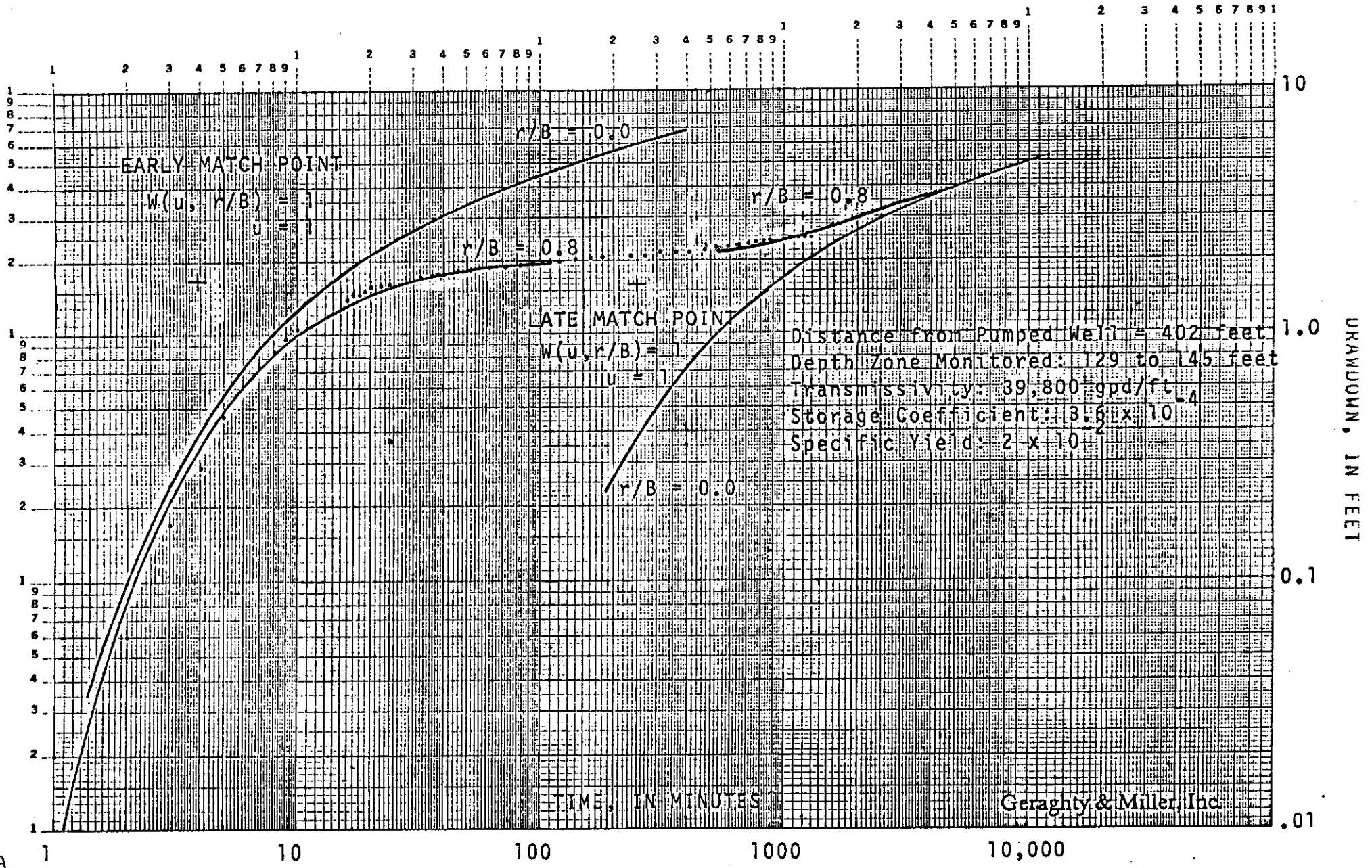


FIGURE 7: DRAWDOWN IN OB-3 AS A RESULT OF PUMPING PRODUCTION WELL 13, JUPITER WATER SYSTEM, JUPITER, FLORIDA, NOVEMBER 29-30, 1978

DR 119

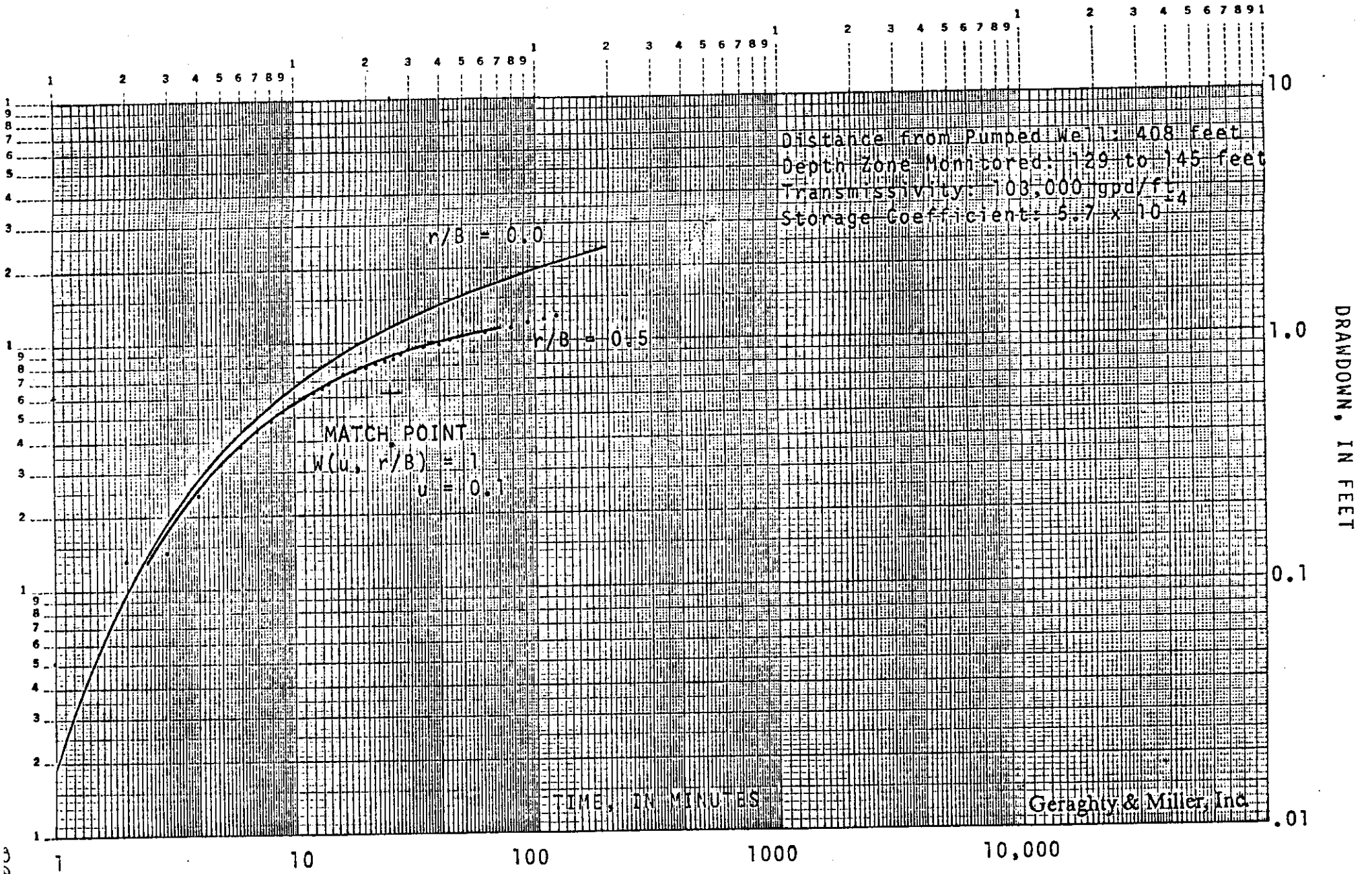


FIGURE 8: WATER-LEVEL RECOVERY IN OB-1 AFTER PUMPING PRODUCTION WELL 13, JUPITER WATER SYSTEM JUPITER, FLORIDA, NOVEMBER 29-30, 1978

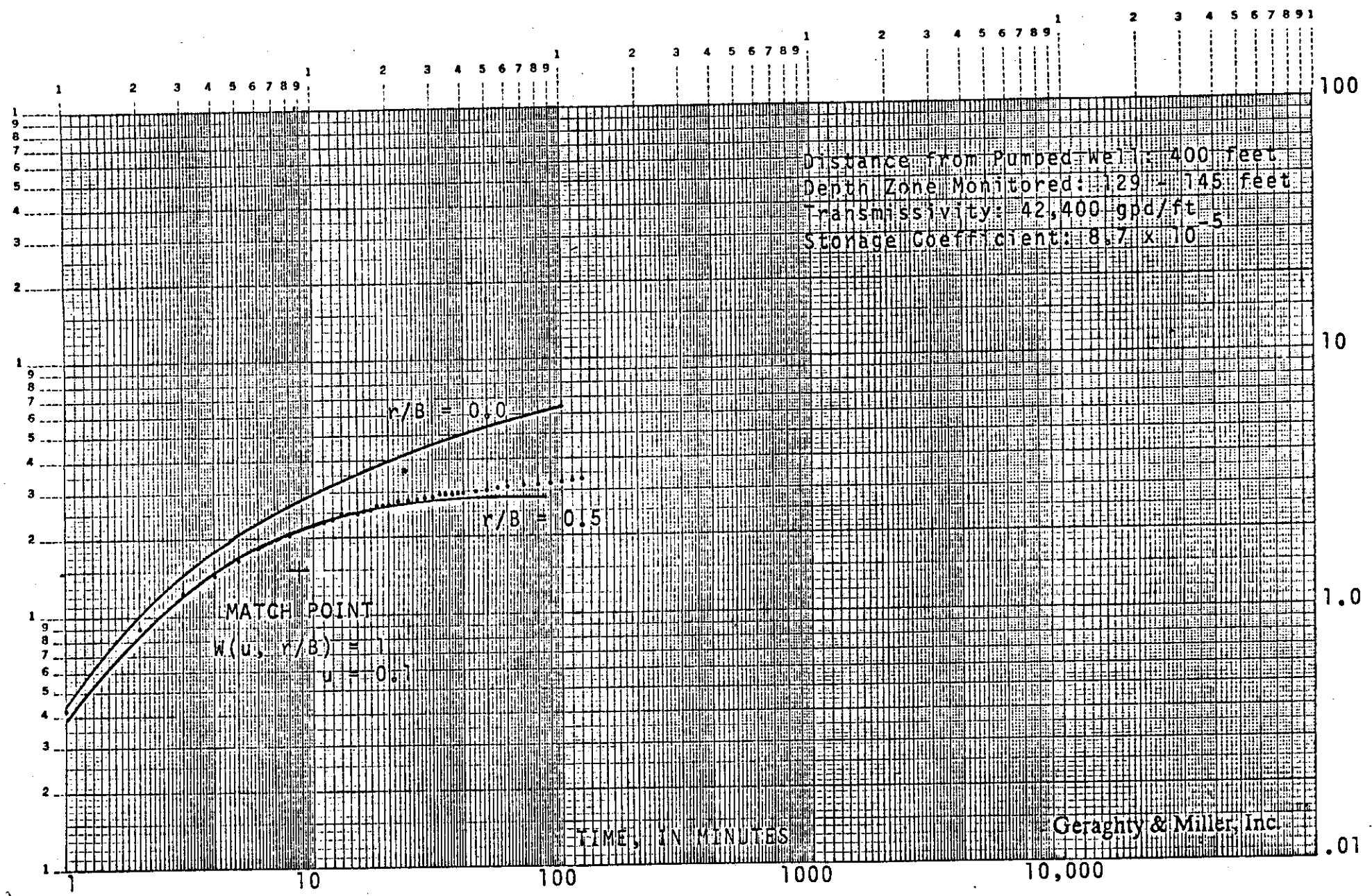


FIGURE 9: WATER-LEVEL RECOVERY IN OB-2 AFTER PUMPING PRODUCTION WELL 13, JUPITER WATER SYSTEM, JUPITER, FLORIDA, NOVEMBER 29-30, 1978

PR119

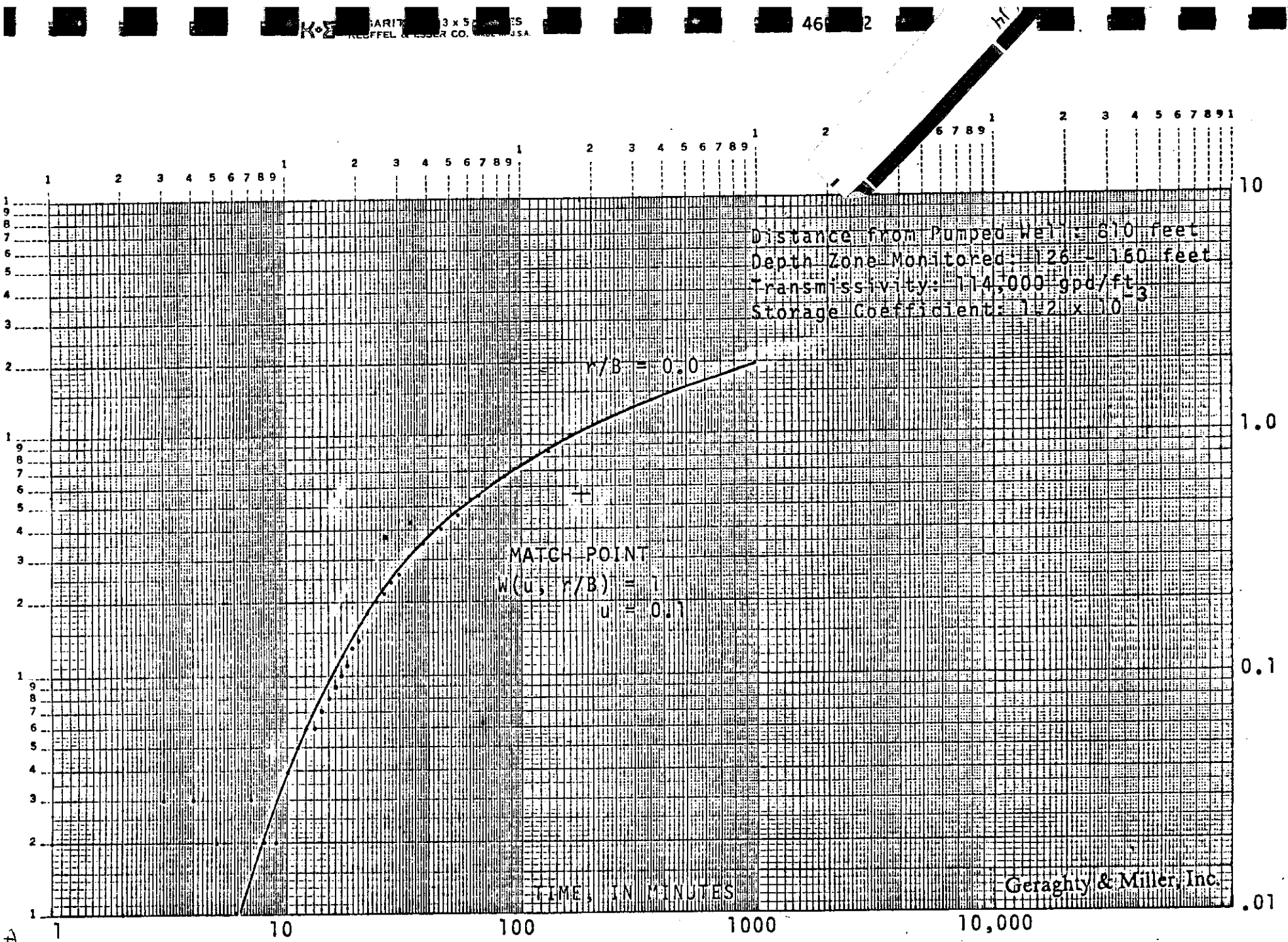


FIGURE 10: WATER-LEVEL RECOVERY IN TW-3 AFTER PUMPING PRODUCTION WELL 13, JUPITER WATER SYSTEM, JUPITER, FLORIDA, NOVEMBER 29-30, 1978

PR119