Regional Assessment of Aquifers for Thermal Energy Storage

Volume 3

Prepared for Pacific Northwest Laboratory
Seasonal Thermal Energy Storage Program
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Pacific Northwest Laboratory
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by Battelle Memorial Institute

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REGIONAL ASSESSMENT OF AQUIFERS
FOR THERMAL ENERGY STORAGE

VOLUME 3
APPENDICES

Century West Engineering Corporation
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TABLE OF CONTENTS

<u>VOLUME 1</u>	<u>Pages</u>
INTRODUCTION	I-1 - I-23
REGION 1 - WESTERN MOUNTAIN RANGES	1-1 - 1-47
Introduction	1-1 - 1-3
Geologic Framework	1-3 - 1-19
Hydrogeologic Framework	1-20 - 1-29
Major Aquifers	1-30
Aquifers Unsuitable for ATES	1-31 - 1-38
Aquifers Suitable for ATES	1-39 - 1-41
Region's ATES Potential	1-42
References Cited	1-43 - 1-44
General References	1-45 - 1-47
REGION 2 - ALLUVIAL BASINS	2-1 - 2-33
Introduction	2-1
Geologic Framework	2-1 - 2-9
Hydrogeologic Framework	2-9 - 2-16
Major Aquifers	2-17
Aquifers Unsuitable for ATES	2-18 - 2-21
Aquifers Suitable for ATES	2-22 - 2-27
Region's ATES Potential	2-28
References Cited	2-29 - 2-30
General References	2-31 - 2-33
REGION 3 - COLUMBIA LAVA PLATEAU	3-1 - 3-31
Introduction	3-1 - 3-3
Geologic Framework	3-4 - 3-15
Hydrogeologic Framework	3-15 - 3-24
Major Aquifers	3-25
Aquifers Unsuitable for ATES	3-26 - 3-30
Region's ATES Potential	3-31
References Cited	3-32 - 3-33
General References	3-34 - 3-37
REGION 4 - COLORADO PLATEAU	4-1 - 4-12
Introduction	4-1
Geologic Framework	4-1
Hydrogeologic Framework	4-2 - 4-4
Major Aquifers	4-5
Aquifers Unsuitable for ATES	4-6 - 4-9
Region's ATES Potential	4-10
References Cited	4-11
General References	4-12

TABLE OF CONTENTS (Continued)

	<u>Pages</u>
REGION 5 - HIGH PLAINS	5-1 - 5-36
Introduction	5-1 - 5-3
Geologic Framework	5-3 - 5-13
Hydrogeologic Framework	5-14 - 5-21
Major Aquifers	5-22 - 5-23
Aquifers Unsuitable for ATES	5-24 - 5-27
Aquifers Suitable for ATES	5-28 - 5-31
Region's ATES Potential	5-32
References Cited	5-33 - 5-34
General References	5-35 - 5-36
REGION 6 - GLACIATED CENTRAL REGION	6-1 - 6-42
Introduction	6-1 - 6-3
Geologic Framework	6-3 - 6-9
Hydrogeologic Framework	6-9 - 6-23
Major Aquifers	6-24
Aquifers Unsuitable for ATES	6-25 - 6-29
Aquifers Suitable for ATES	6-29 - 6-38
Region's ATES Potential	6-39
References Cited	6-40 - 6-41
General References	6-42
 <u>VOLUME 2</u>	
REGION 7 - UNGLACIATED CENTRAL REGION	7-1 - 7-62
Introduction	7-1 - 7-3
Geologic Framework	7-4 - 7-16
Hydrogeologic Framework	7-17 - 7-32
Major Aquifers	7-33
Aquifers Unsuitable for ATES	7-34 - 7-43
Aquifers Suitable for ATES	7-44 - 7-49
Region's ATES Potential	7-50
References Cited	7-51 - 7-55
General References	7-56 - 7-62
REGION 8 - UNGLACIATED APPALACHIANS	8-1 - 8-25
Introduction	8-1
Geologic Framework	8-3 - 8-6
Hydrogeologic Framework	8-6 - 8-13
Major Aquifers	8-14
Aquifers Unsuitable for ATES	8-15 - 8-17
Aquifers Suitable for ATES	8-18 - 8-21
Region's ATES Potential	8-22
References Cited	8-23 - 8-24
General References	8-25

TABLE OF CONTENTS (CONTINUED)

	<u>Pages</u>
REGION 9 - GLACIATED APPALACHIANS	9-1 - 9-27
Introduction	9-1
Geologic Framework	9-2 - 9-6
Hydrogeologic Framework	9-6 - 9-15
Major Aquifers	9-16
Aquifers Unsuitable for ATES	9-17 - 9-19
Aquifers Suitable for ATES	9-20 - 9-23
Region's ATES Potential	9-24
References Cited	9-25
General References	9-26 - 9-27
REGION 10 - COASTAL PLAIN	10-1 - 10-39
Introduction	10-1 - 10-3
Geologic Framework	10-4 - 10-16
Hydrogeologic Framework	10-17 - 10-25
Major Aquifers	10-26
Aquifers Unsuitable for ATES	10-27 - 10-29
Aquifers Suitable for ATES	10-30 - 10-33
Region's ATES Potential	10-34
References Cited	10-35 - 10-36
General References	10-37 - 10-39
REGION 11 - HAWAII	11-1 - 11-18
Introduction	11-1 - 11-2
Geologic Framework	11-2 - 11-3
Hydrogeologic Framework	11-3 - 11-6
Major Aquifers	11-7 - 11-12
Aquifers Unsuitable for ATES	11-13 - 11-15
Region's ATES Potential	11-16
References Cited	11-17
General References	11-18
REGION 12 - ALASKA	12-1 - 12-29
Introduction	12-1 - 12-2
Geologic Framework	12-3
Hydrogeologic Framework	12-3 - 12-14
Major Aquifers	12-15 - 12-18
Aquifers Unsuitable for ATES	12-19 - 12-22
Aquifers Suitable for ATES	12-23 - 12-26
Region's ATES Potential	12-27
References Cited	12-28
General References	12-29

VOLUME 3

APPENDICES

Appendix A	- List of Aquifers	A-1 - A-23
Appendix B	- Aquifer Data	B-1 - B-109

•

•

•

•

•

•

•

•

•

•

LIST OF FIGURES

<u>FIGURE NUMBER</u>	<u>FIGURE TITLE</u>	<u>PAGE NUMBER</u>
I-1	Major Ground-Water Regions of the United States, Excepting Alaska and Hawaii	I-2
I-2	Small System Limiting Guidelines	I-8
I-3	Large System Limiting Guidelines	I-9
1-1	Outline of Region 1 Showing Six Major Provinces	1-2
1-2	Major Geographic Areas as Referenced in Text	1-6
1-3	Major Aquifers Unsuitable for ATES in Region 1	1-32
1-4	Major Aquifers Suitable for ATES in Region 1	1-40
2-1	Outline of Region 2	2-2
2-2	Diagrammatic Cross Section of Ground-Water Flow Regime in Coastal Valleys	2-11
2-3	Major Aquifers Unsuitable for ATES in Region 2	2-19
2-4	Major Aquifers Suitable for ATES in Region 2	2-23
3-1	Outline of Region 3	3-2
3-2	Regional Columbia River Basalt Group Stratigraphic Nomenclature	3-8
3-3	Outcrop Extent of the Columbia River Basalt Group	3-9
3-4	Distribution of Formations within the Columbia River Basalt Group	3-11
3-5	Major Sub-Basins in the Columbia Plateau	3-13
3-6	Map of Southern Idaho Showing Snake River Plain Aquifer	3-14
3-7	Major Aquifers Unsuitable for ATES in Region 3	3-27
4-1	Outline of Region 4 with the Major Aquifers	4-3
4-2	Major Aquifers Unsuitable for ATES in Region 4	4-7
5-1	Region 5 General Outline	5-2
5-2	Geologic Formations and their Water-Bearing Properties, Northern High Plains	5-4

<u>FIGURE NUMBER</u>	<u>FIGURE TITLE</u>	<u>PAGE NUMBER</u>
5-3	Geologic Formations and their Water-Bearing Properties, Southern High Plains	5-5
5-4	Major Aquifers Unsuitable for ATEs in Region 5	5-25
5-5	Major Aquifers Suitable for ATEs in Region 5	5-29
6-1	Region 6 General Outline	6-2
6-2	General Distribution of Paleozoic, Mesozoic and Cenozoic and Precambrian Rocks	6-5
6-3	Region 6 Generalized Structural Framework	6-8
6-4	Location of the Buried Mahomet River Valley and Buried Abandoned Channel of the Mississippi River	6-11
6-5	Major Aquifers Unsuitable for ATEs in Region 6	6-26
6-6	Major Aquifers Suitable for ATEs in Region 6	6-31
7-1	General Outline of Region 7	7-2
7-2	Regional Structural Features	7-5
7-3	Stratigraphic Correlation Chart for the Powder River Basin-Black Hills Area	7-13
7-4	Stratigraphic Nomenclature of South Dakota	7-14
7-5	Stratigraphic Nomenclature of Mesozoic Era in South Dakota	7-15
7-6	Major Aquifers Unsuitable for ATEs in Region 7	7-35
7-7	Major Aquifers Suitable for ATEs in Region 7	7-45
8-1	Major Physiographic Divisions of Region 8	8-2
8-2	Sketch of Idealized Geologic and Hydrogeologic Conditions in the Blue Ridge Province	8-10
8-3	Sketch of Idealized Geologic and Hydrogeologic Conditions in the Valley and Ridge Province	8-12
8-4	Major Aquifers Unsuitable for ATEs in Region 8	8-16
8-5	Major Aquifers Suitable for ATEs in Region 8	8-20
9-1	Major Physiographic Divisions of Region 9	9-3

<u>FIGURE NUMBER</u>	<u>FIGURE TITLE</u>	<u>PAGE NUMBER</u>
9-2	Distribution of Major Aquifers in Region 9	9-7
9-3	Major Aquifers Unsuitable for ATEs in Region 9	9-18
9-4	Major Aquifers Suitable for ATEs in Region 9	9-21
10-1	Geologic Provinces in Region 10	10-2
10-2	Structural Features of the Gulf Coastal Plain	10-5
10-3	Mississippi Embayment	10-6
10-4	General Correlation of Stratigraphic Units	10-8
10-5	Generalized Geologic Cross Section of Coastal Plain Aquifers	10-9
10-6	Gulf Coastal Plain Correlation of Stratigraphic Units	10-11
10-7	Correlation of the Atlantic Coastal Plain Stratigraphic Units	10-16
10-8	Major Aquifers Unsuitable for ATEs in Region 10	10-28
10-9	Major Aquifers Suitable for ATEs in Region 10	10-31
11-1	Major Aquifers in Region 11	11-8
11-2	Major Aquifers Unsuitable for ATEs in Region 11	11-14
12-1	Region 12 Generalized Distribution of Permafrost	12-5
12-2	Major Aquifer with ATEs Potential in Region 12	12-17
12-3	Major Aquifers Unsuitable for ATEs in Region 12	12-20
12-4	Major Aquifers Suitable for ATEs in Region 12	12-24

•
•
•
•

•

•
•
•
•

LIST OF TABLES

APPENDIX A

<u>TABLE NUMBER</u>	<u>TABLE TITLE</u>	<u>PAGE NUMBER</u>
1-1	Region 1 - List of Aquifers	A-1
2-1	Region 2 - List of Aquifers	A-2 - A-12
3-1	Region 3 - List of Aquifers	A-13
4-1	Region 4 - List of Aquifers	A-14
5-1	Region 5 - List of Aquifers	A-15
6-1	Region 6 - List of Aquifers	A-16
7-1	Region 7 - List of Aquifers	A-17
8-1	Region 8 - List of Aquifers	A-18
9-1	Region 9 - List of Aquifers	A-19
10-1	Region 10 - List of Aquifers	A-20 - A-21
11-1	Region 11 - List of Aquifers	A-22
12-1	Region 12 - List of Aquifers	A-23

APPENDIX B

1-2	Region 1 - Aquifer Data	B-1 - B-9
2-2	Region 2 - Aquifer Data	B-10 - B-24
3-2	Region 3 - Aquifer Data	B-25 - B-33
4-2	Region 4 - Aquifer Data	B-34 - B-36
5-2	Region 5 - Aquifer Data	B-37 - B-41
6-2	Region 6 - Aquifer Data	B-42 - B-50
7-2	Region 7 - Aquifer Data	B-51 - B-59
8-2	Region 8 - Aquifer Data	B-60 - B-65
9-2	Region 9 - Aquifer Data	B-66 - B-71
10-2	Region 10 - Aquifer Data	B-72 - B-97
11-2	Region 11 - Aquifer Data	B-98 - B-103
12-2	Region 12 - Aquifer Data	B-104 - B-109

•
•
•
•

APPENDIX A
LIST OF AQUIFERS

•
•
•

REGION 1

NAME	GROUP
406 QUATEPNARY DEPOSITS-RATHDRUM PRAIRIE	SANDS AND GRAVELS
408 LARAMIDE CLASTICS	SANDSTONES(PRIMARY)
409 CRETACEOUS MARINE SEDIMENTS	SANDSTONES(PRIMARY)
410 EARLY MESOZOIC SEDIMENTS	SANDSTONES(PRIMARY)
411 PALEOZOIC CLASTICS	SANDSTONES(PRIMARY)
412 PALEOZOIC CARBONATE DEPOSITS	LIMESTONES(SECONDARY)

REGION 2

NAME	GROUP
027 KLAMATH RIVER BASIN-MODOC CO-CALIF	SANDS AND GRAVELS
028 BUTTE VALLEY-SISKIYOU CO-CALIF	SANDS AND GRAVELS
030 EEL RIVER VALLEY-HUMBOLDT CO-CALIF	SANDS AND GRAVELS
031 EUREKA PLAIN-HUMBOLDT CO-CALIF	SANDS AND GRAVELS
032 MAD RIVER VALLEY-HUMBOLDT CO-CALIF	SANDS AND GRAVELS
033 EUREKA BAY-PRESSURE AREA-HUMBOLDT CO-CALIF	SANDS AND GRAVELS
034 HOOPA VALLEY-HUMBOLDT CO-CALIF	SANDS AND GRAVELS
035 HAYFORK VALLEY-TRINITY CO-CALIF	SANDS AND GRAVELS
036 SCOTT RIVER VALLEY-SISKIYOU CO-CALIF	SANDS AND GRAVELS
037 ROUND VALLEY-MENDOCINO CO-CALIF	SANDS AND GRAVELS
038 LAYTONVILLE VALLEY-MENDOCINO CO-CALIF	SANDS AND GRAVELS
039 LITTLE LAKE VALLEY-MENDOCINO CO-CALIF	SANDS AND GRAVELS
041 LIVERMORE VALLEY CALIF	SANDS AND GRAVELS
042 NAPA VALLEY-NAPA CO-CALIF	SANDS AND GRAVELS
043 SUISUN-FAIRFIELD VALLEY-SOLANO CO-CALIF	SANDS AND GRAVELS
044 YGNACIO VALLEY-CONTRA COSTA CO-CALIF	SANDS AND GRAVELS
045 SANTA CLARA VALLEY-ALAMEDA CO-CALIF	SANDS AND GRAVELS
046 SANTA CLARA PRESSURE AREA-ALAMEDA CO-CALIF	SANDS AND GRAVELS
047 SAN FRAN EAST BAY AREA-ALAMEDA CO-CALIF	SANDS AND GRAVELS
048 UKIAH VALLEY-MENDOCINO CO-CALIF	SANDS AND GRAVELS
049 SANEL VALLEY-MENDOCINO CO-CALIF	SANDS AND GRAVELS
050 SOQUEL VALLEY-SANTA CRUZ CO-CALIF	SANDS AND GRAVELS
051 PAJARO VALLEY-SANTA CRUZ CO-CALIF	SANDS AND GRAVELS
052 SANTA CRUZ PRESSURE AREA-SANTA CRUZ CO-CALIF	SANDS AND GRAVELS
053 GILROY-HOLLISTER VALLEY-CALIF	SANDS AND GRAVELS
054 SO.SANTA CLARA PRESSURE AREA-CALIF	SANDS AND GRAVELS
055 SALINAS VALLEY-MONTEREY CO-CALIF	SANDS AND GRAVELS
056 PASO ROBLES BASIN-MONTEREY CO-CALIF	SANDS AND GRAVELS
057 CHOLAME VALLEY-MONTEREY CO-CALIF	SANDS AND GRAVELS
058 LOCKWOOD VALLEY-MONTEREY CO-CALIF	SANDS AND GRAVELS

062	PISMO CREEK VALLEY-SAN LUIS OBISPO CO-CALIF	SANDS AND GRAVELS
063	ARROYO GRANDE VALLEY-SAN LUIS OBISPO CO-CALIF	SANDS AND GRAVELS
064	SANTA MARIA VALLEY-SANTA BARBARA CO-CALIF	SANDS AND GRAVELS
065	CUYAMA VALLEY-SANTA BARBARA CO-CALIF	SANDS AND GRAVELS
066	SAN ANTONIO CREEK-SANTA BARBARA CO-CALIF	SANDS AND GRAVELS
067	SANTA YNEZ RIVER-SANTA BARBARA CO-CALIF	SANDS AND GRAVELS
068	GOLETA BASIN-SANTA BARBARA CO-CALIF	SANDS AND GRAVELS
069	SANTA BARBARA BASIN-CA	SANDS AND GRAVELS
070	CAMPINTERIA BASIN-SANTA BARBARA CO-CALIF	SANDS AND GRAVELS
071	CARRIZO PLAIN-SAN LUIS OBISPO-CALIF	SANDS AND GRAVELS
072	SCOTT RIVER VALLEY-SANTA CRUZ CO-CALIF	SANDS AND GRAVELS
073	OJAI VALLEY-VENTURA CO-CALIF	SANDS AND GRAVELS
074	VENTURY RIVER VALLEY-VENTURA CO-CALIF	SANDS AND GRAVELS
075	SANTA CLARA RIVER VALLEY-VENTURA CO-CALIF	SANDS AND GRAVELS
076	SAN PEDRO AQUIFER-VENTURA CO-CALIF	SANDS AND GRAVELS
077	OXNARD AQUIFER-VENTURA CO-CALIF	SANDS AND GRAVELS
078	FOX CANYON AQUIFER-VENTURA CO-CALIF	SANDS AND GRAVELS
079	ACTON VALLEY-LOS ANGELES CO-CALIF	SANDS AND GRAVELS
080	PLEASANT VALLEY-VENTURA CO-CALIF	SANDS AND GRAVELS
081	ARROYO SANTA ROSA VALLEY-VENTURA CO-CALIF	SANDS AND GRAVELS
082	LOS POSAS VALLEY-VENTURA CO-CALIF	SANDS AND GRAVELS
083	SIMI VALLEY-VENTURA CO-CALIF	SANDS AND GRAVELS
084	COASTAL PLAIN OF LOS ANGELES-CALIF	SANDS AND GRAVELS
085	SAN FERNANDO VALLEY-L.A.CO-CALIF	SANDS AND GRAVELS
086	SAN GABRIEL VALLEY-L.A.CO-CA	SANDS AND GRAVELS
087	UPPER SANTA ANA VALLEY-L.A.CO-CALIF	SANDS AND GRAVELS
088	SAN BERNARDINO PRESSURE AREA-CALIF	SANDS AND GRAVELS
089	COASTAL PLAIN-ORANGE CO-CALIF	SANDS AND GRAVELS
090	UPPER SANTA ANA VALLEY-L.A.CO-CALIF	SANDS AND GRAVELS
091	ELSINORE BASIN-RIVERSIDE CO-CALIF	SANDS AND GRAVELS
092	SAN JACINTO BASIN-RIVERSIDE CO-CALIF	SANDS AND GRAVELS
093	HEMET LAKE VALLEY-RIVERSIDE CO-CALIF	SANDS AND GRAVELS
094	BEAR VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
095	SAN JUAN VALLEY-ORANGE CO-CALIF	SANDS AND GRAVELS

096	SAN MATEO VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
097	SANTA MARGARITA VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
098	TEMECULA VALLEY-RIVERSIDE CO-CALIF	SANDS AND GRAVELS
099	COAHUILA VALLEY-RIVERSIDE CO-CALIF	SANDS AND GRAVELS
100	SAN LUIS REY VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
101	WARNER VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
102	SAN PASQUAL VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
103	SAN DIEGUITO VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
104	POWAY VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
105	MISSION VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
106	OTAY VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
107	TIA JUANA BASIN-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
108	GOOSE LAKE VALLEY-MADOC CO-CALIF	SANDS AND GRAVELS
109	ALTURAS BASIN-MADOC CO-CALIF	SANDS AND GRAVELS
110	BIG VALLEY-MADOC CO-CALIF	SANDS AND GRAVELS
111	FALL RIVER VALLEY-LASSEN CO-CALIF	SANDS AND GRAVELS
112	REDDING BASIN-SHASTA CO-CALIF	SANDS AND GRAVELS
113	WOODLAND AQUIFER-YOLO CO-CALIF	SANDS AND GRAVELS
114	LAKE ALMANOR VALLEY-PLUMAS CO-CALIF	SANDS AND GRAVELS
115	INDIAN VALLEY-PLUMAS CO-CALIF	SANDS AND GRAVELS
116	AMERICAN VALLEY-PLUMAS CO-CALIF	SANDS AND GRAVELS
117	MOHAWK VALLEY-PLUMAS CO-CALIF	SANDS AND GRAVELS
118	SIERRA VALLEY-PLUMAS CO-CALIF	SANDS AND GRAVELS
119	UPPER LAKE VALLEY-LAKE CO-CALIF	SANDS AND GRAVELS
120	SCOTT VALLEY-LAKE CO-CALIF	SANDS AND GRAVELS
121	KELSEYVILLE VALLEY-LAKE CO-CALIF	SANDS AND GRAVELS
122	HIGH VALLEY-LAKE CO-CALIF	SANDS AND GRAVELS
123	BURNS VALLEY-LAKE CO-CALIF	SANDS AND GRAVELS
124	COYOTE VALLEY-LAKE CO-CALIF	SANDS AND GRAVELS
125	COLLAYAMI VALLEY-LAKE CO-CALIF	SANDS AND GRAVELS
126	SACRAMENTO VALLEY-CALIF	SANDS AND GRAVELS
127	ROUND VALLEY-MADOC CO-CALIF	SANDS AND GRAVELS
128	SAN JOAQUIN VALLEY-CALIF	SANDS AND GRAVELS
129	SO. SAN JOAQUIN VALLEY-CALIF	SANDS AND GRAVELS
130	SUPRISE VALLEY-MADOC CO-CALIF	SANDS AND GRAVELS

131	MADELINE PLAINS-LASSEN CO-CALIF	SANDS AND GRAVELS
132	HONEY LAKE VALLEY-LASSEN CO-CALIF	SANDS AND GRAVELS
133	TAHOE VALLEY-ELDORADO CO-CALIF	SANDS AND GRAVELS
134	MARTIS VALLEY-NEVADA CO-CALIF	SANDS AND GRAVELS
135	LONG VALLEY-MANO CO-CALIF	SANDS AND GRAVELS
136	OWENS VALLEY-INYO CO-CALIF	SANDS AND GRAVELS
137	DEEP SPRINGS VALLEY-INYO CO-CALIF	SANDS AND GRAVELS
138	MIDDLE AMARJOSA VALLEY-INYO CO-CALIF	SANDS AND GRAVELS
139	PAHRUMP VALLEY-INYO CO-CALIF	SANDS AND GRAVELS
140	MESQUITE VALLEY-INYO CO-CALIF	SANDS AND GRAVELS
141	IVANPAH VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
142	KELSO VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
143	SODA LAKE VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
144	CRONISE VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
145	LANGFORD VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
146	COYOTE LAKE VALLEY-SAN BERNARDINO-CALIF	SANDS AND GRAVELS
147	TROY VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
148	LOWER MAJARI RIVER-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
149	MIDDLE MOJAVE RIVER VALLEY-SAN BERNARDINO-CA	SANDS AND GRAVELS
150	UPPER MOJAVE RIVER VALLEY-SAN BERNARDINO CO-CA	SANDS AND GRAVELS
151	EL MIRAGE VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
152	ANTELOPE VALLEY-L.A. CO-CALIF	SANDS AND GRAVELS
153	TAHACHAPI VALLEY-KERN CO-CALIF	SANDS AND GRAVELS
154	FREMONT VALLEY-KERN CO-CALIF	SANDS AND GRAVELS
155	HARPER VALLEY-KERN CO-CALIF	SANDS AND GRAVELS
156	SUPERIOR VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
157	CUDDEBACK VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
158	PILOT KNOB VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
159	SEARLES VALLEY-INYO CO-CALIF	SANDS AND GRAVELS
160	INDIAN WELLS VALLEY-INYO CO-CALIF	SANDS AND GRAVELS
161	FENNER VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
162	WARD VALLEY-RIVERSIDE CO-CALIF	SANDS AND GRAVELS
163	CHUCKWALLA VALLEY-IMPERIAL CO-CALIF	SANDS AND GRAVELS
164	PINTO BASIN-RIVERSIDE CO-CALIF	SANDS AND GRAVELS

165	CADIZ VALLEY-RIVERSIDE CO-CA	SANDS AND GRAVELS
166	BRISTOL VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
167	DALE VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
168	TWENTYNINE PALMS VALLEY-SAN BERNARDINO CO-CA	SANDS AND GRAVELS
169	COPPER MTN. VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
170	WARREN VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
171	LAVIC VALLEY-SAN BERNARDINO CO-CA	SANDS AND GRAVELS
172	LUCERNE VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
173	MORONGO VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
174	COACHELLA VALLEY-IMPERIAL CO-CALIF	SANDS AND GRAVELS
175	WEST SALTON SEA BASIN-IMPERIAL VALLEY CO-CALIF	SANDS AND GRAVELS
176	BORRUYO VALLEY-SAN DIEGO CO-CALIF	SANDS AND GRAVELS
177	OCOTILLO VALLEY-IMPERIAL CO-CALIF	SANDS AND GRAVELS
178	VALLERITO-CARRIZO VALLEY-IMPERIAL CO-CALIF	SANDS AND GRAVELS
179	OROCOTIA VALLEY-RIVERSIDE CO-CALIF	SANDS AND GRAVELS
180	PALO VERDE VALLEY-IMPERIAL CO-CALIF	SANDS AND GRAVELS
181	PALO VERDE MESA-IMPERIAL CO-CALIF	SANDS AND GRAVELS
182	CALZONA VALLEY-RIVERSIDE CO-CALIF	SANDS AND GRAVELS
183	VIDAL VALLEY-RIVERSIDE CO-CALIF	SANDS AND GRAVELS
184	NEEDLES VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
185	PIUTE VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
186	GABBS VALLEY-NYE CO-NEVADA	SANDS AND GRAVELS
187	BUENA VISTA VALLEY-CHURCHILL CO-NEV	SANDS AND GRAVELS
188	EDWARDS CREEK VALLEY-LANDER CO-NEV	SANDS AND GRAVELS
189	BIG SMOKEY VALLEY-NYE CO-NEV	SANDS AND GRAVELS
190	GRASS VALLEY-LANDER CO-NEV	SANDS AND GRAVELS
191	SMITH CREEK VALLEY-CHURCHILL CO-NEV	SANDS AND GRAVELS
192	SAND VALLEY-WASHOE CO-NEV	SANDS AND GRAVELS
193	PAHNUMP VALLEY-CLARK CO-NEV	SANDS AND GRAVELS
194	DIXIE VALLEY-LANDER CO-CALIF	SANDS AND GRAVELS
195	BRADY'S HOT SPRINGS-CHURCHILL CO-NEV	SANDS AND GRAVELS
196	BLACK ROCK DESERT-HUMBOLDT CO-NEV	SANDS AND GRAVELS
197	INDEPENDENCE VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
198	POBY VALLEY-ELKO CO-NEV	SANDS AND GRAVELS

199	RAILROAD VALLEY-NYE CO-NEV	SANDS AND GRAVELS
200	NEWARK VALLEY-EUREKA CO-NEV	SANDS AND GRAVELS
201	DIAMOND VALLEY-EUREKA CO-NEV	SANDS AND GRAVELS
202	GRANITE BASIN-WASHOE CO-NEV	SANDS AND GRAVELS
203	SMOKE CREEK-WASHOE CO-NEV	SANDS AND GRAVELS
204	LONG VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
205	CONTINENTAL LAKE VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
206	VIRGIN VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
207	MOSQUITO VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
208	DUCK LAKE VALLEY-WASHOE CO-NEV	SANDS AND GRAVELS
209	HUALAPAI FLAT-WASHOE CO-NEV	SANDS AND GRAVELS
210	HIGH ROCK LAKE-WASHOE CO-NEV	SANDS AND GRAVELS
211	MUD MEADOW-WASHOE CO-NEV	SANDS AND GRAVELS
212	PINE FOREST VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
213	KINGS RIVER VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
214	DESERT VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
215	SILVER STATE VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
216	QUINN RIVER VALLEY-HUMBOLDT CO-CALIF	SANDS AND GRAVELS
217	MARY'S RIVER-ELKO CO-NEV	SANDS AND GRAVELS
218	STARR VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
219	NORTH FORK-ELKO CO-NEV	SANDS AND GRAVELS
220	LAMOILLE VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
221	SOUTH FORK-ELKO CO-NEV	SANDS AND GRAVELS
222	HUNTINGTON VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
223	DIXIE CREEK-ELKO CO-NEV	SANDS AND GRAVELS
224	ELKO SEGMENT-ELKO CO-NEV	SANDS AND GRAVELS
225	SUSIE CREEK AREA-ELKO CO-NEV	SANDS AND GRAVELS
226	MAGGIE CREEK AREA-ELKO CO-NEV	SANDS AND GRAVELS
227	MARY'S CREEK AREA-ELKO CO-NEV	SANDS AND GRAVELS
228	PINE VALLEY-EUREKA CO-NEV	SANDS AND GRAVELS
229	CRESCENT VALLEY-EUREKA CO-NEV	SANDS AND GRAVELS
230	CARICO LAKE VALLEY-LANDER CO-NEV	SANDS AND GRAVELS
231	UPPER REESE RIVER-LANDER CO-NEV	SANDS AND GRAVELS
232	ANTELOPE VALLEY-LANDER CO-NEV	SANDS AND GRAVELS

233	MIDDLE REESE RIVER-LANDER CO-NEV	SANDS AND GRAVELS
234	LOWER REESE RIVER-LANDER CO-NEV	SANDS AND GRAVELS
235	WHIRLWIND VALLEY-EUREKA CO-NEV	SANDS AND GRAVELS
236	BOULDER FLAT-EUREKA CO-NEV	SANDS AND GRAVELS
237	ROCK CREEK VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
238	WILLOW CREEK VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
239	CLAYERS AREA-HUMBOLDT CO-NEV	SANDS AND GRAVELS
240	PUMPERNICKEL VALLEY-PERSHING CO-NEV	SANDS AND GRAVELS
241	KELLEY CREEK AREA-HUMBOLDT CO-NEV	SANDS AND GRAVELS
242	LITTLE HUMBOLDT VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
243	HARDSCRABBLE AREA-HUMBOLDT CO-NEV	SANDS AND GRAVELS
244	PARADISE VALLEY-HUMBOLDT CO-NEV	SANDS AND GRAVELS
245	WINNEMUCCA SEGMENT-PERSHING CO-NEV	SANDS AND GRAVELS
246	GRASS VALLEY-PERSHING CO-NEV	SANDS AND GRAVELS
247	IMLAY AREA-PERSHING CO-NEV	SANDS AND GRAVELS
248	LOVELOCK VALLEY-PERSHING CO-NEV	SANDS AND GRAVELS
249	WHITE PLAINS-PERSHING CO-NEV	SANDS AND GRAVELS
250	FERNLY AREA-CHURCHILL CO-NEV	SANDS AND GRAVELS
251	FIREBALL VALLEY-CHURCHILL CO-NEV	SANDS AND GRAVELS
252	PYRAMID LAKE VALLEY-LYON CO-NEV	SANDS AND GRAVELS
253	DODGE FLAT-LYON CO-NEV	SANDS AND GRAVELS
254	TRACY SEGMENT-LYON CO-NEV	SANDS AND GRAVELS
255	WARM SPRINGS VALLEY-STORY CO-NEV	SANDS AND GRAVELS
256	SPANISH SPRINGS-STORY CO-NEV	SANDS AND GRAVELS
257	SUN VALLEY-STORY CO-NEV	SANDS AND GRAVELS
258	TRUCKEE MEADOWS-STORY CO-NEV	SANDS AND GRAVELS
259	PLEASANT VALLEY-STORY CO-NEV	SANDS AND GRAVELS
260	WASHOE VALLEY-STORY CO-NEV	SANDS AND GRAVELS
261	LAKE TAHOE BASIN-STORY CO-NEV	SANDS AND GRAVELS
262	TRUCKEE CANYON-WASHOE CO-NEV	SANDS AND GRAVELS
263	COMMON VALLEY-WASHOE CO-NEV	SANDS AND GRAVELS
264	ANTELOPE VALLEY	SANDS AND GRAVELS
265	COLD SPRING VALLEY-WASHOE CO-NEV	SANDS AND GRAVELS
266	CHURCHILL VALLEY-LYON CO-NEV	SANDS AND GRAVELS

301	PAROWAN VALLEY-IRON CO-UTAH	SANDS AND GRAVELS
302	CEDAR CITY VALLEY-IVAN CO-UTAH	SANDS AND GRAVELS
303	LUND DISTRICT-IVAN CO-UTAH	SANDS AND GRAVELS
304	BERYL ENTERPRISE AREA-IRON CO-UTAH	SANDS AND GRAVELS
305	HAMLIN VALLEY-LINCOLN CO-NEV	SANDS AND GRAVELS
306	GREAT SALT LAKE BASIN-BOX ELDER CO-UTAH	SANDS AND GRAVELS
307	MILFORD VALLEY-BENNER CO-UTAH	SANDS AND GRAVELS
308	SEVIER DESERT BASIN-MILLARD CO-UTAH	SANDS AND GRAVELS
309	GROUSE CREEK VALLEY-BOX ELDER CO-UTAH	SANDS AND GRAVELS
310	DEEP CREEK VALLEY-BOX ELDER CO-UTAH	SANDS AND GRAVELS
311	SNAKE VALLEY-MILLARD CO-UTAH	SANDS AND GRAVELS
312	FISH SPRINGS FLAT-MILLARD CO-UTAH	SANDS AND GRAVELS
313	DUGWAY VALLEY-MILLARD CO-UTAH	SANDS AND GRAVELS
314	GOVERNMENT CREEK VALLEY-MILLARD CO-UTAH	SANDS AND GRAVELS
315	SKULL VALLEY-JUAB CO-UTAH	SANDS AND GRAVELS
316	SINK VALLEY-TOOELE CO-UTAH	SANDS AND GRAVELS
317	TOOELE VALLEY-TOOELE CO-UTAH	SANDS AND GRAVELS
318	RUSH VALLEY-TOOELE CO-UTAH	SANDS AND GRAVELS
319	CEDAR VALLEY-TOOELE CO-UTAH	SANDS AND GRAVELS
320	NORTHERN JUAB VALLEY-JUAB CO-UTAH	SANDS AND GRAVELS
321	GOSHEN VALLEY-SALT LAKE CO-UTAH	SANDS AND GRAVELS
322	JORDAN VALLEY-SALT LAKE CO-UTAH	SANDS AND GRAVELS
323	BOUNTIFUL VALLEY-SALT LAKE CO-UTAH	SANDS AND GRAVELS
324	WEBER DELTA AREA-SALT LAKE CO-UTAH	SANDS AND GRAVELS
325	CURLEW VALLEY-BOX ELDER CO-UTAH	SANDS AND GRAVELS
326	PARK VALLEY AREA-BOX ELDER CO-UTAH	SANDS AND GRAVELS
327	POCATELLO VALLEY-ONEDIA CO-IDAHO	SANDS AND GRAVELS
328	VIRGIN RIVER BASIN-MOHAVE CO-AZ	SANDS AND GRAVELS
329	GRAND WASH BASIN-MOHAVE CO-AZ	SANDS AND GRAVELS
330	HUALAPAI VALLEY-MOHAVE CO-AZ	SANDS AND GRAVELS
331	COLORADO RIVER VALLEY-MOHAVE CO-AZ	SANDS AND GRAVELS
332	SACRAMENTO VALLEY-MOHAVE CO-AZ	SANDS AND GRAVELS
333	BIG SANDY VALLEY-MOHAVE CO-AZ	SANDS AND GRAVELS
334	BILL WILLIAMS BASIN-MOHAVE CO-AZ	SANDS AND GRAVELS

267	DAYTON VALLEY-LYON CO-NEV	SANDS AND GRAVELS
268	EAGLE VALLEY-STOREY CO-NEV	SANDS AND GRAVELS
269	CARSON VALLEY-DOUGLAS CO-NEV	SANDS AND GRAVELS
270	ANTELOPE VALLEY-DOUGLAS CO-NEV	SANDS AND GRAVELS
271	SMITH VALLEY-DOUGLAS CO-NEV	SANDS AND GRAVELS
272	MASON VALLEY-DOUGLAS CO-NEV	SANDS AND GRAVELS
273	EAST WALKER AREA-MINERAL CO-NEV	SANDS AND GRAVELS
274	WALKER LAKE VALLEY-MINERAL CO-NEV	SANDS AND GRAVELS
275	UPPER WEST LAKE RIVER-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
276	BRIDGEPORT VALLEY-SAN BERNARDINO CO-CALIF	SANDS AND GRAVELS
277	FISH LAKE VALLEY-MINERAL CO-NEV	SANDS AND GRAVELS
278	BUFFALO VALLEY-LANDER CO-NEV	SANDS AND GRAVELS
279	KOBEH VALLEY-EUREKA CO-NEV	SANDS AND GRAVELS
280	MONITOR VALLEY-LANDER CO-NEV	SANDS AND GRAVELS
281	RALSTON VALLEY-NYE CO-NEV	SANDS AND GRAVELS
282	CLAYTON VALLEY-ESMERALDA CO-NEV	SANDS AND GRAVELS
283	LITTLE FISH LAKE-NYE CO-NEV	SANDS AND GRAVELS
284	STEVENS BASIN-EUREKA CO-NEV	SANDS AND GRAVELS
285	HOT CREEK VALLEY-NYE CO-NEV	SANDS AND GRAVELS
286	YUCEA FLAT-NYE CO-NEV	SANDS AND GRAVELS
287	FRENCHMAN FLAT-LINCOLN CO-NEV	SANDS AND GRAVELS
288	JAKES VALLEY-WHITE PINE CO-NEV	SANDS AND GRAVELS
289	LONG VALLEY-WHITE PINE CO-NEV	SANDS AND GRAVELS
290	CLOVER VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
291	BUTTE VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
292	STEPTOE VALLEY-WHITE PINE CO-NEV	SANDS AND GRAVELS
293	LAKE VALLEY-WHITE PINE CO-NEV	SANDS AND GRAVELS
294	SPRING VALLEY-WHITE PINE CO-NEV	SANDS AND GRAVELS
295	GOSHUTE VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
296	AMARJOSA DESERT-ESMERALDA CO-NEV	SANDS AND GRAVELS
297	THOUSAND SPRINGS VALLEY-ELKO CO-NEV	SANDS AND GRAVELS
298	PLEASANT VALLEY-WHITE PINE CO-NEV	SANDS AND GRAVELS
299	PLEASANT VALLEY-MILLARD CO-UTAH	SANDS AND GRAVELS
300	BEAVER VALLEY-BEAVER CO-UTAH	SANDS AND GRAVELS

335	BUTLER VALLEY-YUMA CO-AZ	SANDS AND GRAVELS
336	MCMULLEN VALLEY-YUMA CO-AZ	SANDS AND GRAVELS
337	HASSAYAMPA BASIN-MARICOPA CO-AZ	SANDS AND GRAVELS
338	HARQUAHALA PLAINS-MARICOPA CO-AZ	SANDS AND GRAVELS
339	SALT RIVER VALLEY-MARICOPA CO-AZ	SANDS AND GRAVELS
340	LOWER HASAYAMPA BASIN-MARICOPA CO-AZ	SANDS AND GRAVELS
341	YUMA BASIN-YUMA CO-AZ	SANDS AND GRAVELS
342	GILA RIVER BASIN-PIMA CO-AZ	SANDS AND GRAVELS
343	WESTERN MEXICAN BASIN-PIMA CO-AZ	SANDS AND GRAVELS
344	WATERMAN BASIN-PIMA CO-AZ	SANDS AND GRAVELS
345	LOWER SANTA CRUZ BASIN-PINAL CO-AZ	SANDS AND GRAVELS
346	AVRA VALLEY-PINAL CO-AZ	SANDS AND GRAVELS
347	ALTAR VALLEY-SANTA CRUZ CO-AZ	SANDS AND GRAVELS
348	SAN PEDRO BASIN-COCHISE CO-AZ	SANDS AND GRAVELS
349	WILCOX BASIN-GRAHAM CO-AZ	SANDS AND GRAVELS
350	DOUGLAS BASIN-COCHISE CO-AZ	SANDS AND GRAVELS
351	SAN BERNARDINO VALLEY-COCHISE CO-AZ	SANDS AND GRAVELS
352	SAN SIMON BASIN-COCHISE CO-AZ	SANDS AND GRAVELS
353	DUNCAN BASIN-GRAHAM CO-AZ	SANDS AND GRAVELS
354	ESTANCIA BASIN-TORRANCE CO-NEW MEX	SANDS AND GRAVELS
355	ANIMAS BASIN-HIDALGO CO-NEW MEX	SANDS AND GRAVELS
356	PLAYAS BASIN-HIDALGO CO-NEW MEX	SANDS AND GRAVELS
357	MEMPHES BASIN-OTERO CO-NEW MEX	SANDS AND GRAVELS
358	EL PASO BASIN-EL PASO CO-TEXAS	SANDS AND GRAVELS
359	ROSWELL ARTESIAN BASIN-CHAUDES CO-NEW MEX	SANDS AND GRAVELS
360	SAN SIMON-RODEO CO-NEW MEX	SANDS AND GRAVELS
361	BLUEWATER BASIN-VALENCIA CO-NEW MEX	SANDS AND GRAVELS
362	RIO GRANDE BASIN-NEW MEX	SANDS AND GRAVELS
363	LORDSBURG VALLEY BASIN-GRANT CO-NEW MEX	SANDS AND GRAVELS
364	NUTT HOCKETT BASIN-UNA CO-NEW MEX	SANDS AND GRAVELS
365	HOT SPRINGS BASIN-SIERRA CO-NEW MEX	SANDS AND GRAVELS
367	GILA SAN FRANCISCO BASIN-CARON CO-NEW MEX	SANDS AND GRAVELS
368	PECCOS RIVER VALLEY-SOUTHWESTERN TEXAS	SANDS AND GRAVELS

369	WILLAMETTE VALLEY-OREGON	SANDS AND GRAVELS	
371	NEWANKUM ARTESIAN BASIN-LEWIS CO-WASH	SANDS AND GRAVELS	
372	FOURTH PLAINS-CLARK CO-WASH	SANDS AND GRAVELS	
373	PUGET SOUND TROUGH-WASH	SANDS AND GRAVELS	
343	SONOMA VALLEY-MENDOCINO CO-CALIF	SANDSTONES(PRIMARY)	.
366	SILVER CITY AQUIFER-SIERRA CO-NEW MEX	SANDSTONES(PRIMARY)	.
329	SHASTA VALLEY-SISKIYOU CO-CALIF	VOLCANICS	.
370	KLAMATH BASIN-OREGON	VOLCANICS	.

REGION 3

NAME	GROUP
013 SNAKE PLAIN AQUIFER	VOLCANICS
019 CLEARWATER PLATEAU	VOLCANICS
020 UPPER WEISER RIVER BASIN	VOLCANICS
021 RAFT RIVER BASIN	VOLCANICS
022 COLUMBIA RIVER GROUP-YAKIMA SUB	VOLCANICS

REGION 4

NAME	GROUP
377 PARADOX VALLEY-MONTROSE CO-COLO	SANDS AND GRAVELS
378 SPANISH VALLEY-GRAND CO-UTAH	SANDS AND GRAVELS
379 COLTON AQUIFER-CARBON CO-UTAH	SANDS AND GRAVELS
380 CASTLE VALLEY-GRAND CO-UTAH	SANDS AND GRAVELS
374 DRY LAKE BASIN-NAVAJO CO-AZ	SANDSTONES(PRIMARY)
376 PAGOSA SPRINGS AREA-ARCHULETA CO-COLO	SANDSTONES(PRIMARY)
382 DRY LAKE BASIN-NAVAJO CO-AZ	SANDSTONES(PRIMARY)
375 UPPER FREMONT RIVER VALLEY-WAYNE CO-UTAH	VOLCANICS

REGION 5

NAME	GROUP
471 PLEISTOCENE-PLIOCENE UNDIFFERENTIATED	SANDS AND GRAVELS
472 RECENT ALLUVIUM UNDIFFERENTIATED	SANDS AND GRAVELS
473 PLEISTOCENE UNDIFFERENTIATED	SANDS AND GRAVELS
474 OGALLALA FORMATION	SANDS AND GRAVELS
475 WHITE RIVER GROUP	SANDS AND GRAVELS
476 BRULE FORMATION	SANDS AND GRAVELS
477 CHADRON FORMATION	SANDS AND GRAVELS
479 DAKOTA SANDSTONE	SANDSTONES (PRIMARY)
480 CHEYENNE SANDSTONE	SANDSTONES (PRIMARY)
481 DODDUM GROUP	SANDSTONES (PRIMARY)
478 NIobrara FORMATION	OTHER

REGION 6

NAME	GROUP
002 AMERICAN BOTTOMS-MISSISSIPPI R. VALLEY	SANDS AND GRAVELS
010 ALLUVIAL BASINS UNDIFFERENTIATED	SANDS AND GRAVELS
013 MAHOMET (TEAYS) BURIED VALLEY	SANDS AND GRAVELS
388 GREAT MIAMI RIVER VALLEY ALLUVIUM	SANDS AND GRAVELS
389 MISSISSIPPI RIV. ALLUVIUM UNDIFFERENTIATED	SANDS AND GRAVELS
390 MISSOURI RIVER-ALLUVIUM UNDIFFERENTIATED	SANDS AND GRAVELS
403 SANKOTY SAND	SANDS AND GRAVELS
404 OHIO RIVER ALLUVIUM UNDIFFERENTIATED	SANDS AND GRAVELS
003 CAMBRO-ORDOVICIAN	SANDSTONES (PRIMARY)
004 IRONTON-GALESVILLE SANDSTONE	SANDSTONES (PRIMARY)
005 MT. SIMON SANDSTONE	SANDSTONES (PRIMARY)
008 DAKOTA SANDSTONE	SANDSTONES (PRIMARY)
014 GLENWOOD-ST. PETER SANDSTONE	SANDSTONES (PRIMARY)
394 PENNSYLVANIAN SANDSTONES	SANDSTONES (PRIMARY)
399 CAMBRIAN SANDSTONES-NEW YORK	SANDSTONES (PRIMARY)
400 JORDAN SANDSTONE	SANDSTONES (PRIMARY)
401 HINCKLEY SANDSTONE	SANDSTONES (PRIMARY)
405 FRANCOVIA SANDSTONE	SANDSTONES (PRIMARY)
001 KEOKUK-BURLINGTON LIMESTONE	LIMESTONES (SECONDARY)
006 SILURIAN DOLOMITE	LIMESTONES (SECONDARY)
007 LOCKPORT DOLOMITE	LIMESTONES (SECONDARY)
393 PENNSYLVANIAN LIMESTONES	LIMESTONES (SECONDARY)
395 MISSISSIPPIAN AQUIFER	LIMESTONES (SECONDARY)
396 DEVONIAN UNDIFFERENTIATED	LIMESTONES (SECONDARY)
397 PRAIRIE DU CHIEN GROUP	LIMESTONES (SECONDARY)
398 GALENA - PLATTEVILLE	LIMESTONES (SECONDARY)
011 PRECAMBRIAN UNDIFFERENTIATED	CRYSTALLINE BASEMENT (SECONDARY)
012 FORT UNION AQUIFER	COAL AND SANDSTONES (SECONDARY)
391 FOX HILLS-HELL CREEK AQUIFER	COAL AND SANDSTONES (SECONDARY)
392 PERMIAN UNDIFFERENTIATED	COAL AND SANDSTONES (SECONDARY)
009 PIERRE SHALE	OTHER

REGION 7

NAME	GROUP
426 QUARternary DEPOSITS	SANDS AND GRAVELS
427 TERTIARY SEDIMENTS	SANDSTONES (PRIMARY)
428 PALEOZOIC SEDIMENTS	SANDSTONES (PRIMARY)
429 LOWER MESOZOIC SEDIMENTS	SANDSTONES (PRIMARY)
430 CRETACEOUS MARINE SEDIMENTS	SANDSTONES (PRIMARY)

REGION 3

NAME	GROUP
482 ALLUVIUM	SANDS AND GRAVELS
483 CONEMAUGH GROUP	SANDSTONES (PRIMARY)
484 ALLEGHENY GROUP	SANDSTONES (PRIMARY)
485 POTTSVILLE GROUP	SANDSTONES (PRIMARY)
487 POCONO FORMATION	SANDSTONES (PRIMARY)
488 TRIASSIC SANDSTONES UNDIFFERENTIATED	SANDSTONES (PRIMARY)
486 GREENBRIAR LIMESTONE	LIMESTONES (SECONDARY)
489 CARBONATES UNDIFFERENTIATED	LIMESTONES (SECONDARY)
490 CRYSTALLINE ROCKS UNDIFFERENTIATED	CRYSTALLINE BASEMENT (SECONDARY)

REGION 9

NAME	GROUP
413 MARINE DEPOSITS UNDIFFERENTIATED	SANDS AND GRAVELS
414 RECENT ALLUVIUM UNDIFFERENTIATED	SANDS AND GRAVELS
415 CONNECTICUT RIVER ALLUVIUM	SANDS AND GRAVELS
416 OUTWASH UNDIFFERENTIATED	SANDS AND GRAVELS
* 417 OUTWASH - MASSACHUSETTS	SANDS AND GRAVELS
* 418 OUTWASH - VERMONT	SANDS AND GRAVELS
* 419 ICE-CONTACT DEPOSITS UNDIFFERENTIATED	SANDS AND GRAVELS
420 ICE-CONTACT DEPOSITS-MASSACHUSETTS	SANDS AND GRAVELS
421 ESKERS UNDIFFERENTIATED	SANDS AND GRAVELS
422 ESKER - VERMONT	SANDS AND GRAVELS
423 TRIASSIC SANDSTONES-UNDIFFERENTIATED	SANDSTONES(PRIMARY)
424 CAMBRO-ORDOVICIAN CARBONATES	LIMESTONES(SECONDARY)
425 IGNEOUS & METAMORPHIC ROCKS	CRYSTALLINE BASEMENT(SECONDARY)

REGION 10

NAME	GROUP
431 RECENT DEPOSITS UNDIFFERENTIATED	SANDS AND GRAVELS
432 ALLUVIUM UNDIFFERENTIATED	SANDS AND GRAVELS
433 PLEISTOCENE DEPOSITS UNDIFFERENTIATED	SANDS AND GRAVELS
434 JAMECO AQUIFER	SANDS AND GRAVELS
435 POCCOMOKE AQUIFER	SANDS AND GRAVELS
436 MANOKIN AQUIFER	SANDS AND GRAVELS
437 FREDERICA AQUIFER	SANDS AND GRAVELS
438 MAGOTHY AQUIFER	SANDS AND GRAVELS
439 LLOYD AQUIFER	SANDS AND GRAVELS
440 NONMARINE CRETACEOUS AQUIFER	SANDS AND GRAVELS
441 MISSISSIPPI RIVER VALLEY ALLUVIUM	SANDS AND GRAVELS
442 RED RIVER VALLEY ALLUVIUM	SANDS AND GRAVELS
443 CHICOT AQUIFER-200 FT SAND	SANDS AND GRAVELS
444 CHICOT AQUIFER-500 FT SAND	SANDS AND GRAVELS
445 CHICOT AQUIFER-700 FT SAND	SANDS AND GRAVELS
446 COCKFIELD FORMATION	SANDS AND GRAVELS
447 MEMPHIS AQUIFER	SANDS AND GRAVELS
448 SPARTA SAND	SANDS AND GRAVELS
449 MERIDIAN-UPPER WILCOX AQUIFER	SANDS AND GRAVELS
450 CARRIZO SAND	SANDS AND GRAVELS
451 LOWER WILCOX AQUIFER	SANDS AND GRAVELS
452 NACATOH SAND	SANDS AND GRAVELS
453 RIPLEY FORMATION	SANDS AND GRAVELS
454 COFFEE SAND	SANDS AND GRAVELS
455 TOKIO FORMATION	SANDS AND GRAVELS
456 EUTAW FORMATION	SANDS AND GRAVELS
457 TUSCALOOSA FORMATION	SANDS AND GRAVELS
458 GORDO FORMATION	SANDS AND GRAVELS
459 COKER FORMATION	SANDS AND GRAVELS
460 TRINITY GROUP	SANDS AND GRAVELS
465 FEDERALSBURG AQUIFER	SANDS AND GRAVELS
466 CHESWOLD AQUIFER	SANDS AND GRAVELS

467	PINEY POINT AQUIFER	SANDS AND GRAVELS
468	AQUIA AND RANCOCAS AQUIFER	SANDS AND GRAVELS
470	POTOMAC GROUP AQUIFER	SANDS AND GRAVELS
461	PALEOZOIC AQUIFERS UNDIFFERENTIATED	LIMESTONES (SECONDARY)
462	FLORIDAN AQUIFER	LIMESTONES (SECONDARY)
463	BISCAYNE AQUIFER	LIMESTONES (SECONDARY)
464	PRINCIPAL ARTESIAN AQUIFER	LIMESTONES (SECONDARY)
469	BRUNSWICK SHALE	OTHER

REGION 11

NAME	GROUP
025 NORTH CENTRAL-DIKE IMPOUNDED-OAHU	VOLCANICS
026 WAIANAE VOLCANICS-DIKE IMPOUNDED-OAHU	VOLCANICS
383 HALEAKALA BASAL-MAUI	VOLCANICS
384 MAUNA KEA-BASAL-HAWAII	VOLCANICS
385 NAPALI BASAL-KAUAI	VOLCANICS
386 KOOLAU RANGE-DIKE IMPOUNDED-OAHU	VOLCANICS
387 PEARL HARBOR BASAL-OAHU	VOLCANICS

REGION 12

NAME	GROUP
015 YUKON-KUSKOKWIM DELTA	SANDS AND GRAVELS
022 TANANA RIVER BASIN	SANDS AND GRAVELS
023 ANCHORAGE AREA ARTESIAN	SANDS AND GRAVELS
024 MATANUSKA VALLEY-PALMER	SANDS AND GRAVELS
381 SEWARD ALLUVIUM	SANDS AND GRAVELS
016 BROOKS RANGE CARBONATES	LIMESTONES (SECONDARY)

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APPENDIX B
AQUIFER DATA

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REGION 1

TRANSMISSIVITY				STORATIVITY			HYDROLOGIC CHARACTERISTICS				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
K GPD/FT							WELL YIELD				GPM/FT			FT/DAY		
MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS																
QUATEPNARY DEPOSITS-RATHDRUM PRAIRIE																
	972.0	82,300.00	2				50	3,000	1,200	3						
	630.0	90,000.00	3													
AVERAGES	801.0	86,150.00					50	3,000	1,200							
SANDSTONES(PRIMARY)																
LARAMIDE CLASTICS																
	2.2	6.60	3.00	4			1	400	100	4	0.01	125.0	4	0.0100	3.2000	4
	0.6	1.00	0.70	8			1	600	250	6	1.50	2.3	6	0.5700	3.0200	6
	0.0	20.00		9			100	350	300	7	0.02	20.0	7			
							10	1,300		3	0.50	40.0	3			
							10	1,200		3	0.01	10.0	3			
							20	1,100	50	7	0.00	15.0	7			
AVERAGES	0.9	9.20	1.23				23	825	100		0.34	35.3		0.2700	5.6100	
EARLY MESOZOIC SEDIMENTS																
							45	350	100	7	0.25	0.2	7			
AVERAGES							45	350	100		0.25	0.2				
PALEOZOIC CLASTICS																
							500	2,000	800	5	2.00	270.0	7	0.0030	2.0000	5
							100	7,000	600	7						
AVERAGES							300	4,500	700		2.00	270.0		0.0030	2.0000	
LIMESTONES(SECONDARY)																
PALEOZOIC CARBONATE DEPOSITS																
							100	3,000	500	7						
AVERAGES							100	3,000	500							

B-1

Table 1-2

STORAGE				REGIONAL HYDROLOGIC CHARACTERISTICS										POROSITY			
Y/M AC-FT				FLOW VELOCITY		HYDRAULIC GRADIENT				%							
MIN	MAX	REF		MIN	MAX	DES	REF	MIN	MAX	DES	REF	MIN	MAX	REF			
SANDS AND GRAVELS																	
QUATERNARY DEPOSITS-RATHDRUM PRAIRIE				40.00000	64.00000		2		.1300		2		.25		2		
				-----	-----				.0050	.1900	7		-----	-----			
AVERAGES				40.00000	64.00000				.0025	.1600				.25			
SANDSTONES(PRIMARY)																	
LARAMIE CLASTICS													7	41	4		
				-----	-----				-----	-----			-----	-----			
AVERAGES													7	41			
EARLY MESOZOIC SEDIMENTS				NO DATA REPORTED FOR THIS GROUP													
PALEOZOIC CLASTICS				NO DATA REPORTED FOR THIS GROUP													
LIMESTONES(SECONDARY)																	
PALEOZOIC CARBONATE DEPOSITS				NO DATA REPORTED FOR THIS GROUP													

Table 1-2

	AREAL EXTENT		GEOMETRY				THICKNESS		
	K SQ. MI.		DEPTH BELOW SURFACE				FT		
	APPROX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF
SANDS AND GRAVELS									
QUATERNARY DEPOSITS-RATHDUN PRAIRIE	0.35	2	0	500		2	10	200	2
	0.50	3	5	1,000	200	3	50	1,000	3
AVERAGES	0.42		2	750			30	640	
SANDSTONES(PRIMARY)									
LARAMIE CLASTICS			20	1,000	300	4	10	400	4
			0	600	100	6	40	150	6
			50	1,200	250	7	0	500	7
			100	850	200	7	15	120	7
AVERAGES			42	912	212		16	222	
EARLY MESOZOIC SEDIMENTS			400	1,700		7			
AVERAGES			400	1,700					
PALEOZOIC CLASTICS	5.00	5	300			5	40	900	7
			400	4,000		7			
AVERAGES	5.00		450	7,000			40	900	
LIMESTONES(SECONDARY)									
PALEOZOIC CARBONATE DEPOSITS			100	2,000	1,000	7	100	800	7
AVERAGES			100	2,000	1,000		100	800	

Table 1-2

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

QUATERNARY DEPOSITS-RATHDRUM PRAIRIE

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 3

LOWER- AQUICLUDE REF- 3

LITHOLOGY OF CONFINING UNITS

UPPER- NA REF- 3

LOWER- METASEDIMENTS AND BASALT REF- 3

LITHOLOGY OF AQUIFER- GLACIAL GRAVELS REF- 3

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 2

SPATIAL VARIATION- HETEROGENOUS-ANISOTROPIC REF- 2

BOUNDARIES OF LATERAL UNIT- BEDROCK REF- 2

GEOMETRY(SHAPE)- TABULAR REF- 2

SANDSTONES(PRIMARY)

LARAMIDE CLASTICS

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 7

LOWER- AQUITARD REF- 4

LITHOLOGY OF CONFINING UNITS

UPPER- SILTSTONE AND SHALE REF- 7

LOWER- SILTSTONE AND SHALE REF- 7

LITHOLOGY OF AQUIFER- SANDSTONE REF- 4

AGE OF GEOLOGIC UNIT- TERTIARY (EOCENE) REF- 6

SPATIAL VARIATION- HETEROGENEOUS ANISOTROPIC REF- 6

BOUNDARIES OF LATERAL UNIT- FACIES & STRUCTURES REF- 7

GEOMETRY(SHAPE)- TABULAR REF- 4

EARLY MESOZOIC SEDIMENTS

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 7

LOWER- AQUITARD REF- 7

LITHOLOGY OF CONFINING UNITS

UPPER- FINE-GRAINED SEDIMENTS REF- 7

LOWER- FINE-GRAINED SEDIMENTS REF- 7

LITHOLOGY OF AQUIFER- SANDSTONE REF- 7

AGE OF GEOLOGIC UNIT- CRETACEOUS REF- 7

SPATIAL VARIATION- HETEROGENOUS-ANISOTROPIC REF- 7

BOUNDARIES OF LATERAL UNIT- STRUCTURES REF- 7

GEOMETRY(SHAPE)- DIPPING TABULAR REF- 7

PALEOZOIC CLASTICS

INTEGRITY OF CONFINING UNITS

UPPER- AQUICLUDE REF- 5

LOWER- AQUITARD REF- 7

LITHOLOGY OF CONFINING UNITS

UPPER- FINE-GRAINED SEDIMENTARY REF- 5

LOWER- FINE-GRAINED SEDIMENTARY REF- 5

LITHOLOGY OF AQUIFER- UNIFORM SANDSTONE REF- 7

AGE OF GEOLOGIC UNIT- PENNSYLVANIAN REF- 5

SPATIAL VARIATION- HOMOGENOUS ANISOTROPIC REF- 7

BOUNDARIES OF LATERAL UNIT- STRUCTURES REF- 7

GEOMETRY(SHAPE)- DIPPING TABULAR REF- 7

Table 1-2

SANDS AND GRAVELS

GEOLOGIC CHARACTERISTICS

LIMESTONES(SECONDARY)

PALEOZOIC CARBONATE DEPOSITS

INTEGRITY OF CONFINING UNITS

UPPER- AQUICLUDE REF- 7

LOWER- AQUICLUDE REF- 7

LITHOLOGY OF CONFINING UNITS

UPPER- FINE-GRAINED SEDIMENTS REF- 7

LOWER- FINE-GRAINED SEDIMENTS REF- 7

LITHOLOGY OF AQUIFER- LIMESTONE REF- 7

AGE OF GEOLOGIC UNIT- MISSISSIPPIAN REF- 7

SPATIAL VARIATION- HETEROGENEOUS-ANISOTROPIC REF- 7

BOUNDARIES OF LATERAL UNIT- STRUCTURES-FACIES REF- 7

GEOMETRY(SHAPE)- TABULAR REF- 7

THERMAL CHARACTERISTICS															
TEMPERATURE				AQUIFER				THERMAL CONDUCTIVITY				THERMAL CONDUCTIVITY			
DEG.CEL.				MCAL/CM SEC DEG C				UPPER CONFINEMENT				LOWER CONFINEMENT			
MIN	MAX	REF		MIN	MAX	AVG	REF	MIN	MAX	REF		MIN	MAX	REF	
SANDS AND GRAVELS															
QUATERNARY DEPOSITS-RATHDRUM PRAIRIE															
NO DATA REPORTED FOR THIS GROUP															
SANDSTONES(PRIMARY)															
LARAMIDE CLASTICS															
	3	14	6												
	5	12	7												
	5	11	7												
	---	---		---	---	---		---	---			---	---		
AVERAGES	6	12													
EARLY MESOZOIC SEDIMENTS															
NO DATA REPORTED FOR THIS GROUP															
PALEOZOIC CLASTICS															
NO DATA REPORTED FOR THIS GROUP															
LIMESTONES(SECONDARY)															
PALEOZOIC CARBONATE DEPOSITS															
NO DATA REPORTED FOR THIS GROUP															

Table 1-2

	TOTAL DISSOLVED SOLIDS			WATER QUALITY						PH		
	MG/L			HARDNESS			SPECIFIC CONDUCTANCE					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
QUATERNARY DEPOSITS-RATHDRUM PRAIRIE												
NO DATA REPORTED FOR THIS GROUP												
SANDSTONES(PRIMARY)												
LARAMIDE CLASTICS												
	205	4,520	6	2	2,590	6	340	6,300	6	6.8	9.7	6
	234	4,530	7	2	1,720	7	340	6,180	7	5.3	8.7	7
	177	793	7	97	556	7	249	1,140	7	5.8	8.1	7
	-----	-----		-----	-----		-----	-----		-----	-----	
AVERAGES	222	3,231		33	1,622		309	4,540		6.3	8.8	
EARLY MESOZOIC SEDIMENTS												
	200	1,000	7				694	1,750	7	6.8	85.0	7
	-----	-----		---	---		-----	-----		---	---	
AVERAGES	200	1,000					694	1,750		6.8	85.0	
PALEOZOIC CLASTICS												
	200	3,500	5									
	200	1,400	7									
	-----	-----		---	---		-----	-----		---	---	
AVERAGES	200	2,450										
LIMESTONES(SECONDARY)												
PALEOZOIC CARBONATE DEPOSITS												
	728	3,902	7									
	-----	-----		---	---		-----	-----		---	---	
AVERAGES	728	3,902										

Table 1-2

WATER QUALITY											
CA & MG MG/L			NA & K MG/L			CL MG/L			SO4 MG/L		
MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS											
QUATERNARY DEPOSITS-RATHDRUM PRAIRIE											
						0.0	14.0	2	7.0	159	2
	-----	-----	-----	-----		-----	-----		-----	-----	
AVERAGES						0.0	14.0		7.0	159	
SANDSTONES(PRIMARY)											
LARAMIDE CLASTICS											
						0.0	416.0	6	3.2		6
						0.1	35.0	7	4.1		7
						4.5	12.0	7	10.0	328	7
	-----	-----	-----	-----		-----	-----		-----	-----	
AVERAGES						1.5	171.0		5.7		
EARLY MESOZOIC SEDIMENTS											
						6.0	17.0	7		533	7
	-----	-----	-----	-----		-----	-----		-----	-----	
AVERAGES						6.0	17.0			533	
PALEOZOIC CLASTICS											
NO DATA REPORTED FOR THIS GROUP											
LIMESTONES(SECONDARY)											
PALEOZOIC CARBONATE DEPOSITS											
						10.0	430.0	7			7
	-----	-----	-----	-----		-----	-----		-----	-----	
AVERAGES						10.0	430.0				

Table 1-2

WATER QUALITY

	NO3			FE			FLUORIDE			SILICATES		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
QUATERNARY DEPOSITS-RATHDRUM PRAIRIE				0.0	740.0	2				1	69	2
	----	----		----	----		----	----		----	----	
AVERAGES				0.0	740.0					1	69	
SANDSTONES(PRIMARY)												
LARAMIDE CLASTICS												
	0.0	92.00	6	0.0	8.0	6	0.2	3.80	6	1	28	6
	0.0	23.00	7	0.0	8.4	7	0.2	3.00	7	5	30	7
	0.4	6.50	7	0.0	0.1	7	0.3	0.60	7	27	56	7
	----	----		----	----		----	----		----	----	
AVERAGES	0.1	40.50		0.0	5.5		0.2	2.46		11	38	
EARLY MESOZOIC SEDIMENTS												
	0.0	1.40	7	0.0	0.7	7	0.4	1.50	7	12	18	7
	----	----		----	----		----	----		----	----	
AVERAGES	0.0	1.40		0.0	0.7		0.4	1.50		12	18	
PALEOZOIC CLASTICS												
NO DATA REPORTED FOR THIS GROUP												
LIMESTONES(SECONDARY)												
PALEOZOIC CARBONATE DEPOSITS												
NO DATA REPORTED FOR THIS GROUP												

Table 1-2

	TRANSMISSIVITY				STORATIVITY			HYDROLOGIC CHARACTERISTICS				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS																	
KLAMATH RIVER BASIN-MODOC CO-CALIF																	
SO. SAN JOAQUIN VALLEY-CALIF																	
GABBS VALLEY-NYE CO-NEVADA																	
BUENA VISTA VALLEY-CHURCHILL CO-NEV																	
EDWARDS CREEK VALLEY-LANDER CO-NEV																	
BIG SMOKEY VALLEY-NYE CO-NEV																	
GRASS VALLEY-LANDER CO-NEV																	
SMITH CREEK VALLEY-CHURCHILL CO-NEV																	
SAND VALLEY-WASHOE CO-NEV																	
ESTANCIA BASIN-TORRANCE CO-NEW MEX																	
ANIMAS BASIN-HIDALGO CO-NEW MEX																	

Table 2-2

HYDROLOGIC CHARACTERISTICS																
TRANSMISSIVITY				STORATIVITY		WELL YIELD				SPECIFIC CAPACITY			HYD CONDUCTIVITY			
K GPD/FT						GPM				GPM/FT			FT/DAY			
MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS																
PLAYAS BASIN-HIDALGO CO-NEW MEX																
NO DATA REPORTED FOR THIS GROUP																
MEMBRES BASIN-OTERO CO-NEW MEX																
NO DATA REPORTED FOR THIS GROUP																
NEWANKUM ARTESIAN BASIN-LEWIS CO-WASH																
							100	400	250	13						
AVERAGES							100	400	250							

Table 2-2

	STORAGE			REGIONAL HYDROLOGIC CHARACTERISTICS							POROSITY		
	MM	AC-FT	REF	FLOW VELOCITY		HYDRAULIC GRADIENT				DEG			REF
	MIN	MAX		MIN	MAX	MIN	MAX	MIN	MAX		MIN	MAX	
SANDS AND GRAVELS													
KLAMATH RIVER BASIN-MODOC CO-CALIF													
NO DATA REPORTED FOR THIS GROUP													
SO. SAN JOAQUIN VALLEY-CALIF													
NO DATA REPORTED FOR THIS GROUP													
GABBS VALLEY-NYE CO-NEVADA													
	16.0		12										
AVERAGES	16.0												
BUENA VISTA VALLEY-CHURCHILL CO-NEV													
	24.0		12										
AVERAGES	24.0												
EDWARDS CREEK VALLEY-LANDER CO-NEV													
	7.0		12										
AVERAGES	7.0												
BIG SMOKEY VALLEY-NYE CO-NEV													
	120.0		12										
	120.0		12										
AVERAGES	120.0												
GRASS VALLEY-LANDER CO-NEV													
	16.0		12										
AVERAGES	16.0												
SMITH CREEK VALLEY-CHURCHILL CO-NEV													
	15.0		12										
AVERAGES	15.0												
SAND VALLEY-WASHOE CO-NEV													
	0.2		12										
	0.2		12										
AVERAGES	0.2												
ESTANCIA BASIN-TORRANCE CO-NEW MEX													
NO DATA REPORTED FOR THIS GROUP													

Table 2-2

B-13

	STORAGE			REGIONAL HYDROLOGIC CHARACTERISTICS							POROSITY		
	MM AC-FT			FLOW VELOCITY			HYDRAULIC GRADIENT				%		
	MIN	MAX	REF	MIN	MAX	DEG REF	MIN	MAX	REF		MIN	MAX	REF
SANDS AND GRAVELS													
ANIMAS BASIN-HIDALGO CO-NEW MEX													
PLAYAS BASIN-HIDALGO CO-NEW MEX													
MEMBRES BASIN-OTEPO CO-NEW MEX													
NEWANKUM ARTESIAN BASIN-LEWIS CO-WASH													

Table 2-2

	AREAL EXTENT		GEOMETRY				THICKNESS			
	K SQ. MI.	REF	DEPTH BELOW SURFACE		TYP	REF	FT			
	APPROX		MIN	MAX			MIN	MAX	REF	
SANDS AND GRAVELS										
KLAMATH RIVER BASIN-MODOC CO-CALIF										
NO DATA REPORTED FOR THIS GROUP										
SO. SAN JOAQUIN VALLEY-CALIF										
	5.00	11	300			11				
AVERAGES	5.00		300							
GABBS VALLEY-NYE CO-NEVADA										
	1.27	12								
AVERAGES	1.27									
BUENA VISTA VALLEY-CHURCHILL CO-NEV										
	0.74	12								
AVERAGES	0.74									
EDWARDS CREEK VALLEY-LANDER CO-NEV										
	0.41	12								
AVERAGES	0.41									
BIG SMOKEY VALLEY-NYE CO-NEV										
	2.90	12								
AVERAGES	2.90									
GRASS VALLEY-LANDER CO-NEV										
	0.59	12								
AVERAGES	0.59									
SMITH CREEK VALLEY-CHURCHILL CO-NEV										
	0.58	12								
AVERAGES	0.58									
SAND VALLEY-WASHOE CO-NEV										
	0.01	12								
AVERAGES	0.01									

Table 2-2

	AREAL EXTENT		GEOMETRY				THICKNESS		
	K SQ. MI.	REF	DEPTH BELOW SURFACE		TYP	REF	FT		
	APPROX		MIN	MAX			MIN	MAX	REF
SANDS AND GRAVELS									
ESTANCIA BASIN-TORRANCE CO-NEW MEX									
NO DATA REPORTED FOR THIS GROUP									
ANIMAS BASIN-HIDALGO CO-NEW MEX									
NO DATA REPORTED FOR THIS GROUP									
PLAYAS BASIN-HIDALGO CO-NEW MEX									
NO DATA REPORTED FOR THIS GROUP									
MEMBRES BASIN-OTERO CO-NEW MEX									
NO DATA REPORTED FOR THIS GROUP									
NEWANKUM ARTESIAN BASIN-LEWIS CO-WASH									
	0.02	13	200	300		13	2	10	13
	-----		-----	-----	-----		-----	-----	
AVERAGES	0.02		200	300			2	10	

Table 2-2

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

KLAMATH RIVER BASIN-MODOC CO-CALIF

INTEGRITY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF AQUIFER- NO DATA REPORTED REF- 0

AGE OF GEOLOGIC UNIT- NO DATA REPORTED REF- 0

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- NO DATA REPORTED REF- 0

SC. SAN JOAQUIN VALLEY-CALIF

INTEGRITY OF CONFINING UNITS

UPPER- HOMOGENEOUS REF- 11

LOWER- HETEROGENEOUS REF- 11

LITHOLOGY OF CONFINING UNITS

UPPER- DIATOMACEOUS CLAY REF- 11

LOWER- IMPERMEABLE CONSOLIDATED MARINE SEDIMENT REF- 11

LITHOLOGY OF AQUIFER- ALLUVIAL SANDS AND GRAVELS REF- 11

AGE OF GEOLOGIC UNIT- PLIOCENE REF- 11

SPATIAL VARIATION- SANDS AND GRAVELS REF- 11

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK REF- 11

GEOMETRY(SHAPE)- BASIN REF- 11

GABBS VALLEY-NYE CO-NEVADA

INTEGRITY OF CONFINING UNITS

UPPER- NONE REF- 12

LOWER- FAULT BOUNDED BEDROCK REF- 12

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 12

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 12

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 12

SPATIAL VARIATION- GRAVEL TO CLAY REF- 12

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 12

GEOMETRY(SHAPE)- CLOSED BASIN REF- 12

BUENA VISTA VALLEY-CHURCHILL CO-NEV

INTEGRITY OF CONFINING UNITS

UPPER- NONE REF- 12

LOWER- FAULT BOUNDED BEDROCK REF- 12

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 12

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 12

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 12

SPATIAL VARIATION- GRAVEL TO CLAY REF- 12

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 12

GEOMETRY(SHAPE)- CLOSED BASIN REF- 12

Table 2-2

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

EDWARDS CREEK VALLEY-LANDER CO-NEV

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 12

LOWER- FAULT BOUNDED BEDROCK REF- 12

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 12

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 12

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 12

SPATIAL VARIATION- GRAVEL TO CLAY REF- 12

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 12

GEOMETRY(SHAPE)- CLOSED BASIN REF- 12

BIG SMOKEY VALLEY-NYE CO-NEV

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 12

LOWER- FAULT BOUNDED BEDROCK REF- 12

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 12

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 12

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 12

SPATIAL VARIATION- GRAVEL TO CLAY REF- 12

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 12

GEOMETRY(SHAPE)- CLOSED BASIN REF- 12

GRASS VALLEY-LANDER CO-NEV

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 12

LOWER- FAULT BOUNDED BEDROCK REF- 12

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 12

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 12

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 12

SPATIAL VARIATION- GRAVEL TO CLAY REF- 12

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 12

GEOMETRY(SHAPE)- CLOSED BASIN REF- 12

SMITH CREEK VALLEY-CHURCHILL CO-NEV

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 12

LOWER- FAULT BOUNDED BEDROCK REF- 12

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 12

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 12

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 12

SPATIAL VARIATION- GRAVEL TO CLAY REF- 12

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 12

GEOMETRY(SHAPE)- CLOSED BASIN REF- 12

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

SAND VALLEY-WASHOE CO-NEV

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 12

LOWER- FAULT BOUNDED BEDROCK REF- 12

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 12

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 12

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 12

SPATIAL VARIATION- GRAVEL TO CLAY REF- 12

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 12

GEOMETRY(SHAPE)- CLOSED BASIN REF- 12

ESTANCIA BASIN-TORRANCE CO-NEW MEX

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 14

LOWER- FAULT BOUNDED BEDROCK REF- 14

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE ROCK REF- 14

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 14

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 14

SPATIAL VARIATION- GRAVEL TO CLAY REF- 14

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 14

GEOMETRY(SHAPE)- CLOSED BASIN REF- 14

ANIMAS BASIN-HIDALGO CO-NEW MEX

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 14

LOWER- FAULT BOUNDED BEDROCK REF- 14

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 14

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 14

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 14

SPATIAL VARIATION- GRAVEL TO CLAY REF- 14

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 14

GEOMETRY(SHAPE)- CLOSED BASIN REF- 14

PLAYAS BASIN-HIDALGO CO-NEW MEX

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 14

LOWER- FAULT BOUNDED BASINS REF- 14

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 14

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 14

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 14

SPATIAL VARIATION- GRAVEL TO CLAY REF- 14

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 14

GEOMETRY(SHAPE)- CLOSED BASIN REF- 14

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

MEMBRES BASIN-OTERO CO-NEW MEX

INTEGRITY OF CONFINING UNITS

UPPER- NONE REF- 14

LOWER- FAULT BOUNDED BEDROCK REF- 14

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- IMPERMEABLE BEDROCK REF- 14

LITHOLOGY OF AQUIFER- ALLUVIAL DEPOSITS REF- 14

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 14

SPATIAL VARIATION- GRAVEL TO CLAY REF- 14

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE BEDROCK-FAULT BOUNDED REF- 14

GEOMETRY(SHAPE)- CLOSED BASIN REF- 14

NEWANKUM ARTESIAN BASIN-LEWIS CO-WASH

INTEGRITY OF CONFINING UNITS

UPPER- HETEROGENEOUS REF- 13

LOWER- HETEROGENEOUS REF- 13

LITHOLOGY OF CONFINING UNITS

UPPER- POORLY SORTED GLACIAL DEPOSITS REF- 13 LOWER- SILT AND CLAY REF- 13

LITHOLOGY OF AQUIFER- NON-MARINE SANDSTONE REF- 13

AGE OF GEOLOGIC UNIT- TERTIARY REF- 13

SPATIAL VARIATION- SAND-GRAVEL REF- 13

BOUNDARIES OF LATERAL UNIT- SYNCLINAL FOLDING REF- 13

GEOMETRY(SHAPE)- SYNCLINAL-BASIN SHAPED REF- 13

B-20

TEMPERATURE DEG.CEL.			THERMAL CHARACTERISTICS												
			AQUIFER				THERMAL CONDUCTIVITY				UPPER CONFINEMENT				LOWER CONFINEMENT
MIN	MAX	REF	MIN	MAX	AVG	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF

SANDS AND GRAVELS

KLAMATH RIVER BASIN-MODOC CO-CALIF
NO DATA REPORTED FOR THIS GROUP

SO. SAN JOAQUIN VALLEY-CALIF
NO DATA REPORTED FOR THIS GROUP

GARBS VALLEY-NYE CO-NEVADA
NO DATA REPORTED FOR THIS GROUP

BUENA VISTA VALLEY-CHURCHILL CO-NEV
NO DATA REPORTED FOR THIS GROUP

EDWARDS CREEK VALLEY-LANDER CO-NEV
NO DATA REPORTED FOR THIS GROUP

BIG SMOKEY VALLEY-NYE CO-NEV
NO DATA REPORTED FOR THIS GROUP

GRASS VALLEY-LANDER CO-NEV
NO DATA REPORTED FOR THIS GROUP

SMITH CREEK VALLEY-CHURCHILL CO-NEV
NO DATA REPORTED FOR THIS GROUP

SAND VALLEY-WASHOE CO-NEV
NO DATA REPORTED FOR THIS GROUP

ESTANCIA BASIN-TORRANCE CO-NEW MEX
NO DATA REPORTED FOR THIS GROUP

ANIMAS BASIN-HIDALGO CO-NEW MEX
NO DATA REPORTED FOR THIS GROUP

PLAYAS BASIN-HIDALGO CO-NEW MEX
NO DATA REPORTED FOR THIS GROUP

MEMBRES BASIN-OTERO CO-NEW MEX
NO DATA REPORTED FOR THIS GROUP

NEWANKUM ARTESIAN BASIN-LEWIS CO-WASH
NO DATA REPORTED FOR THIS GROUP

Table 2-2

TOTAL DISSOLVED SOLIDS				WATER QUALITY			SPECIFIC CONDUCTANCE			PH		
MG/L				HARDNESS			MICRO CHMS					
MIN	MAX	REF		MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
KLAMATH RIVER BASIN-MODOC CO-CALIF												
NO DATA REPORTED FOR THIS GROUP												
SO. SAN JOAQUIN VALLEY-CALIF												
NO DATA REPORTED FOR THIS GROUP												
GABBS VALLEY-NYE CO-NEVADA												
	0	1,000	12									
AVERAGES	0	1,000										
BUENA VISTA VALLEY-CHURCHILL CO-NEV												
	3,000	0	12									
AVERAGES	3,000	0										
EDWARDS CREEK VALLEY-LANDER CO-NEV												
	1,000	3,000	12									
AVERAGES	1,000	3,000										
BIG SMOKEY VALLEY-NYE CO-NEV												
	0	1,000	12									
AVERAGES	0	1,000										
GRASS VALLEY-LANDER CO-NEV												
	0	1,000	12									
AVERAGES	0	1,000										
SMITH CREEK VALLEY-CHURCHILL CO-NEV												
	0	1,000	12									
AVERAGES	0	1,000										
SAND VALLEY-WASHOE CO-NEV												
	3,000		12									
AVERAGES	3,000											

Table 2-2

SANDS AND GRAVELS	TOTAL DISSOLVED SOLIDS			WATER QUALITY			SPECIFIC CONDUCTANCE			PH		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
ESTANCIA BASIN-TORRANCE CO-NEW MEX	NO DATA REPORTED FOR THIS GROUP											
ANIMAS BASIN-HIDALGO CO-NEW MEX	NO DATA REPORTED FOR THIS GROUP											
PLAYAS BASIN-HIDALGO CO-NEW MEX	NO DATA REPORTED FOR THIS GROUP											
MEMBRES BASIN-OTERO CO-NEW MEX	NO DATA REPORTED FOR THIS GROUP											
NEWANKUM ARTESIAN BASIN-LEWIS CO-WASH	NO DATA REPORTED FOR THIS GROUP											

B-23

	CA & MG			WATER QUALITY			CL			SO4		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
KLAMATH RIVER BASIN-MODOC CO-CALIF												
	NO DATA REPORTED FOR THIS GROUP											
SO. SAN JOAQUIN VALLEY-CALIF												
	NO DATA REPORTED FOR THIS GROUP											
GASBS VALLEY-NYE CO-NEVADA												
	NO DATA REPORTED FOR THIS GROUP											
BUENA VISTA VALLEY-CHURCHILL CO-NEV												
	NO DATA REPORTED FOR THIS GROUP											
EDWARDS CREEK VALLEY-LANDER CO-NEV												
	NO DATA REPORTED FOR THIS GROUP											
BIG SMOKEY VALLEY-NYE CO-NEV												
	NO DATA REPORTED FOR THIS GROUP											
GRASS VALLEY-LANDER CO-NEV												
	NO DATA REPORTED FOR THIS GROUP											
SMITH CREEK VALLEY-CHURCHILL CO-NEV												
	NO DATA REPORTED FOR THIS GROUP											
SAND VALLEY-WASHOE CO-NEV												
	NO DATA REPORTED FOR THIS GROUP											
ESTANCIA BASIN-TORRANCE CO-NEW MEX												
	NO DATA REPORTED FOR THIS GROUP											
ANIMAS BASIN-HIDALGO CO-NEW MEX												
	0.0	0	14									
	-----	-----		-----	-----		-----	-----		-----	-----	
AVERAGES	0.0	0										
PLAYAS BASIN-HIDALGO CO-NEW MEX												
	NO DATA REPORTED FOR THIS GROUP											
MEMBRES BASIN-OTERO CO-NEW MEX												
	NO DATA REPORTED FOR THIS GROUP											
NEWANKUM ARTESIAN BASIN-LEWIS CO-WASH												
	NO DATA REPORTED FOR THIS GROUP											

Table 2-2

	NO3			WATER QUALITY			FLUORIDE			SILICATES		
	MIN	MAX	REF	FE	MG/L	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
KLAMATH RIVER BASIN-MODOC CO-CALIF												
NO DATA REPORTED FOR THIS GROUP												
SO. SAN JOAQUIN VALLEY-CALIF												
NO DATA REPORTED FOR THIS GROUP												
GABBS VALLEY-NYE CO-NEVADA												
NO DATA REPORTED FOR THIS GROUP												
BUENA VISTA VALLEY-CHURCHILL CO-NEV												
NO DATA REPORTED FOR THIS GROUP												
EDWARDS CREEK VALLEY-LANDER CO-NEV												
NO DATA REPORTED FOR THIS GROUP												
BIG SMOKEY VALLEY-NYE CO-NEV												
NO DATA REPORTED FOR THIS GROUP												
GRASS VALLEY-LANDER CO-NEV												
NO DATA REPORTED FOR THIS GROUP												
SMITH CREEK VALLEY-CHURCHILL CO-NEV												
NO DATA REPORTED FOR THIS GROUP												
SAND VALLEY-WASHOE CO-NEV												
NO DATA REPORTED FOR THIS GROUP												
ESTANCIA BASIN-TORRANCE CO-NEW MEX												
NO DATA REPORTED FOR THIS GROUP												
ANIMAS BASIN-HIDALGO CO-NEW MEX												
NO DATA REPORTED FOR THIS GROUP												
PLAYAS BASIN-HIDALGO CO-NEW MEX												
NO DATA REPORTED FOR THIS GROUP												
MEMBRES BASIN-OTERO CO-NEW MEX												
NO DATA REPORTED FOR THIS GROUP												
NEWANKUM ARTESIAN BASIN-LEWIS CO-WASH												
NO DATA REPORTED FOR THIS GROUP												

Table 2-2

REGION 3

	TRANSMISSIVITY				STORATIVITY			HYDROLOGIC CHARACTERISTICS				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
	K GPD/FT							WELL YIELD				GPM/FT			FT/DAY		
	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS																	
SNAKE PLAIN AQUIFER																	
	0.0	20,000.00	0.00	20	0.15000	0.22000	16										
	250.0	35,000.00	15,000.00	16													
AVERAGES	125.0	27,500.00	7,500.00		0.15000	0.22000											
CLEARWATER PLATEAU																	
								5	110	40	19						
AVERAGES								5	110	40							
UPPER WEISER RIVER BASIN																	
								25	150	75	10						
AVERAGES								25	150	75							
RAFT RIVER BASIN																	
	10.0	450.00	15.00	25				900	2,700	1,500	25	19.00	68.0	25			
AVERAGES	10.0	450.00	15.00					900	2,700	1,500		19.00	68.0				
COLUMBIA RIVER GROUP-YAKIMA SUB																	
	8.0	400.00	60.00	15	0.00003	0.00120	15	100	3,000	500	18	11.00	60.0	17	0.0300	0.0900	15
	1.8	50.00	19.50	24	0.00250	0.00250	24	100	2,400	500	24				0.0000	0.0900	22
	1.0	250.00	40.00	22	0.00006	0.00500	22	200	2,000	700	21						
	20.0	300.00	60.00	21	0.00150	0.00600	21	200	2,000	700	17						
	67.0	500.00	100.00	17													
AVERAGES	19.5	300.00	55.90		0.00102	0.00367		150	2,350	650		11.00	60.0		0.0150	0.0900	

Table 3-2

	STORAGE			REGIONAL HYDROLOGIC CHARACTERISTICS									POROSITY		
	MM AC-FT			FLOW VELOCITY			HYDRAULIC GRADIENT						%		
	MIN	MAX	REF	MIN	MAX	DEG REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS															
SNAKE PLAIN AQUIFER										.0280	.0940	20			
										.4000	.7600	16			
										-----	-----				
AVERAGES										.2140	.4270				
CLEARWATER PLATEAU															
NO DATA REPORTED FOR THIS GROUP															
UPPER WEISER RIVER BASIN															
NO DATA REPORTED FOR THIS GROUP															
RAFT RIVER BASIN											.2800	25	15	25	25
										-----	-----		-----	-----	
AVERAGES										.2800			15	25	
COLUMBIA RIVER GROUP-YAKIMA SUB											.1000	15	1	3	15
													5	16	22
										-----	-----		-----	-----	
AVERAGES										.1000			3	0	

Table 3-2

	AREAL EXTENT		GEOMETRY				THICKNESS		
	K SQ.MI.		DEPTH BELOW SURFACE				FT		
	APPROX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF
VOLCANICS									
SNAKE PLAIN AQUIFER									
	9.50	20							
	9.50	16							
AVERAGES	9.50		-----	-----	-----		-----	-----	
CLEARWATER PLATEAU									
	1.70	19							
AVERAGES	1.70		-----	-----	-----		-----	-----	
UPPER WEISER RIVER BASIN									
NO DATA REPORTED FOR THIS GROUP									
RAFT RIVER BASIN									
	1.50	25					200	1,000	25
AVERAGES	1.50		-----	-----	-----		200	1,000	
COLUMBIA RIVER GROUP-YAKIMA SUB									
	2.00	18	40	1,000	300	18	20	1,000	18
	2.00	15	0	1,000	200	15	15	800	15
	3.60	24	100	1,200	300	24	200	1,000	24
	50.00	23	50	0	500	23	15	1,000	23
	50.00	21	200	1,000	600	21	50	1,000	21
			200	1,000	400	17			
AVERAGES	21.52		98	866	383		60	960	

Table 3-2

GEOLOGIC CHARACTERISTICS

VOLCANICS

SNAKE PLAIN AQUIFER

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 20

LOWER- AQUICLUDE REF- 20

LITHOLOGY OF CONFINING UNITS

UPPER- FRACTURED BASALT REF- 20

LOWER- DENSE BASALT REF- 20

LITHOLOGY OF AQUIFER- BASALT REF- 20

AGE OF GEOLOGIC UNIT- TERTIARY (MIOCENE) REF- 20

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 20

CLEARWATER PLATEAU

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 19

LOWER- AQUICLUDE REF- 19

LITHOLOGY OF CONFINING UNITS

UPPER- FRACTURED BASALT REF- 19

LOWER- DENSE BASALT REF- 19

LITHOLOGY OF AQUIFER- BASALT REF- 19

AGE OF GEOLOGIC UNIT- TERTIARY (MIOCENE) REF- 19

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 19

UPPER WEISER RIVER BASIN

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 10

LOWER- AQUICLUDE REF- 10

LITHOLOGY OF CONFINING UNITS

UPPER- FRACTURED BASALT OR SAND REF- 10

LOWER- DENSE BASALT REF- 10

LITHOLOGY OF AQUIFER- BASALT REF- 10

AGE OF GEOLOGIC UNIT- TERTIARY (MIOCENE) REF- 10

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 10

VOLCANICS

GEOLOGIC CHARACTERISTICS

RAFT RIVER BASIN

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 25

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF AQUIFER- VOLCANIC RX AND SEDIMENTS REF- 25

AGE OF GEOLOGIC UNIT- TERTIARY REF- 25

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- ELONGATED REF- 25

COLUMBIA RIVER GROUP-YAKIMA SUB

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD-LEAKY REF- 18

LOWER- AQUITARD-LEAKY REF- 18

LITHOLOGY OF CONFINING UNITS

UPPER- DENSE BASALT REF- 18

LOWER- DENSE BASALT REF- 18

LITHOLOGY OF AQUIFER- FRACTURED-VESICULAR BASALT REF- 18

AGE OF GEOLOGIC UNIT- TERTIARY-MIOCENE REF- 18

SPATIAL VARIATION- HETEROGENEOUS-ANISOTROPIC REF- 18

BOUNDARIES OF LATERAL UNIT- FAULTS-RIVERS-STRUCTURES REF- 18

GEOMETRY(SHAPE)- TABULAR REF- 18

THERMAL CHARACTERISTICS											
TEMPERATURE				AQUIFER				THERMAL CONDUCTIVITY			
DEG.CEL.				MCAL/CM SEC DEG C				UPPER CONFINEMENT			
MIN	MAX	REF		MIN	MAX	AVG	REF	MIN	MAX	REF	
								LOWER CONFINEMENT			
								MCAL/CM SEC DEG C			
								MIN MAX REF			

VOLCANICS

SNAKE PLAIN AQUIFER

NO DATA REPORTED FOR THIS GROUP

CLEARWATER PLATEAU

NO DATA REPORTED FOR THIS GROUP

UPPER WEISER RIVER BASIN

	64	64	10	---	---	---	---	---	---	---	---
AVERAGES	64	64									

RAFT RIVER BASIN

NO DATA REPORTED FOR THIS GROUP

COLUMBIA RIVER GROUP-YAKIMA SUB

	6	23	18								
	8	30	23								
	11	27	17								
AVERAGES	8	26									

Table 3-2

	TOTAL DISSOLVED SOLIDS			WATER QUALITY						PH		
	MG/L			HARDNESS			SPECIFIC CONDUCTANCE					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS												
SNAKE PLAIN AQUIFER	0	250	16	---	---		410	450	16	---	---	
AVERAGES	0	250		---	---		410	450		---	---	
CLEARWATER PLATEAU	144	460	19	48	212	19	---	---		---	---	
AVERAGES	144	460		48	212		---	---		---	---	
UPPER WEISER RIVER BASIN	73	206	10	19	75	10	138	333	10	7.2	8.3	10
AVERAGES	73	206		19	75		138	333		7.2	8.3	
RAFT RIVER BASIN	320	1,280	25	---	---		---	---		7.0	8.0	25
AVERAGES	320	1,280		---	---		---	---		7.0	8.0	
COLUMBIA RIVER GROUP-YAKIMA SUB	112	861	15	14	626	18	50	1,410	18	7.2	8.7	15
	60	1,640	23	3	96	15	250	560	15	6.5	9.2	23
	201	568	17	4	412	23	107	694	23	7.2	9.1	17
	---	---		10	334	17	258	891	17	---	---	
AVERAGES	124	1,023		7	367		156	888		6.9	9.0	

Table 3-2

WATER QUALITY

	NO3			FE			FLUORIDE			SILICATES		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS												
SNAKE PLAIN AQUIFER												
	NO DATA REPORTED FOR THIS GROUP											
CLEARWATER PLATEAU												
	0.0	42.50	19	0.0	0.3	19	0.2	1.24	19	0	160	19
	-----	-----		-----	-----		-----	-----		-----	-----	
AVERAGES	0.0	42.50		0.0	0.3		0.2	1.24		0	160	
UPPER WEISER RIVER BASIN												
	0.0	0.00	10									
	-----	-----		-----	-----		-----	-----		-----	-----	
AVERAGES	0.0	0.00										
RAFT RIVER BASIN												
	NO DATA REPORTED FOR THIS GROUP											
COLUMBIA RIVER GROUP-YAKIMA SUB												
	0.0	10.00	18	0.0	11.0	18	0.1	1.10	18	20	134	13
	0.0	0.50	15	0.0	4.0	15	0.7	18.00	15	22	36	15
	0.2	6.00	23	0.1	16.5	23	0.0	2.00	23	18	121	23
				0.0	0.2	17	0.4	2.00	17	38	115	17
	-----	-----		-----	-----		-----	-----		-----	-----	
AVERAGES	0.0	5.50		0.0	7.9		0.3	5.77		24	94	

Table 3-2

		WATER QUALITY											
		CA & MG			NA & K			CL			SO4		
		MG/L			MG/L			MG/L			MG/L		
		MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS													
SNAKE PLAIN AQUIFER													
		-----	-----		10.0	60.0	16	10.0	70.0	16	-----	---	
	AVERAGES	-----	-----		10.0	60.0		10.0	70.0		-----	---	
CLEARWATER PLATEAU													
		-----	-----		-----	-----		1.0	26.0	19	1.0	52	19
	AVERAGES	-----	-----		-----	-----		1.0	26.0		1.0	52	
UPPER WEISER RIVER BASIN													
		-----	-----		-----	-----		1.4	8.5	10	1.4	31	10
	AVERAGES	-----	-----		-----	-----		1.4	8.5		1.4	31	
RAFT RIVER BASIN													
NO DATA REPORTED FOR THIS GROUP													
COLUMBIA RIVER GROUP-YAKIMA SUB													
		20.0	100	23	7.0	126.0	23	0.3	27.0	18	0.0	53	18
								3.8	31.0	15	0.0	29	15
								1.0	50.0	23	1.0	130	23
								4.0	91.0	17	0.0	120	17
	AVERAGES	20.0	100		7.0	126.0		2.2	62.2		0.2	33	

Table 3-2

REGION 4

	TRANSMISSIVITY				STORATIVITY			HYDROLOGIC CHARACTERISTICS				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
	K GPD/FT							WELL YIELD				GPM/FT			FT/DAY		
	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
SANDSTONES(PRIMARY)																	
DRY LAKE BASIN-NAVAJO CO-AZ								500	2,500		26						
AVERAGES	-----	-----	-----		-----	-----		500	2,500	-----		-----	-----		-----	-----	

	STORAGE			REGIONAL HYDROLOGIC CHARACTERISTICS				HYDRAULIC GRADIENT			POROSITY		
	MM AC-FT			FLOW VELOCITY				%			%		
	MIN	MAX	REF	MIN	MAX	DEG	REF	MIN	MAX	REF	MIN	MAX	REF
SANDSTONES(PRIMARY)													
DRY LAKE BASIN-NAVAJO CO-AZ													
	NO DATA REPORTED FOR THIS GROUP												

	AREAL EXTENT		GEOMETRY				THICKNESS		
	K SQ.MI.		DEPTH BELOW SURFACE				FT		
	APPROX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF
SANDSTONES(PRIMARY)									
DRY LAKE BASIN-NAVAJO CO-AZ									
AVERAGES	0.03	26	-----	-----	200	26	-----	-----	
	0.03				200				

Table 4-2

GEOLOGIC CHARACTERISTICS

SANDSTONES(PRIMARY)

DRY LAKE BASIN-NAVAJO CO-AZ

INTEGRITY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF CONFINING UNITS

UPPER- SILTSTONE BEDS REF- 26

LOWER- BEDDED SEQUENCE & SEDIMENTARY & BASALTIC ROCK REF- 26

LITHOLOGY OF AQUIFER- SANDSTONE (WEAKLY CEMENTED) REF- 26

AGE OF GEOLOGIC UNIT- PERMIAN REF- 26

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- FOLDING (ANTICLINE) REF- 26

GEOMETRY(SHAPE)- DOME-SHAPE ANTICLINE REF- 26

THERMAL CHARACTERISTICS

TEMPERATURE
DEG.CEL.
MIN MAX REF

AQUIFER
MCAL/CM SEC DEG C
MIN MAX AVG REF

THERMAL CONDUCTIVITY
UPPER CONFINEMENT
MCAL/CM SEC DEG C
MIN MAX REF

LOWER CONFINEMENT
MCAL/CM SEC DEG C
MIN MAX REF

SANDSTONES(PRIMARY)

DRY LAKE BASIN-NAVAJO CO-AZ

NO DATA REPORTED FOR THIS GROUP

WATER QUALITY

TOTAL DISSOLVED SOLIDS
MG/L
MIN MAX REF

HARDNESS
MG/L
MIN MAX REF

SPECIFIC CONDUCTANCE
MICRO OHMS
MIN MAX REF

PH
MIN MAX REF

SANDSTONES(PRIMARY)

DRY LAKE BASIN-NAVAJO CO-AZ

NO DATA REPORTED FOR THIS GROUP

CA & MG
MG/L
MIN MAX REF

NA & K
MG/L
MIN MAX REF

CL
MG/L
MIN MAX REF

SO4
MG/L
MIN MAX REF

SANDSTONES(PRIMARY)

DRY LAKE BASIN-NAVAJO CO-AZ

NO DATA REPORTED FOR THIS GROUP

NO3
MG/L
MIN MAX REF

FE
MG/L
MIN MAX REF

FLUORIDE
MG/L
MIN MAX REF

SILICATES
MG/L
MIN MAX REF

SANDSTONES(PRIMARY)

DRY LAKE BASIN-NAVAJO CO-AZ

NO DATA REPORTED FOR THIS GROUP

REGION 5

TRANSMISSIVITY K GPD/FT				STORATIVITY			HYDROLOGIC CHARACTERISTICS WELL YIELD GPM				SPECIFIC CAPACITY GPM/FT			HYD CONDUCTIVITY FT/DAY		
MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS																
PLEISTOCENE-PLIOCENE UNDIFFERENTIATED																
52.1	590.00		27	0.00014	0.00480	27	1,000	2,800	2,000	27						
AVERAGES	52.1	590.00		0.00014	0.00480		1,000	2,800	2,000							
OGALLALA FORMATION																
20.0	250.00		28	0.01000	0.20000	28	330	1,410	1,000	28	7.00	105.0	28			
1.0	39.20		30				410	1,410	1,000	29	1.50	15.3	30			
25.0	330.00	100.00	29								18.00	117.0	29			
AVERAGES	15.3	206.40		0.01000	0.20000		370	1,410	1,000		8.93	79.1				
WHITE RIVER GROUP																
25.0	2,000.00		30								2.80	257.0	30			
AVERAGES	25.0	2,000.00									2.80	257.0				

STORAGE MM AC-FT				REGIONAL HYDROLOGIC CHARACTERISTICS FLOW VELOCITY FT/DAY				HYDRAULIC GRADIENT %			POROSITY %		
MIN	MAX	REF		MIN	MAX	DEG	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS													
PLEISTOCENE-PLIOCENE UNDIFFERENTIATED													
NO DATA REPORTED FOR THIS GROUP													
OGALLALA FORMATION													
WHITE RIVER GROUP													
NO DATA REPORTED FOR THIS GROUP													

Table 5-2

B-37

	AREAL EXTENT		GEOMETRY				THICKNESS		
	K SQ. MI.		DEPTH BELOW SURFACE				FT		
	APPROX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF
SANDS AND GRAVELS									
PLEISTOCENE-PLIOCENE UNDIFFERENTIATED									
NO DATA REPORTED FOR THIS GROUP									
OGALLALA FORMATION									
			32	195	0	28	59	242	28
			35	231	0	29	54	277	29
	-----		-----	-----	-----		-----	-----	
AVERAGES			33	213	0		56	259	
WHITE RIVER GROUP									
NO DATA REPORTED FOR THIS GROUP									

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

PLEISTOCENE-PLIOCENE UNDIFFERENTIATED

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED TO AQUITARD REF- 27

LOWER- AQUICLUDE REF- 27

LITHOLOGY OF CONFINING UNITS

UPPER- SAND GRAVEL CLAY REF- 27

LOWER- SHALE REF- 27

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 27

AGE OF GEOLOGIC UNIT- PLEISTOCENE AND PLIOCENE REF- 27

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- LENTICULAR REF- 27

OGALLALA FORMATION

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED TO AQUICLUDE REF- 28

LOWER- AQUICLUDE REF- 29

LITHOLOGY OF CONFINING UNITS

UPPER- SAND AND GRAVEL TO CLAY REF- 29

LOWER- SHALE REF- 29

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 28

AGE OF GEOLOGIC UNIT- PLIOCENE REF- 28

SPATIAL VARIATION- HETEROGENEOUS REF- 28

BOUNDARIES OF LATERAL UNIT- LITHOLOGIC REF- 28

GEOMETRY(SHAPE)- LENSES REF- 28

WHITE RIVER GROUP

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED TO AQUITARD REF- 30

LOWER- AQUITARD REF- 30

LITHOLOGY OF CONFINING UNITS

UPPER- SANDSTONE AND SILT REF- 30

LOWER- SANDSTONE REF- 30

LITHOLOGY OF AQUIFER- LENSES REF- 30

AGE OF GEOLOGIC UNIT- OLIGOCENE REF- 30

SPATIAL VARIATION- HETEROGENEOUS REF- 30

BOUNDARIES OF LATERAL UNIT- LITHOLOGIC REF- 30

GEOMETRY(SHAPE)- TABULAR REF- 30

Table 5-2

THERMAL CHARACTERISTICS

	TEMPERATURE				AQUIFER				THERMAL CONDUCTIVITY				UPPER CONFINEMENT				LOWER CONFINEMENT			
	DEG.CEL.				MCAL/CM SEC DEG C				MCAL/CM SEC DEG C				MCAL/CM SEC DEG C				MCAL/CM SEC DEG C			
	MIN	MAX	REF		MIN	MAX	AVG	REF	MIN	MAX	REF		MIN	MAX	REF		MIN	MAX	REF	
SANDS AND GRAVELS																				
PLEISTOCENE-PLIOCENE UNDIFFERENTIATED																				
	16	17	27		----	----	----		----	----			----	----			----	----		
AVERAGES	16	17																		
OGALLALA FORMATION																				
WHITE RIVER GROUP																				

NO DATA REPORTED FOR THIS GROUP

NO DATA REPORTED FOR THIS GROUP

	TOTAL DISSOLVED SOLIDS			WATER QUALITY						PH		
	MG/L			HARDNESS			SPECIFIC CONDUCTANCE					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
PLEISTOCENE-PLIOCENE UNDIFFERENTIATED												
	-----	-----		82	528	27	132	1,112	27	---	---	
AVERAGES				82	528		132	1,112				
OGALLALA FORMATION												
	167	308	28	125	219	23	197	1,120	30			
	234	280	30	60	436	30						
AVERAGES	200	294		92	327		197	1,120				
WHITE RIVER GROUP												
	208	424	30	98	264	30						
AVERAGES	208	424		98	264							
	CA & MG			NA & K			CL			SO4		
	MG/L			MG/L			MG/L			MG/L		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
PLEISTOCENE-PLIOCENE UNDIFFERENTIATED												
	-----	-----		-----	-----		7.0	193.0	27	-----	-----	
AVERAGES							7.0	193.0				
OGALLALA FORMATION												
							1.0	17.0	23	0.3	30	23
							5.0	14.0	30	15.0	22	30
AVERAGES							3.0	15.5		7.6	26	
WHITE RIVER GROUP												
							2.5	13.0	30	3.8	74	30
AVERAGES							2.5	13.0		3.8	74	

Table 5-2

WATER QUALITY															
NO3 MG/L				FE MG/L			FLUORIDE MG/L			SILICATES MG/L					
MIN	MAX	REF		MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF			
SANDS AND GRAVELS															
PLEISTOCENE-PLIOCENE UNDIFFERENTIATED															
NO DATA REPORTED FOR THIS GROUP															
OGALLALA FORMATION															
	1.6	16.00	28	0.0	5.8	28	0.3	0.90	28						
	2.0	12.00	30	0.0	0.2	30	0.7	0.90	30						
	----	----		----	----		----	----		----	----				
AVERAGES	1.8	14.00		0.0	3.0		0.5	0.90							
WHITE RIVER GROUP															
	1.0	13.00	30	0.0	1.1	30	0.4	0.90	30						
	----	----		----	----		----	----		----	----				
AVERAGES	1.0	13.00		0.0	1.1		0.4	0.90							

Table 5-2

REGION 6

	TRANSMISSIVITY				STORATIVITY			HYDROLOGIC CHARACTERISTICS				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS																	
AMERICAN BOTTOMS-MISSISSIPPI R. VALLEY																	
	50.0	300.00		31	0.00200	0.15500	37	500	1,000		31	22.00	238.0	37	142.0000	388.0000	37
	50.0	300.00		37				300	1,100	500	37						
AVERAGES	50.0	300.00			0.00200	0.15500		400	1,050	250		22.00	238.0		142.0000	388.0000	
MAHOMET (TEAYS) BURIED VALLEY																	
	3.0	510.00		40	0.00001	0.00350	40	50	2,550	1,000	40	1.58	207.0	40	26.8000		40
AVERAGES	3.0	510.00			0.00001	0.00350		50	2,550	1,000		1.58	207.0		26.8000		
GREAT MIAMI RIVER VALLEY ALLUVIUM																	
	35.0	300.00		39	0.20000	0.00010	34		3,000		39				100.2000	166.7000	34
					0.00200	0.10000	39										
AVERAGES	35.0	300.00			0.10100	0.05005			3,000						100.2000	166.7000	
SANDSTONES (PRIMARY)																	
CAMBRO-ORDOVICIAN																	
	10.8	26.90		33	0.35000	0.60000	36			2,000	33	1.70	7.0	33	25.0000	40.0000	36
	0.0	0.00	17.00	36	0.00028	0.00000	35			1,000	32	3.00	80.0	35	2.7000	4.7000	32
	30.0	40.00		35				100		1,000	35						
AVERAGES	13.6	22.30			0.17514	0.30000				1,333		2.35	43.5		13.8500	22.3500	
DAKOTA SANDSTONE																	
								300	1,000		38						
AVERAGES								300	1,000								
GLENWOOD-ST. PETER SANDSTONE																	
NO DATA REPORTED FOR THIS GROUP																	
CAMBRIAN SANDSTONES-NEW YORK																	
			0.10	41	0.00000	0.00001	41								0.0030	0.0260	41
AVERAGES			0.10		0.00000	0.00001									0.0030	0.0260	
JORDAN SANDSTONE																	
NO DATA REPORTED FOR THIS GROUP																	

Table 6-2

STORAGE
MM AC-FT
MIN MAX REF

REGIONAL HYDROLOGIC CHARACTERISTICS
FLOW VELOCITY
FT/DAY
MIN MAX DEG REF
HYDRAULIC GRADIENT
%
MIN MAX REF

POROSITY
%
MIN MAX REF

SANDS AND GRAVELS

AMERICAN BOTTOMS-MISSISSIPPI R. VALLEY
NO DATA REPORTED FOR THIS GROUP

MAHOMET (TEAYS) BURIED VALLEY
NO DATA REPORTED FOR THIS GROUP

GREAT MIAMI RIVER VALLEY ALLUVIUM
NO DATA REPORTED FOR THIS GROUP

SANDSTONES (PRIMARY)

CAMBRO-ORDOVICIAN

AVERAGES

0.27000

35

10 15 35

0.27000

10 15

DAKOTA SANDSTONE

AVERAGES

15 0 38

15 0

GLENWOOD-ST. PETER SANDSTONE
NO DATA REPORTED FOR THIS GROUP

CAMBRIAN SANDSTONES-NEW YORK

AVERAGES

1 13 41

1 13

JORDAN SANDSTONE

NO DATA REPORTED FOR THIS GROUP

Table 6-2

	AREAL EXTENT K SQ. MI. APPROX REF		GEOMETRY DEPTH BELOW SURFACE FT				THICKNESS FT		
			MIN	MAX	TYP	REF	MIN	MAX	REF
SANDS AND GRAVELS									
AMERICAN BOTTOMS-MISSISSIPPI R. VALLEY									
	0.33	31					25	75	31
	0.17	37					0	170	37
	-----		-----	-----	-----		-----	-----	
AVERAGES	0.25						12	122	
MAHOMET (TEAYS) BURIED VALLEY									
	3.70	40	30	320	200	40	0	500	40
	-----		-----	-----	-----		-----	-----	
AVERAGES	3.70		30	320	200		0	500	
GREAT MIAMI RIVER VALLEY ALLUVIUM									
							2	275	34
							150	200	39
	-----		-----	-----	-----		-----	-----	
AVERAGES							75	237	
SANDSTONES (PRIMARY)									
CAMBRO-ORDOVICIAN									
				2,500		33		250	33
			900	2,200		32	800	2,200	32
				3,200		35		600	35
	-----		-----	-----	-----		-----	-----	
AVERAGES				2,633				1,016	
DAKOTA SANDSTONE									
							150	400	38
	-----		-----	-----	-----		-----	-----	
AVERAGES							150	400	
GLENWOOD-ST. PETER SANDSTONE									
NO DATA REPORTED FOR THIS GROUP									
CAMBRIAN SANDSTONES-NEW YORK									
								2,500	41
	-----		-----	-----	-----		-----	-----	
AVERAGES								2,500	
JORDAN SANDSTONE									
NO DATA REPORTED FOR THIS GROUP									

Table 6-2

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

AMERICAN BOTTOMS-MISSISSIPPI R. VALLEY

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD-LEAKY REF- 37

LOWER- AQUITARD REF- 37

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY AND SILT REF- 37

LOWER- LIMESTONE AND DOLOMITE REF- 37

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 31

AGE OF GEOLOGIC UNIT- PLEISTOCENE AND HOLOCENE REF- 37

SPATIAL VARIATION- HETEROGENEOUS REF- 37

BOUNDARIES OF LATERAL UNIT- RIVER AND BASIN REF- 37

GEOMETRY(SHAPE)- BASIN REF- 37

MAHOMET (TEAYS) BURIED VALLEY

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD-LEAKY REF- 40

LOWER- AQUITARD-LEAKY REF- 40

LITHOLOGY OF CONFINING UNITS

UPPER- GLACIAL TILL REF- 40

LOWER- SHALE-SOME SANDSTONE REF- 40

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 40

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 40

SPATIAL VARIATION- HETEROGENEOUS REF- 40

BOUNDARIES OF LATERAL UNIT- RECHARGE REF- 40

GEOMETRY(SHAPE)- BASIN REF- 40

GREAT MIAMI RIVER VALLEY ALLUVIUM

INTEGRITY OF CONFINING UNITS

UPPER- PATCHY AQUITARD REF- 39

LOWER- AQUITARD REF- 39

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY TILL REF- 39

LOWER- SHALE-SOME LIMESTONE REF- 39

LITHOLOGY OF AQUIFER- OUTWASH & SAND AND GRAVEL REF- 39

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 34

SPATIAL VARIATION- HETEROGENEOUS REF- 39

BOUNDARIES OF LATERAL UNIT- RIVER BEDROCK REF- 34

GEOMETRY(SHAPE)- VALLEY FILL REF- 39

SANDSTONES(PRIMARY)

CAMBRO-ORDOVICIAN

INTEGRITY OF CONFINING UNITS

UPPER- VARIABLE REF- 35

LOWER- AQUITARD - LEAKY REF- 35

LITHOLOGY OF CONFINING UNITS

UPPER- VARIABLE REF- 35

LOWER- DOLOMITE REF- 35

LITHOLOGY OF AQUIFER- SANDSTONES AND DOLOMITE REF- 35

AGE OF GEOLOGIC UNIT- CAMBRO-ORDOVICIAN REF- 35

SPATIAL VARIATION- ANISOTROPIC-SANDSTONE TO DOLOMITE REF- 36

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 35

GEOMETRY(SHAPE)- TABULAR REF- 36

Table 6-2

SANDS AND GRAVELS

GEOLOGIC CHARACTERISTICS

DAKOTA SANDSTONE

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 38

LOWER- AQUICLUDE REF- 38

LITHOLOGY OF CONFINING UNITS

UPPER- LIMESTONE REF- 38

LOWER- SHALE OR PRECAMBRIAN REF- 38

LITHOLOGY OF AQUIFER- SANDSTONE REF- 38

AGE OF GEOLOGIC UNIT- CRETACEOUS REF- 38

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 38

GLENWOOD-ST. PETER SANDSTONE

INTEGRITY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF AQUIFER- NO DATA REPORTED REF- 0

AGE OF GEOLOGIC UNIT- NO DATA REPORTED REF- 0

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- NO DATA REPORTED REF- 0

CAMBRIAN SANDSTONES-NEW YORK

INTEGRITY OF CONFINING UNITS

UPPER- AQUICLUDE-THICK REF- 41

LOWER- AQUICLUDE REF- 41

LITHOLOGY OF CONFINING UNITS

UPPER- ORDOVICIAN LIMESTONES REF- 41

LOWER- PRECAMBRIAN BASEMENT REF- 41

LITHOLOGY OF AQUIFER- QUARTZITIC AND DOLOMITIC SS REF- 41

AGE OF GEOLOGIC UNIT- CAMBRIAN REF- 41

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 41

JORDAN SANDSTONE

INTEGRITY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF AQUIFER- NO DATA REPORTED REF- 0

AGE OF GEOLOGIC UNIT- NO DATA REPORTED REF- 0

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- NO DATA REPORTED REF- 0

THERMAL CHARACTERISTICS

	TEMPERATURE			AQUIFER				THERMAL CONDUCTIVITY			UPPER CONFINEMENT			LOWER CONFINEMENT		
	DEG. CEL.			MCAL/CM SEC DEG C				MCAL/CM SEC DEG C			MCAL/CM SEC DEG C			MCAL/CM SEC DEG C		
	MIN	MAX	REF	MIN	MAX	AVG	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS																
AMERICAN BOTTOMS-MISSISSIPPI R. VALLEY																
	11	16	37													
AVERAGES	11	16														
MAHOMET (TEAYS) BURIED VALLEY																
NO DATA REPORTED FOR THIS GROUP																
GREAT MIAMI RIVER VALLEY ALLUVIUM																
	11	12	39													
AVERAGES	11	12														
SANDSTONES (PRIMARY)																
CAMBRO-ORDOVICIAN																
NO DATA REPORTED FOR THIS GROUP																
DAKOTA SANDSTONE																
	21	48	38													
AVERAGES	21	48														
GLENWOOD-ST. PETER SANDSTONE																
NO DATA REPORTED FOR THIS GROUP																
CAMBRIAN SANDSTONES-NEW YORK																
	27	40	41													
AVERAGES	27	40														
JORDAN SANDSTONE																
NO DATA REPORTED FOR THIS GROUP																

Table 6-2

	TOTAL DISSOLVED SOLIDS			WATER QUALITY			SPECIFIC CONDUCTANCE			PH		
	MG/L			MG/L			MICRO OHMS					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
AMERICAN BOTTOMS-MISSISSIPPI R. VALLEY												
	163	1,882	37	124	1,273	37	-----	-----		---	---	
AVERAGES	163	1,882		124	1,273							
MAHOMET (TEAYS) BURIED VALLEY												
	310	478	40	170	595	40	-----	-----		---	---	
AVERAGES	310	478		170	595							
GREAT MIAMI RIVER VALLEY ALLUVIUM												
	400	450	39	---	-----		-----	-----		7.0	7.7	39
AVERAGES	400	450								7.0	7.7	
SANDSTONES (PRIMARY)												
CAMBRO-ORDOVICIAN												
	300	500	32	200	400	32						
	500	2,500	35	---	-----		-----	-----		---	---	
AVERAGES	400	1,500		200	400							
DAKOTA SANDSTONE												
	1,200	2,497	33	---	-----		-----	-----		---	---	
AVERAGES	1,200	2,497										
GLENWOOD-ST. PETER SANDSTONE												
NO DATA REPORTED FOR THIS GROUP												
CAMBRIAN SANDSTONES-NEW YORK												
	-----	-----	41	---	-----	41	-----	0	41	3.1	10.5	41
AVERAGES								0		3.1	10.5	
JORDAN SANDSTONE												
NO DATA REPORTED FOR THIS GROUP												

Table 6-2

WATER QUALITY															
NO3				FE				FLUORIDE				SILICATES			
MG/L				MG/L				MG/L				MG/L			
MIN	MAX	REF		MIN	MAX	REF		MIN	MAX	REF		MIN	MAX	REF	
SANDS AND GRAVELS															
AMERICAN BOTTOMS-MISSISSIPPI R. VALLEY															
	0.1	88.60	37		0.2	22.9	37		0.1	0.50	37		8	45	37
	----	----			----	----			----	----			----	----	
AVERAGES	0.1	88.60			0.2	22.9			0.1	0.50			8	45	
MAHOMET (TEAYS) BURIED VALLEY															
	----	----			0.6	3.2	40		----	----			----	----	
	----	----			----	----			----	----			----	----	
AVERAGES					0.6	3.2									
GREAT MIAMI RIVER VALLEY ALLUVIUM															
	0.0	18.00	39		0.0	8.2	39		0.0	0.50	39		8	17	39
	----	----			----	----			----	----			----	----	
AVERAGES	0.0	18.00			0.0	8.2			0.0	0.50			8	17	
SANDSTONES (PRIMARY)															
CAMBRO-ORDOVICIAN															
	----	----			0.0	4.8	32		----	----			----	----	
	----	----			----	----			----	----			----	----	
AVERAGES					0.0	4.8									
DAKOTA SANDSTONE															
	----	----			----	----			1.2	5.00	38		----	----	
	----	----			----	----			----	----			----	----	
AVERAGES									1.2	5.00					
GLENWOOD-ST. PETER SANDSTONE															
NO DATA REPORTED FOR THIS GROUP															
CAMBRIAN SANDSTONES-NEW YORK															
	----	----			0.0	2.5	41		----	----			1	28	41
	----	----			----	----			----	----			----	----	
AVERAGES					0.0	2.5							1	28	
JORDAN SANDSTONE															
NO DATA REPORTED FOR THIS GROUP															

Table 6-2

WATER QUALITY															
CA & MG						NA & K				CL			SO4		
MG/L						MG/L				MG/L			MG/L		
MIN MAX REF						MIN MAX REF				MIN MAX REF			MIN MAX REF		
SANDS AND GRAVELS															
AMERICAN BOTTOMS-MISSISSIPPI R. VALLEY															
-----						1.6	35.9	37	2.0	640.0	37	32.1	537	37	
AVERAGES						-----	-----		-----	-----		-----	-----		
						1.6	35.9		2.0	640.0		32.1	537		
MAHOMET (TEAYS) BURIED VALLEY															
-----						-----	-----		0.0	37.0	40	0.0	9	40	
AVERAGES						-----	-----		-----	-----		-----	-----		
									0.0	37.0		0.0	9		
GREAT MIAMI RIVER VALLEY ALLUVIUM															
235.0 862 39						3.4	14.2	39	5.5	48.0	39	24.0	424	39	
-----						-----	-----		-----	-----		-----	-----		
AVERAGES 235.0 862						3.4	14.2		5.5	48.0		24.0	424		
SANDSTONES (PRIMARY)															
CAMBRO-ORDOVICIAN															
NO DATA REPORTED FOR THIS GROUP															
DAKOTA SANDSTONE															
-----						-----	-----		53.0	-----	33	10.0	---	33	
AVERAGES						-----	-----		53.0	-----		10.0	---		
GLENWOOD-ST. PETER SANDSTONE															
NO DATA REPORTED FOR THIS GROUP															
CAMBRIAN SANDSTONES-NEW YORK															
27.0 72 41						60.0	87.0	41	62.0	192.0	41	3.0	500	41	
-----						-----	-----		-----	-----		-----	-----		
AVERAGES 27.0 72						60.0	87.0		62.0	192.0		3.0	500		
JORDAN SANDSTONE															
NO DATA REPORTED FOR THIS GROUP															

Table 6-2

REGION 7

HYDROLOGIC CHARACTERISTICS																	
TRANSMISSIVITY				STORATIVITY			WELL YIELD				SPECIFIC CAPACITY			HYD CONDUCTIVITY			
K GPD/FT							GPM				GPM/FT			FT/DAY			
MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF	
SANDS AND GRAVELS																	
QUATERNARY DEPOSITS																	
50.0	300.00	150.00	50	0.03000	0.20000	58	100	2,500	1,000	50	10.00	80.0	53	4.0000	4.0000	50	
15.0	200.00	80.00	58	0.05000	0.20000	47	50	2,000	600	58	1.00	500.0	48	0.0700	1.2000	58	
40.0	360.00		47	0.20000	0.00000	46	200	2,000	600	47	23.00	178.0	54	13.4000	401.0000	48	
6.9	314.00	52.00	48	0.00000	0.15000	53	200	800		49				107.0000	942.0000	46	
10.0	330.00	180.00	46	0.00000	0.14000	54	450	1,500						221.1000	381.9000	53	
70.0	100.00		53	0.15000	0.00000	49	300	1,900		57				134.0000		54	
AVERAGES				31.9	267.33		0.07166	0.11500		216	1,783		11.33	252.6		79.9283	583.6833
SANDSTONES (PRIMARY)																	
TERTIARY SEDIMENTS																	
8.0	77.00	0.00	59	0.00150	0.00200	59	150	1,100	650	59	7.90	35.6	59	4.0000	83.0000	59	
2.5		2.50	60	0.00030	0.00500	44	70	0	70	60	1.50	0.0	60	2.3000		60	
15.0	60.00	0.00	43				600	1,100	300	43	2.00	15.0	44	0.1700	60.4800	43	
10.0	25.00	15.00	44														
AVERAGES				8.3		4.37	0.00090	0.00350		273	733	506	3.80	16.8		2.1566	49.4933
PALEOZOIC SEDIMENTS																	
0.8	2.60		45	0.00060	0.00090	45	50	300	100	45	0.04	44.2	61		0.0114	55	
0.4	7.00		55	0.00000	0.00010	52	1	500	50	61	0.40	4.3	55	2.5000	8.3000	56	
19.0	38.00		52	0.13000	0.38000	56	1	500	50	55	1.00	10.0	56				
5.0	14.00	10.00	56				100	1,200	500	52							
							50	1,200	0	56							
AVERAGES				6.3	15.40	2.50	0.04353	0.12700		40	740	140	0.43	19.5		1.2500	4.1557
LOWER MESOZOIC SEDIMENTS																	
12.0	37.00	22.00	49	0.00024	0.00029	49	30	400	0	49							
AVERAGES				12.0	37.00	22.00	0.00024	0.00029		30	400	0					
CRETACEOUS MARINE SEDIMENTS																	
3.0	4.70	2.80	42	0.00002	0.00008	42	1	700	450	42	0.57	4.2	42	0.4000	1.7400	42	
1.4	16.70	3.20	42	0.00002	0.00002	42	1	600		42	0.36	6.0	42	1.8700	25.4000	42	
2.6	12.50	4.40	51	0.00004	0.00003	51	65	800	200	51	0.90	5.8	51				
							300	1,000	500	38							
AVERAGES				2.3	11.30	3.46	0.00002	0.00004		91	775		0.61	5.3		1.1350	13.5700

Table 7-2

	STORAGE			REGIONAL HYDROLOGIC CHARACTERISTICS									POROSITY		
	MM AC-FT			FLOW VELOCITY			HYDRAULIC GRADIENT								
	MIN	MAX	REF	MIN	MAX	DEG REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS															
QUARTERNARY DEPOSITS															
	2.0	2.0	50							.1800	.2500	58	27	53	48
	1.0	1.0	47							.0570	.0950	53			
	0.5		46												
	0.1	0.2	53												
	0.0	5.3	54												
	-----	-----								-----	-----		---	---	
AVERAGES	0.7									.1135	.5225		27	53	
SANDSTONES(PRIMARY)															
TERTIARY SEDIMENTS															
	NO DATA REPORTED FOR THIS GROUP														
PALEOZOIC SEDIMENTS															
	75.0		52										19	21	62
													6	16	55
													24	43	56
	-----	-----								-----	-----		---	---	
AVERAGES	75.0												16	26	
LOWER MESOZOIC SEDIMENTS															
	NO DATA REPORTED FOR THIS GROUP														
CRETACEOUS MARINE SEDIMENTS															
		60.0	42										15		33
		1,000.0	38												
	-----	-----								-----	-----		---	---	
AVERAGES		530.0											15		

Table 7-2

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

QUARTERNARY DEPOSITS

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 50

LOWER- AQUITARD REF- 58

LITHOLOGY OF CONFINING UNITS
UPPER- NONE REF- 50

LOWER- FINE-GRAINED SEDIMENTS REF- 58

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 50

AGE OF GEOLOGIC UNIT- QUARTERNARY REF- 58

SPATIAL VARIATION- HETEROGENOUS-ANISOTROPIC REF- 58

BOUNDARIES OF LATERAL UNIT- TOPOGRAPHY REF- 58

GEOMETRY(SHAPE)- LOBATE-TABULAR REF- 58

SANDSTONES(PRIMARY)

TERTIARY SEDIMENTS

INTEGRITY OF CONFINING UNITS
UPPER- AQUITARD REF- 44

LOWER- AQUITARD REF- 59

LITHOLOGY OF CONFINING UNITS

UPPER- VOLCANIC SEDIMENTS & BASALT REF- 44 LOWER- VOLCANIC SEDIMENTS REF- 44

LITHOLOGY OF AQUIFER- VOLCANIC SEDIMENTS REF- 44

AGE OF GEOLOGIC UNIT- MIDCEN-PLEISTOCENE REF- 44

SPATIAL VARIATION- HETEROGENEOUS-ANISOTROPIC REF- 44

BOUNDARIES OF LATERAL UNIT- TOPOGRAPHY-LITHOLOGY REF- 44

GEOMETRY(SHAPE)- TABULAR REF- 59

PALEOZOIC SEDIMENTS

INTEGRITY OF CONFINING UNITS
UPPER- AQUITARD REF- 45

LOWER- AQUITARD REF- 45

LITHOLOGY OF CONFINING UNITS

UPPER- SHALES SILTSTONE REF- 45 LOWER- LIMESTONE REF- 45

LITHOLOGY OF AQUIFER- SANDSTONE REF- 45

AGE OF GEOLOGIC UNIT- PENNSYLVANIAN REF- 45

SPATIAL VARIATION- HETEROGENOUS ANISOTROPIC REF- 45

BOUNDARIES OF LATERAL UNIT- FACIES FAULTS REF- 45

GEOMETRY(SHAPE)- LOBATE REF- 45

SANDS AND GRAVELS

GEOLOGIC CHARACTERISTICS

LOWER MESOZOIC SEDIMENTS

INTEGRITY OF CONFINING UNITS

UPPER- LEAKY AQUITARD REF- 49

LOWER- AQUITARD REF- 49

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- NO DATA REPORTED REF- 0

LITHOLOGY OF AQUIFER- SANDSTONE REF- 49

AGE OF GEOLOGIC UNIT- TRIASSIC REF- 49

SPATIAL VARIATION- HETEROGENEOUS-ANISOTROPIC REF- 49

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 49

CRETACEOUS MARINE SEDIMENTS

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 42

LOWER- AQUITARD REF- 42

LITHOLOGY OF CONFINING UNITS

UPPER- SHALE REF- 42

LOWER- SHALE-LIMESTONE REF- 42

LITHOLOGY OF AQUIFER- SANDSTONE REF- 42

AGE OF GEOLOGIC UNIT- LOWER CRETACEOUS REF- 42

SPATIAL VARIATION- HETEROGENEOUS-ANISOTROPIC REF- 42

BOUNDARIES OF LATERAL UNIT- FAULTING-FACIES REF- 42

GEOMETRY(SHAPE)- TABULAR REF- 42

	AREAL EXTENT K SQ.-MI. APPROX REF	GEOMETRY DEPTH BELOW SURFACE FT				THICKNESS FT		
		MIN	MAX	TYP	REF	MIN	MAX	REF
SANDS AND GRAVELS								
QUATERNARY DEPOSITS								
		10	250	40	50	10	60	50
		0	100	25	47	10	90	47
		0	100	70	48	100	150	48
		0	90	30	46	0	50	46
		0	85	20	54	20	70	53
						0	60	54
						13	70	57
						475	600	49
AVERAGES	-----	-----	-----	-----		-----	-----	
		2	125	37		17	60	
SANDSTONES (PRIMARY)								
TERTIARY SEDIMENTS								
		0	350	120	59	145	0	60
		25	1,300	280	60	100	700	43
		900	2,500	0	44	500	2,000	44
AVERAGES	-----	-----	-----	-----		-----	-----	
		308	1,333	133		248	900	
PALEOZOIC SEDIMENTS								
	1.80 56	500	2,000	1,000	45	10	300	45
		20	1,000	300	61	50	100	62
		1,000	1,500	1,100	62	0	500	55
		0	2,300	500	52	0	400	52
		0	150	0	56	10	150	56
AVERAGES	-----	-----	-----	-----		-----	-----	
	1.80	304	1,390	580		14	290	
LOWER MESOZOIC SEDIMENTS								
		0	600	300	49	60	200	49
AVERAGES	-----	-----	-----	-----		-----	-----	
		0	600	300		60	200	
CRETACEOUS MARINE SEDIMENTS								
		0	1,600	500	42	110	270	42
		0	0	500	42	80	200	51
		200	1,490	0	51	150	400	33
		0	2,000	700	38			
AVERAGES	-----	-----	-----	-----		-----	-----	
		50	1,272	425		113	290	

Table 7-2

THERMAL CHARACTERISTICS																					
TEMPERATURE						AQUIFER				THERMAL CONDUCTIVITY				UPPER CONFINEMENT				LOWER CONFINEMENT			
DEG.CEL.						MCAL/CM SEC DEG C				MCAL/CM SEC DEG C				MCAL/CM SEC DEG C							
						MIN	MAX	AVG	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF			
SANDS AND GRAVELS																					
QUARTERNARY DEPOSITS																					
				8	14	48															
				12	15	53															
				---	---																
	AVERAGES			10	14																
SANDSTONES(PRIMARY)																					
TERTIARY SEDIMENTS																					
				2	10	59															
				3	10	60															
				---	---																
	AVERAGES			5	10																
PALEOZOIC SEDIMENTS																					
				22	27	62															
				---	---																
	AVERAGES			22	27																
LOWER MESOZOIC SEDIMENTS																					
NO DATA REPORTED FOR THIS GROUP																					
CRETACEOUS MARINE SEDIMENTS																					
				21	48	38															
				---	---																
	AVERAGES			21	48																

Table 7-2

	TOTAL DISSOLVED SOLIDS			WATER QUALITY			SPECIFIC CONDUCTANCE			PH		
	MG/L			MG/L			MICRO OHMS					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
QUATERNARY DEPOSITS												
	155	7,270	47	170	1,500	47	590	1,270	53	7.5	7.8	53
	309	739	53	100	500	43						
				28	0	49						
	-----	-----		---	-----		-----	-----		---	---	
AVERAGES	232	4,029		99	666		590	1,270		7.5	7.3	
SANDSTONES (PRIMARY)												
TERTIARY SEDIMENTS												
	260	487	59	165	342	59	370	730	59	7.2	8.1	59
							533	5,060	60	6.8	8.3	60
	-----	-----		---	-----		-----	-----		---	---	
AVERAGES	260	487		165	342		476	2,895		7.0	8.2	
PALEOZOIC SEDIMENTS												
	300	1,000	45	4	26	62	1,090	2,200	62	6.0	7.4	55
	0	668	62	19	175	55	8	8	62	7.1	8.2	52
	0	500	52	43	438	56	39	748	55	7.1	8.1	56
	79	1,220	56				333	1,620	52			
							204	2,630	56			
	-----	-----		---	-----		-----	-----		---	---	
AVERAGES	94	847		23	229		335	1,441		6.7	7.9	
LOWER MESOZOIC SEDIMENTS												
	NO DATA REPORTED FOR THIS GROUP											
CRETACEOUS MARINE SEDIMENTS												
	516	1,130	42	1	426	42	0	2,250	42	7.0	9.5	42
	114	2,620	42	0	1,070	42						
	272	1,510	51	2	310	51						
	1,200	5,400	38									
	-----	-----		---	-----		-----	-----		---	---	
AVERAGES	525	2,677		1	602		0	2,250		7.0	9.5	

Table 7-2

WATER QUALITY

	NO3			FE			FLUORIDE			SILICATES		
	MIN	MG/L MAX	REF	MIN	MG/L MAX	REF	MIN	MG/L MAX	REF	MIN	MG/L MAX	REF
SANDS AND GRAVELS												
QUATERNARY DEPOSITS												
	0.0	60.00	48	0.0	58.0	47	0.2	0.70	53	26	52	53
	0.4	0.34	53	0.5	10.0	49	0.2	2.40	54	20	0	49
	21.0		54	0.0	2.2	53						
	----	----		----	----		----	----		----	----	
AVERAGES	7.1	81.11		0.1	23.4		0.2	1.55		23	26	
SANDSTONES (PRIMARY)												
TERTIARY SEDIMENTS												
	3.8		59	0.0	0.4	59	0.2	0.50	59	54	60	59
	0.0	16.00	60	0.0	13.0	60	0.0	1.30	60	7	15	60
	----	----		----	----		----	----		----	----	
AVERAGES	1.9	59.00		0.0	6.7		0.1	0.90		30	37	
PALEOZOIC SEDIMENTS												
	0.2	3.50	55	0.1	1.2	62	0.0	1.30	62	0	9	62
	0.0	44.00	52	0.1	16.0	55	0.0	0.30	55	0	18	52
				0.1	0.3	52	0.0	1.50	52	16	30	56
	----	----		----	----		----	----		----	----	
AVERAGES	0.1	23.75		0.1	5.8		0.0	1.03		5	19	
LOWER MESOZOIC SEDIMENTS												
NO DATA REPORTED FOR THIS GROUP												
CRETACEOUS MARINE SEDIMENTS												
				0.0	2.1	42	0.6	7.00	51			
				0.6	2.0	38	0.7	5.00	38			
	----	----		----	----		----	----		----	----	
AVERAGES				0.3	2.0		0.6	6.00				

Table 7-2

B-59

		WATER QUALITY											
		CA & MG			NA & K			CL			SO4		
		MG/L			MG/L			MG/L			MG/L		
		MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS													
QUARTERNARY DEPOSITS													
										58			58
										47	37.0	388	48
										48	30.0	190	53
										53			
		-----	-----		-----	-----		-----	-----		-----	-----	
AVERAGES												753	
SANDSTONES(PRIMARY)													
TERTIARY SEDIMENTS													
										59	10.0	29	59
										60	1.3		60
		-----	-----		-----	-----		-----	-----		-----	-----	
AVERAGES											5.6		
PALEOZOIC SEDIMENTS													
					0.0	278.0	62	54.0	295.0	62	1.3	31	62
								0.8	169.0	55	0.9	2	55
								0.0	250.0	52		476	56
								3.2	49.0	56			
		-----	-----		-----	-----		-----	-----		-----	-----	
AVERAGES					0.0	278.0		14.5	190.7			169	
LOWER MESOZOIC SEDIMENTS													
NO DATA REPORTED FOR THIS GROUP													
CRETACEOUS MARINE SEDIMENTS													
								53.0		38	2.8		38
		-----	-----		-----	-----		-----	-----		-----	-----	
AVERAGES								53.0			2.8		

Table 7-2

REGION 8

HYDROLOGIC CHARACTERISTICS																	
TRANSMISSIVITY				STORATIVITY				WELL YIELD				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
K GPD/FT								GPM				GPM/FT			FT/DAY		
MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF	
SANDSTONES (PRIMARY)																	
CONEMAUGH GROUP																	
	0.40		63				1	400	16	63							
AVERAGES	0.40						1	400	16								
ALLEGHENY GROUP																	
	27.0		63				1	350		63	19.20		63				
AVERAGES	27.0						1	350			19.20						
POTTSVILLE GROUP																	
	6.5	10.00	63	0.00700	0.00000	63	1	250		63	4.50	120.0	64				
	10.0	89.00	64	0.00040	0.00000	64					12.00	0.0	64				
											4.50	120.0	64				
AVERAGES	8.2	49.00		0.00370	0.00000		1	250			7.00	80.0					
POCONO FORMATION																	
	2.2	10.00	63	0.00010	0.00015	63	4	120		63							
AVERAGES	2.2	10.00		0.00010	0.00015		4	120									

		REGIONAL HYDROLOGIC CHARACTERISTICS																
		STORAGE				FLOW VELOCITY				HYDRAULIC GRADIENT				POROSITY				
		MM AC-FT				FT/DAY				%				%				
		MIN		MAX	REF	MIN		MAX	DEG	REF	MIN		MAX	REF	MIN		MAX	REF
SANDSTONES (PRIMARY)																		
CONEMAUGH GROUP		NO DATA REPORTED FOR THIS GROUP																
ALLEGHENY GROUP		NO DATA REPORTED FOR THIS GROUP																
POTTSVILLE GROUP		NO DATA REPORTED FOR THIS GROUP																
POCONO FORMATION		NO DATA REPORTED FOR THIS GROUP																

Table 8-2

	AREAL EXTENT K SQ. MI. APPROX REF	GEOMETRY DEPTH BELOW SURFACE FT				THICKNESS FT		
		MIN	MAX	TYP	REF	MIN	MAX	REF
SANDSTONES (PRIMARY)								
CONEMAUGH GROUP								
		0	985	625	63	70	840	63
AVERAGES	-----	0	985	625		70	840	
ALLEGHENY GROUP								
		0	672	111	63	150	300	63
AVERAGES	-----	0	672	111		150	300	
POTTSVILLE GROUP								
		0	1,000	202	63	225	1,150	63
AVERAGES	-----	0	1,000	202		225	1,150	
POCONO FORMATION								
		100	322	0	63	0	600	63
AVERAGES	-----	100	322	0		0	600	

Table 8-2

GEOLOGIC CHARACTERISTICS

SANDSTONES(PRIMARY)

CONEMAUGH GROUP

INTEGRITY OF CONFINING UNITS
UPPER- AQUITARD REF- 63

LOWER- AQUITARD REF- 63

LITHOLOGY OF CONFINING UNITS

UPPER- SILTSTONE SHALE SANDSTONE LIMESTONE
LITHOLOGY OF AQUIFER- SANDSTONE REF- 63
AGE OF GEOLOGIC UNIT- PENNSYLVANIAN REF- 63
SPATIAL VARIATION- HETEROGENEOUS REF- 63
BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 63
GEOMETRY(SHAPE)- CHANNEL SANDSTONE REF- 63

REF- 63 LOWER- SILTSTONE SHALE SANDSTONE LIMESTONE REF- 63

ALLEGHENY GROUP

INTEGRITY OF CONFINING UNITS
UPPER- AQUITARD REF- 63

LOWER- AQUITARD REF- 63

LITHOLOGY OF CONFINING UNITS

UPPER- SILTSTONE SHALE SANDSTONE LIMESTONE
LITHOLOGY OF AQUIFER- SANDSTONE REF- 63
AGE OF GEOLOGIC UNIT- PENNSYLVANIAN REF- 63
SPATIAL VARIATION- HETEROGENEOUS REF- 63
BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 63
GEOMETRY(SHAPE)- CHANNEL SANDSTONE REF- 63

REF- 63 LOWER- SILTSTONE SHALE SANDSTONE LIMESTONE REF- 63

POTTSVILLE GROUP

INTEGRITY OF CONFINING UNITS
UPPER- AQUITARD REF- 63

LOWER- AQUICLUDE REF- 63

LITHOLOGY OF CONFINING UNITS

UPPER- SILTSTONE SHALE SANDSTONE LIMESTONE
LITHOLOGY OF AQUIFER- SANDSTONE REF- 63
AGE OF GEOLOGIC UNIT- PENNSYLVANIAN REF- 63
SPATIAL VARIATION- HETEROGENEOUS REF- 63
BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 63
GEOMETRY(SHAPE)- CHANNEL SANDSTONE REF- 63

REF- 63 LOWER- SHALE REF- 63

POCONG FORMATION

INTEGRITY OF CONFINING UNITS
UPPER- NONE(OUTCROP) TO AQUITARD REF- 63

LOWER- AQUITARD REF- 63

LITHOLOGY OF CONFINING UNITS

UPPER- LIMESTONE REF- 63
LITHOLOGY OF AQUIFER- SANDSTONE REF- 63
AGE OF GEOLOGIC UNIT- MISSISSIPPIAN REF- 63
SPATIAL VARIATION- HETEROGENEOUS REF- 63
BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 63
GEOMETRY(SHAPE)- TABULAR REF- 63

LOWER- SHALE REF- 63

THERMAL CHARACTERISTICS

TEMPERATURE				AQUIFER				THERMAL CONDUCTIVITY				THERMAL CONDUCTIVITY			
DEG.CEL.				MCAL/CM SEC DEG C				UPPER CONFINEMENT				LOWER CONFINEMENT			
MIN	MAX	REF		MIN	MAX	AVG	REF	MIN	MAX	REF		MIN	MAX	REF	

SANDSTONES(PRIMARY)

CONEMAUGH GROUP

NO DATA REPORTED FOR THIS GROUP

ALLEGHENY GROUP

NO DATA REPORTED FOR THIS GROUP

POTTSVILLE GROUP

NO DATA REPORTED FOR THIS GROUP

POCONG FORMATION

NO DATA REPORTED FOR THIS GROUP

Table 8-2

	TOTAL DISSOLVED SOLIDS			WATER QUALITY			SPECIFIC CONDUCTANCE			PH		
	MG/L			HARDNESS			MICRO OHMS					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDSTONES (PRIMARY)												
CONEMAUGH GROUP	393	-----	63	102	-----	63	-----	-----		---	---	
AVERAGES	393			102								
ALLEGHENY GROUP	180	-----	63	81	-----	63	-----	-----		---	---	
AVERAGES	180			81								
POTTSVILLE GROUP	30	-----	63	46	-----	63	-----	-----		---	---	
AVERAGES	30			46								
POCONO FORMATION	208	-----	63	124	-----	63	-----	-----		---	---	
AVERAGES	208			124								

	CA & MG			NA & K			CL			SO4		
	MG/L			MG/L			MG/L			MG/L		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDSTONES (PRIMARY)												
CONEMAUGH GROUP							5.0	-----	63	-----	-----	
AVERAGES							5.0					
ALLEGHENY GROUP							4.0	-----	63	-----	-----	
AVERAGES							4.0					
POTTSVILLE GROUP							4.0	-----	63	-----	-----	
AVERAGES							4.0					
POCONO FORMATION							6.0	-----	63	-----	-----	
AVERAGES							6.0					

Table 8-2

WATER QUALITY

	NO3			FE			FLUORIDE			SILICATES		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDSTONES (PRIMARY)												
CONEMAUGH GROUP												
AVERAGES	----	----		0.1	----	63	----	----		---	---	
				0.1								
ALLEGHENY GROUP												
AVERAGES	----	----		1.0	----	63	----	----		---	---	
				1.0								
POTTSVILLE GROUP												
AVERAGES	----	----		1.5	----	63	----	----		---	---	
				1.5								
POCONO FORMATION												
AVERAGES	----	----		0.0	----	63	----	----		---	---	
				0.0								

Table 8-2

REGION 9

	TRANSMISSIVITY K GPD/FT				STORATIVITY			HYDROLOGIC CHARACTERISTICS WELL YIELD GPM				SPECIFIC CAPACITY GPM/FT			HYD CONDUCTIVITY FT/DAY		
	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS																	
OUTWASH - MASSACHUSETTS																	
	0.0		34.00	66	0.20000		66			600	66	32.00		66			
	3.0	44.00		67				3	700	50	67	8.00	33.0	67			
AVERAGES	4.0				0.20000			1	350	325		20.00					
OUTWASH - VERMONT																	
	20.0			55				463			65	30.00		65			
AVERAGES	20.0							463				30.00					
ICE-CONTACT DEPOSITS-MASSACHUSETTS																	
	8.0	74.00	30.00	67				2	730	50	67	3.00	125.0	67			
AVERAGES	8.0	74.00	30.00					2	730	50		3.00	125.0				
ESKER - VERMONT																	
								614		3,000	68	64.00		68			
AVERAGES								614		3,000		64.00					

	STORAGE MM AC-FT			REGIONAL HYDROLOGIC CHARACTERISTICS FLOW VELOCITY FT/DAY				HYDRAULIC GRADIENT %			POROSITY %		
	MIN	MAX	REF	MIN	MAX	DEG	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS													
OUTWASH - MASSACHUSETTS													
AVERAGES											32	54	67
OUTWASH - VERMONT													
NO DATA REPORTED FOR THIS GROUP													
ICE-CONTACT DEPOSITS-MASSACHUSETTS													
AVERAGES											26	59	67
ESKER - VERMONT													
NO DATA REPORTED FOR THIS GROUP													

Table 9-2

		AREAL EXTENT		GEOMETRY				THICKNESS		
		K SQ. MI.		DEPTH BELOW		SURFACE		FT		
		APPROX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF
SANDS AND GRAVELS										
OUTWASH - MASSACHUSETTS										
									100	66
								1	200	67
	AVERAGES	-----		-----	-----	-----		-----	150	
OUTWASH - VERMONT										
								69		65
	AVERAGES	-----		-----	-----	-----		-----		
								69		
ICE-CONTACT DEPOSITS-MASSACHUSETTS										
									78	67
	AVERAGES	-----		-----	-----	-----		-----	78	
ESKER - VERMONT										
								136		68
	AVERAGES	-----		-----	-----	-----		-----		
								136		

Table 9-2

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

OUTWASH - MASSACHUSETTS

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 66

LOWER- AQUITARD REF- 66

LITHOLOGY OF CONFINING UNITS

UPPER- NONE REF- 66

LOWER- TILL REF- 66

LITHOLOGY OF AQUIFER- SAND AND GRAVEL SILT REF- 66

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 66

SPATIAL VARIATION- ANISOTROPIC REF- 66

BOUNDARIES OF LATERAL UNIT- BEDROCK VALLEY REF- 66

GEOMETRY(SHAPE)- TABULAR REF- 66

OUTWASH - VERMONT

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 65

LOWER- AQUITARD REF- 65

LITHOLOGY OF CONFINING UNITS

UPPER- NONE REF- 65

LOWER- BEDROCK REF- 65

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 65

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 65

SPATIAL VARIATION- HOMOGENEOUS REF- 65

BOUNDARIES OF LATERAL UNIT- BEDROCK VALLEY REF- 65

GEOMETRY(SHAPE)- BASIN FILL REF- 65

ICE-CONTACT DEPOSITS-MASSACHUSETTS

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 67

LOWER- AQUITARD REF- 67

LITHOLOGY OF CONFINING UNITS

UPPER- NONE REF- 67

LOWER- TILL REF- 67

LITHOLOGY OF AQUIFER- SAND & GRAVEL REF- 67

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 67

SPATIAL VARIATION- HETEROGENEOUS REF- 67

BOUNDARIES OF LATERAL UNIT- BEDROCK VALLEY REF- 67

GEOMETRY(SHAPE)- CHANNEL REF- 67

ESKER - VERMONT

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 68

LOWER- UNKNOWN REF- 68

LITHOLOGY OF CONFINING UNITS

UPPER- NONE REF- 68

LOWER- UNKNOWN REF- 68

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 68

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 68

SPATIAL VARIATION- ALMOST HOMOGENEOUS REF- 68

BOUNDARIES OF LATERAL UNIT- ESKER BOUNDARIES REF- 68

GEOMETRY(SHAPE)- ESKER REF- 68

Table 9-2

THERMAL CHARACTERISTICS

	TEMPERATURE			AQUIFER				THERMAL CONDUCTIVITY				LOWER CONFINEMENT			
	DEG.CEL.			MICAL/CM SEC DEG C				UPPER CONFINEMENT				MICAL/CM SEC DEG C			
	MIN	MAX	REF	MIN	MAX	AVG	REF	MIN	MAX	REF		MIN	MAX	REF	
SANDS AND GRAVELS															
OUTWASH - MASSACHUSETTS															
		8	11	66											
		6	16	67											
		---	---		---	---	---					---	---		
AVERAGES		7	13												
OUTWASH - VERMONT															
		8	0	65											
		---	---		---	---	---					---	---		
AVERAGES		8	0												
ICE-CONTACT DEPOSITS-MASSACHUSETTS															
		6	16	67											
		---	---		---	---	---					---	---		
AVERAGES		6	16												
ESKER - VERMONT															
		6	0	68											
		---	---		---	---	---					---	---		
AVERAGES		6	0												

Table 9-2

	TOTAL DISSOLVED SOLIDS			WATER QUALITY						PH		
				HARDNESS			SPECIFIC CONDUCTANCE					
	MIN	MG/L MAX	REF	MIN	MG/L MAX	REF	MIN	MICRO OHMS MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
OUTWASH - MASSACHUSETTS												
	52	119	66	10	58	66	49	150	66	6.7	7.0	66
	37	237	67	17	258	67	55	329	67	5.7	7.5	67
AVERAGES	44	178		13	158		52	239		6.2	7.2	
OUTWASH - VERMONT												
	200	0	65	29	0	65	355	0	65	7.9	0.0	65
AVERAGES	200	0		29	0		355	0		7.9	0.0	
ICE-CONTACT DEPOSITS-MASSACHUSETTS												
	37	237	67	17	258	67	55	329	67	5.7	7.5	67
AVERAGES	37	237		17	258		55	329		5.7	7.5	
ESKER - VERMONT												
	129	0	68	15	0	68	222	0	68	8.0	0.0	68
AVERAGES	129	0		15	0		222	0		8.0	0.0	

	CA & MG			NA & K			CL			SO4		
	MG/L			MG/L			MG/L			MG/L		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
OUTWASH - MASSACHUSETTS												
	5.6	21	66	3.8	19.3	66	2.0	9.5	66	0.2	45	66
	6.1	57	67	3.9	31.0	67	3.0	26.0	67	6.2	89	67
AVERAGES	5.8	39		3.8	25.1		2.5	17.7		3.2	67	
OUTWASH - VERMONT												
	64.0	0	65	8.2	0.0	65	17.0	0.0	65	15.0	0	65
AVERAGES	64.0	0		8.2	0.0		17.0	0.0		15.0	0	
ICE-CONTACT DEPOSITS-MASSACHUSETTS												
	6.1	57	67	3.9	31.0	67	3.0	26.0	67	6.2	89	67
AVERAGES	6.1	57		3.9	31.0		3.0	26.0		6.2	89	
ESKER - VERMONT												
	41.3	0	68	4.0	0.0	68	2.8	0.0	68	18.0	0	68
AVERAGES	41.3	0		4.0	0.0		2.8	0.0		18.0	0	

Table 9-2

WATER QUALITY

	NO3			FE			FLUORIDE			SILICATES		
	MIN	MG/L MAX	REF	MIN	MG/L MAX	REF	MIN	MG/L MAX	REF	MIN	MG/L MAX	REF
SANDS AND GRAVELS												
OUTWASH - MASSACHUSETTS												
	0.4	2.40	66	0.3	0.8	66	0.5	2.50	66	7	16	66
	0.0	44.00	67	0.0	2.1	67	0.0	0.90	67	4	22	67
	----	----		----	----		----	----		----	----	
AVERAGES	0.2	23.20		0.1	1.4		0.2	1.70		5	19	
OUTWASH - VERMONT												
	6.6	0.00	65	0.0	0.0	65	0.0	0.00	65	6	0	65
	----	----		0.0	0.0	65	----	----		----	----	
AVERAGES	6.6	0.00		0.0	0.0		0.0	0.00		6	0	
ICE-CONTACT DEPOSITS-MASSACHUSETTS												
	0.0	44.00	67	0.0	2.1	67	0.0	0.90	67	4	22	67
	----	----		----	----		----	----		----	----	
AVERAGES	0.0	44.00		0.0	2.1		0.0	0.90		4	22	
ESKER - VERMONT												
	0.1	0.00	68	0.0	0.0	68	0.1	0.00	68	7	0	68
	----	----		----	----		----	----		----	----	
AVERAGES	0.1	0.00		0.0	0.0		0.1	0.00		7	0	

Table 9-2

	TRANSMISSIVITY				STORATIVITY				HYDROLOGIC CHARACTERISTICS				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF	
SANDS AND GRAVELS																		
JAMECO AQUIFER	110.0	300.00		74				220			74	20.00	150.0	74	1.0000	1.5000	74	
AVERAGES	110.0	300.00						220				20.00	150.0		1.0000	1.5000		
POCOMOKE AQUIFER	26.5	60.00	54.50	74	0.00050		74				74	3.00	18.7	74				
AVERAGES	26.5	60.00	54.50		0.00050							3.00	18.7					
MANOKIN AQUIFER	29.2			75	0.00050		75					3.90	10.0	75				
AVERAGES	29.2				0.00050							3.90	10.0					
MAGOTHY AQUIFER	0.5	3.00	0.00	71	0.00010		71	5	400		71	1.00	7.0	71				
	80.0	400.00	250.00	74								1.00	30.0	74				
AVERAGES	40.2	201.50	125.00		0.00010			5	400			1.00	18.5					
LLOYD AQUIFER	35.0	120.00	90.00	74				78	2,100		74	1.00	25.0	74				
AVERAGES	35.0	120.00	90.00					78	2,100			1.00	25.0					
NONMARINE CRETACEOUS AQUIFER	550.0	3,000.00	0.00	71	0.00100	0.00500	71	3	300		71	1.00	13.0	71				
AVERAGES	550.0	3,000.00	0.00		0.00100	0.00500		3	300			1.00	13.0					
MISSISSIPPI RIVER VALLEY ALLUVIUM	39.0	600.00	0.00	77	0.00030	0.08000	77	500	5,000	2,000	77	29.00	130.0	77				
AVERAGES	39.0	600.00	0.00		0.00030	0.08000		500	5,000	2,000		29.00	130.0					
RED RIVER VALLEY ALLUVIUM	6.5	76.00	2.00	77	0.00030	0.00160	77	0	2,000	500	77	12.00	14.0	77				
	6.2	76.00	0.00	77														
AVERAGES	6.3	76.00	1.00		0.00030	0.00160		0	2,000	500		12.00	14.0					

Table 10-2

TRANSMISSIVITY				HYDROLOGIC CHARACTERISTICS						SPECIFIC CAPACITY			HYD CONDUCTIVITY			
K GPD/FT				STORATIVITY			WELL YIELD			GPM/FT			FT/DAY			
MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
CHICOT AQUIFER-200 FT SAND																
260.0			72	0.00860		72	1,800	4,500	2,800	72						
AVERAGES	260.0			0.00860			1,800	4,500	2,300							
CHICOT AQUIFER-500 FT SAND																
190.0			72	0.00054		72	600	3,800		72	6.00	75.0	72			
CHICOT AQUIFER-700 FT SAND																
		180.00	72	0.00060		72	800	2,200		72	30.00	32.0	72			
AVERAGES		180.00		0.00060			800	2,200			30.00	32.0				
COCKFIELD FORMATION																
22.5	72.00		73	0.00010	0.00080	73	5	50		73						
AVERAGES	22.5	72.00		0.00010	0.00080		5	50								
MEMPHIS AQUIFER																
42.0	300.00		73	0.00010	0.01100	73					4.00	54.0	73			
AVERAGES	42.0	300.00		0.00010	0.01100						4.00	54.0				
SPARTA SAND																
13.5	140.00	2.00	73	0.00020	0.00240	73	200	2,000		73	7.00	16.0	73			
13.5	140.00		73													
AVERAGES	13.5	140.00		0.00020	0.00240		200	2,000			7.00	16.0				
MERIDIAN-UPPER WILCOX AQUIFER																
11.0	86.00		73	0.00010	0.00300	73					15.00	24.0	73			
AVERAGES	11.0	86.00		0.00010	0.00300						15.00	24.0				
CARRIZO SAND																
1.3	4.10		73				30	100		73	1.00	2.0	73			
12.0	150.00		76				0	1,340	1,000	76	5.00	75.0	76			
AVERAGES	6.6	77.05					15	720			3.00	38.5				
LOWER WILCOX AQUIFER																
80.0	160.00		73	0.00010	0.00150	73	50	2,000	500	73	12.00	39.0	73			
AVERAGES	80.0	160.00		0.00010	0.00150		50	2,000	500		12.00	39.0				
NACATOCH SAND																
1.4	3.60		69				5	300		69						
AVERAGES	1.4	3.60					5	300								

Table 10-2

HYDROLOGIC CHARACTERISTICS																
TRANSMISSIVITY				STORATIVITY			WELL YIELD				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
K GPD/FT							GPM				GPM/FT			FT/DAY		
MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
RIPLEY FORMATION																
	25.0	32.00		69	0.00009	0.00076	69	250	1,140	100	69	1.00	27.0	69		
AVERAGES	25.0	32.00			0.00009	0.00076		250	1,140	100		1.00	27.0			
COFFEE SAND																
								600			69	0.50	3.5	69		
AVERAGES								600				0.50	3.5			
TOKIO FORMATION																
	1.3	4.50		69	0.00004		69	10	300	20	69					
AVERAGES	1.3	4.50			0.00004			10	300	20						
EUTAW FORMATION																
	0.5	20.00		69	0.00020	0.00130	69	300	770	500	69	0.40	4.5	69		
AVERAGES	0.5	20.00			0.00020	0.00130		300	770	500		0.40	4.5			
TUSCALOOSA FORMATION																
		450.00	200.00	70								5.00	45.0	70		
AVERAGES		450.00	200.00									5.00	45.0			
GORDO FORMATION																
	33.0	160.00		69	0.00010		69		1,250	500	69	12.00	33.0	69		
AVERAGES	33.0	160.00			0.00010				1,250	500		12.00	33.0			
COKER FORMATION																
	3.0	250.00		69	0.00022	0.00030	69	1	1,000	200	69	1.00	71.0	69		
AVERAGES	3.0	250.00			0.00022	0.00030		1	1,000	200		1.00	71.0			
TRINITY GROUP																
		10.00	69	0.00004		69		200		69						
AVERAGES		10.00		0.00004				200								

Table 10-2

	STORAGE			REGIONAL HYDROLOGIC CHARACTERISTICS										POROSITY		
	MM AC-FT			FLOW VELOCITY				HYDRAULIC GRADIENT			%					
	MIN	MAX	REF	MIN	MAX	DEG	REF	MIN	MAX	REF	MIN	MAX	REF			
SANDS AND GRAVELS																
JAMECO AQUIFER	NO DATA REPORTED FOR THIS GROUP															
POCOMOKE AQUIFER	NO DATA REPORTED FOR THIS GROUP															
MANOKIN AQUIFER	NO DATA REPORTED FOR THIS GROUP															
MAGOTHY AQUIFER	NO DATA REPORTED FOR THIS GROUP															
LLOYD AQUIFER	NO DATA REPORTED FOR THIS GROUP															
NONMARINE CRETACEOUS AQUIFER	NO DATA REPORTED FOR THIS GROUP															
MISSISSIPPI RIVER VALLEY ALLUVIUM	NO DATA REPORTED FOR THIS GROUP															
RED RIVER VALLEY ALLUVIUM	NO DATA REPORTED FOR THIS GROUP															
CHICOT AQUIFER-200 FT SAND	NO DATA REPORTED FOR THIS GROUP															
CHICOT AQUIFER-500 FT SAND	NO DATA REPORTED FOR THIS GROUP															
CHICOT AQUIFER-700 FT SAND	NO DATA REPORTED FOR THIS GROUP															
COCKFIELD FORMATION	NO DATA REPORTED FOR THIS GROUP															
MEMPHIS AQUIFER	NO DATA REPORTED FOR THIS GROUP															

Table 10-2

	REGIONAL HYDROLOGIC CHARACTERISTICS											
	STORAGE			FLOW VELOCITY			HYDRAULIC GRADIENT			POROSITY		
	MM	AC-FT		FT/DAY			%			%		
	MIN	MAX	REF	MIN	MAX	DEG REF	MIN	MAX	REF	MIN	MAX	REF
SPARTA SAND	NO DATA REPORTED FOR THIS GROUP											
MERIDIAN-UPPER WILCOX AQUIFER	NO DATA REPORTED FOR THIS GROUP											
CARRIZO SAND	NO DATA REPORTED FOR THIS GROUP											
LOWER WILCOX AQUIFER	NO DATA REPORTED FOR THIS GROUP											
NACATOCH SAND	NO DATA REPORTED FOR THIS GROUP											
RIPLEY FORMATION	NO DATA REPORTED FOR THIS GROUP											
COFFEE SAND	NO DATA REPORTED FOR THIS GROUP											
TOKIO FORMATION	NO DATA REPORTED FOR THIS GROUP											
EUTAW FORMATION	NO DATA REPORTED FOR THIS GROUP											
TUSCALOOSA FORMATION	<div style="display: flex; justify-content: space-between;"> ----- ----- .0400 .2000 70 --- </div>											
AVERAGES	<div style="display: flex; justify-content: space-between;"> ----- ----- .0400 .2000 --- </div>											
GORDO FORMATION	NO DATA REPORTED FOR THIS GROUP											
COKER FORMATION	NO DATA REPORTED FOR THIS GROUP											
TRINITY GROUP	NO DATA REPORTED FOR THIS GROUP											

Table 10-2

B-77

		AREAL EXTENT		GEOMETRY				THICKNESS		
		K SQ.MI.	REF	DEPTH	BELOW	SURFACE	FT	MIN	MAX	REF
		APPROX		MIN	MAX	TYP				
SANDS AND GRAVELS										
JAMECO AQUIFER										
		-----		-----	-----	-----		0	300	74
	AVERAGES							0	300	
POCOMOKE AQUIFER										
		-----		-----	-----	-----		35	55	74
	AVERAGES							35	55	
MANOKIN AQUIFER										
		-----		-----	-----	-----		120	160	75
	AVERAGES							120	160	
MAGOTHY AQUIFER										
		-----		-----	-----	-----		0	150	71
								25	1,000	74
	AVERAGES							12	575	
LLOYD AQUIFER										
		-----		-----	-----	-----		80	450	74
	AVERAGES							80	450	
NONMARINE CRETACEOUS AQUIFER										
		-----		100	2,000		71		6,000	71
	AVERAGES			100	2,000				6,000	
MISSISSIPPI RIVER VALLEY ALLUVIUM										
		-----		0	150		77		150	77
	AVERAGES			0	150				150	
RED RIVER VALLEY ALLUVIUM										
		-----		0	100		77		100	77
	AVERAGES			0	100				100	
CHICOT AQUIFER-200 FT SAND										
		-----		85	180		72	20	200	72
	AVERAGES			85	180			20	200	
CHICOT AQUIFER-500 FT SAND										
		-----		410	750		72	25	310	72
	AVERAGES			410	750			25	310	

Table 10-2

	AREAL EXTENT		GEOMETRY				THICKNESS		
	K SQ. MI.	REF	DEPTH BELOW SURFACE		FT	TYP	REF	MIN	MAX
	APPROX		MIN	MAX					
CHICOT AQUIFER-700 FT SAND								60	220
	-----		-----	-----	-----			-----	72
AVERAGES								60	220
COCKFIELD FORMATION	33.00	73						100	700
	-----		-----	-----	-----			-----	73
AVERAGES	33.00							100	700
MEMPHIS AQUIFER								400	870
	-----		-----	-----	-----			-----	73
AVERAGES								400	870
SPARTA SAND								100	1,100
	-----		-----	-----	-----			-----	73
AVERAGES								100	1,100
MERIDIAN-UPPER WILCOX AQUIFER	17.50	73						50	400
	-----		-----	-----	-----			-----	73
AVERAGES	17.50							50	400
CARRIZO SAND	5.00	73						60	300
	-----		-----	-----	-----			10	1,000
AVERAGES	5.00							35	650
LOWER WILCOX AQUIFER	8.00	73	0	3,000		73		300	450
	-----		-----	-----	-----			-----	73
AVERAGES	8.00		0	3,000				300	450
NACATOK SAND								150	600
	-----		-----	-----	-----			-----	69
AVERAGES								150	600
RIPLEY FORMATION	20.00	69	0	2,500		69			575
	-----		-----	-----	-----			-----	69
AVERAGES	20.00		0	2,500					575
COFFEE SAND	7.00	69							250
	-----		-----	-----	-----			-----	69
AVERAGES	7.00								250
TOKIO FORMATION	1.00	69						50	300
	-----		-----	-----	-----			-----	69

Table 10-2

	AREAL EXTENT		GEOMETRY				THICKNESS		
	K SQ.MI.	REF	DEPTH	BELOW SURFACE	FT	REF	FT	REF	
	APPROX		MIN	MAX	TYP		MIN	MAX	
EUTAW FORMATION	11.00	69	-----	-----	-----		-----	400	69
AVERAGES	11.00							400	
TUSCALOOSA FORMATION	-----		-----	-----	-----		10	1,100	70
AVERAGES							10	1,100	
GORDO FORMATION	12.00	69	-----	2,000	-----	69	-----	-----	
AVERAGES	12.00			2,000					
COKER FORMATION	6.50	69	-----	150	-----	69	-----	150	69
AVERAGES	6.50			150				150	
TRINITY GROUP	1.00	69	-----	-----	-----		-----	2,500	69
AVERAGES	1.00							2,500	

Table 10-2

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

JAMECO AQUIFER

INTEGRITY OF CONFINING UNITS

UPPER- AQUICLUDE REF- 74

LOWER- UNCONFINED REF- 74

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY REF- 74

LOWER- GRAVEL REF- 74

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 74

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 74

SPATIAL VARIATION- HETEROGENEOUS REF- 74

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 74

POCOMOKE AQUIFER

INTEGRITY OF CONFINING UNITS

UPPER- AQUICLUDE REF- 74

LOWER- AQUICLUDE REF- 74

LITHOLOGY OF CONFINING UNITS

UPPER- SILT AND CLAY REF- 74

LOWER- SILT AND CLAY REF- 74

LITHOLOGY OF AQUIFER- SAND REF- 74

AGE OF GEOLOGIC UNIT- MIOCENE REF- 74

SPATIAL VARIATION- HETEROGENEOUS REF- 74

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 74

MANOKIN AQUIFER

INTEGRITY OF CONFINING UNITS

UPPER- AQUICLUDE REF- 75

LOWER- AQUICLUDE REF- 75

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY SILT FINE SAND REF- 75

LOWER- CLAY SILT REF- 75

LITHOLOGY OF AQUIFER- SAND REF- 75

AGE OF GEOLOGIC UNIT- MIOCENE REF- 75

SPATIAL VARIATION- HETEROGENEOUS REF- 75

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 75

MASOTHY AQUIFER

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED TO AQUICLUDE REF- 71

LOWER- AQUICLUDE TO UNCONFINED REF- 71

LITHOLOGY OF CONFINING UNITS

UPPER- SAND AND CLAY REF- 74

LOWER- CLAY REF- 74

LITHOLOGY OF AQUIFER- SAND REF- 71

AGE OF GEOLOGIC UNIT- LATE CRETACEOUS REF- 71

SPATIAL VARIATION- HETEROGENEOUS REF- 71

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 71

SANDS AND GRAVELS

GEOLOGIC CHARACTERISTICS

LLOYD AQUIFER

INTEGRITY OF CONFINING UNITS
UPPER- AQUICLUDE REF- 74

LOWER- AQUICLUDE REF- 74

LITHOLOGY OF CONFINING UNITS
UPPER- CLAY REF- 74

LOWER- BEDROCK REF- 74

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 74

AGE OF GEOLOGIC UNIT- LATE CRETACEOUS REF- 74

SPATIAL VARIATION- HETEROGENEOUS REF- 74

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 74

NONMARINE CRETACEOUS AQUIFER

INTEGRITY OF CONFINING UNITS
UPPER- UNCONFINED TO CONFINED REF- 71

LOWER- AQ ICLUDE REF- 71

LITHOLOGY OF CONFINING UNITS

UPPER- SAND SILT AND CLAY REF- 71

LOWER- CRYSTALLINE BASEME T REF- 71

LITHOLOGY OF AQUIFER- SAND SILT AND CLAY REF- 71

AGE OF GEOLOGIC UNIT- EARLY CRETACEOUS REF- 71

SPATIAL VARIATION- HETEROGENEOUS REF- 71

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 71

MISSISSIPPI RIVER VALLEY ALLUVIUM

INTEGRITY OF CONFINING UNITS
UPPER- UNCONFINED TO AQUITARD REF- 77

LOWER- AQUIT RD REF- 77

LITHOLOGY OF CONFINING UNITS

UPPER- SAND AND GRAVEL TO CLAY REF- 77

LOWER- BEDROCK REF- 77

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 77

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 77

SPATIAL VARIATION- HETEROGENEOUS REF- 77

BOUNDARIES OF LATERAL UNIT- BEDROCK AND RIVER REF- 77

GEOMETRY(SHAPE)- BASIN REF- 77

RED RIVER VALLEY ALLUVIUM

INTEGRITY OF CONFINING UNITS
UPPER- UNCONFINED TO AQUITARD REF- 77

LOWER- AQUITAR REF- 77

LITHOLOGY OF CONFINING UNITS

UPPER- SAND AND GRAVEL TO CLAY REF- 77

LOWER- BEDROCK REF- 77

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 77

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 77

SPATIAL VARIATION- HETEROGENEOUS REF- 77

BOUNDARIES OF LATERAL UNIT- BEDROCK AND RIVER REF- 77

GEOMETRY(SHAPE)- BASIN REF- 77

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

CHICOT AQUIFER-200 FT SAND

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED TO AQUICLUDE REF- 72

LOWER- CLAY REF- 72

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY REF- 72

LOWER- CLAY REF- 72

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 72

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 72

SPATIAL VARIATION- HETEROGENEOUS REF- 72

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 72

CHICOT AQUIFER-500 FT SAND

INTEGRITY OF CONFINING UNITS

UPPER- AQUICLUDE REF- 72

LOWER- AQUICLUDE REF- 72

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY REF- 72

LOWER- CLAY REF- 72

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 72

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 72

SPATIAL VARIATION- HETEROGENEOUS REF- 72

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 72

CHICOT AQUIFER-700 FT SAND

INTEGRITY OF CONFINING UNITS

UPPER- AQUICLUDE REF- 72

LOWER- AQUICLUDE REF- 72

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY REF- 72

LOWER- CLAY REF- 72

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 72

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 72

SPATIAL VARIATION- HETEROGENEOUS REF- 72

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 72

COCKFIELD FORMATION

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED TO AQUITARD REF- 73

LOWER- AQUITARD REF- 73

LITHOLOGY OF CONFINING UNITS

UPPER- SAND AND CLAY REF- 73

LOWER- CLAY REF- 73

LITHOLOGY OF AQUIFER- SAND REF- 73

AGE OF GEOLOGIC UNIT- TERTIARY REF- 73

SPATIAL VARIATION- HETEROGENEOUS REF- 73

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 73

GEOMETRY(SHAPE)- TABULAR REF- 73

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

MEMPHIS AQUIFER

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED TO AQUITARD REF- 73

LOWER- AQUITARD REF- 73

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY SAND AND GRAVEL REF- 73

LOWER- CLAY REF- 73

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 73

AGE OF GEOLOGIC UNIT- TERTIARY REF- 73

SPATIAL VARIATION- HETEROGENEOUS REF- 73

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 73

GEOMETRY(SHAPE)- TABULAR REF- 73

SPARTA SAND

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD TO UNCONFINED REF- 73

LOWER- AQUITARD REF- 73

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY TO SAND REF- 73

LOWER- CLAY REF- 73

LITHOLOGY OF AQUIFER- SAND REF- 73

AGE OF GEOLOGIC UNIT- TERTIARY REF- 73

SPATIAL VARIATION- HETEROGENEOUS REF- 73

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 73

GEOMETRY(SHAPE)- TABULAR REF- 73

MERIDIAN-UPPER WILCOX AQUIFER

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 73

LOWER- AQUITARD REF- 73

LITHOLOGY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 0

LOWER- CLAY REF- 73

LITHOLOGY OF AQUIFER- SAND REF- 73

AGE OF GEOLOGIC UNIT- TERTIARY REF- 73

SPATIAL VARIATION- HETEROGENEOUS REF- 73

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 73

GEOMETRY(SHAPE)- TABULAR REF- 73

CARRIZO SAND

INTEGRITY OF CONFINING UNITS

UPPER- AQUICLUDE TO UNCONFINED REF- 73

LOWER- AQUITARD REF- 73

LITHOLOGY OF CONFINING UNITS

UPPER- SAND REF- 76

LOWER- CLAY REF- 73

LITHOLOGY OF AQUIFER- SAND REF- 73

AGE OF GEOLOGIC UNIT- TERTIARY REF- 73

SPATIAL VARIATION- HETEROGENEOUS REF- 73

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 73

GEOMETRY(SHAPE)- TABULAR REF- 73

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

LOWER WILCOX AQUIFER

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 73

LOWER- AQUITARD REF- 73

LITHOLOGY OF CONFINING UNITS

UPPER- CLAY AND MARL REF- 73

LOWER- CLAY REF- 73

LITHOLOGY OF AQUIFER- TABULAR REF- 73

AGE OF GEOLOGIC UNIT- TERTIARY REF- 73

SPATIAL VARIATION- HETEROGENEOUS REF- 73

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 73

GEOMETRY(SHAPE)- TABULAR REF- 73

NACATOCH SAND

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 69

LOWER- AQUITARD REF- 69

LITHOLOGY OF CONFINING UNITS

UPPER- MARL REF- 69

LOWER- CHALK REF- 69

LITHOLOGY OF AQUIFER- SAND REF- 69

AGE OF GEOLOGIC UNIT- LATE CRETACEOUS REF- 69

SPATIAL VARIATION- HETEROGENEOUS REF- 69

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 69

GEOMETRY(SHAPE)- TABULAR REF- 69

RIPLEY FORMATION

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 69

LOWER- AQUITARD REF- 69

LITHOLOGY OF CONFINING UNITS

UPPER- CHALK AND CLAYS REF- 69

LOWER- CHALK AND LIMESTONE REF- 69

LITHOLOGY OF AQUIFER- NO DATA REPORTED REF- 0

AGE OF GEOLOGIC UNIT- LATE CRETACEOUS REF- 69

SPATIAL VARIATION- HETEROGENEOUS REF- 69

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 69

GEOMETRY(SHAPE)- TABULAR REF- 69

COFFEE SAND

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 69

LOWER- UNCONFINED REF- 69

LITHOLOGY OF CONFINING UNITS

UPPER- CHALK REF- 69

LOWER- SAND AND GRAVEL REF- 69

LITHOLOGY OF AQUIFER- SAND REF- 69

AGE OF GEOLOGIC UNIT- LATE CRETACEOUS REF- 69

SPATIAL VARIATION- HETEROGENEOUS REF- 69

BOUNDARIES OF LATERAL UNIT- OUTCROP TO FACIES CHANGE REF- 69

GEOMETRY(SHAPE)- TABULAR REF- 69

SANDS AND GRAVELS

GEOLOGIC CHARACTERISTICS

TOKIO FORMATION

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 69

LOWER- UNCONFINED REF- 69

LITHOLOGY OF CONFINING UNITS

UPPER- SAND REF- 69

LOWER- SAND AND GRAVEL REF- 69

LITHOLOGY OF AQUIFER- NO DATA REPORTED REF- 0

AGE OF GEOLOGIC UNIT- LATE CRETACEOUS REF- 69

SPATIAL VARIATION- HETEROGENEOUS REF- 69

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 69

GEOMETRY(SHAPE)- TABULAR REF- 69

EUTAW FORMATION

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 69

LOWER- UNCONFINED REF- 69

LITHOLOGY OF CONFINING UNITS

UPPER- CHALK REF- 69

LOWER- SAND AND GRAVEL REF- 69

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 69

AGE OF GEOLOGIC UNIT- LATE CRETACEOUS REF- 69

SPATIAL VARIATION- HETEROGENEOUS REF- 69

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 69

TUSCALOOSA FORMATION

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED TO AQUITARD REF- 70

LOWER- UNKNOWN REF- 70

LITHOLOGY OF CONFINING UNITS

UPPER- SAND AND CLAY REF- 70

LOWER- UNKNOWN REF- 70

LITHOLOGY OF AQUIFER- NO DATA REPORTED REF- 0

AGE OF GEOLOGIC UNIT- CRETACEOUS REF- 70

SPATIAL VARIATION- HETEROGENEOUS REF- 70

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 70

GEOMETRY(SHAPE)- TABULAR REF- 70

GORDO FORMATION

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 69

LOWER- UNCONFINED REF- 69

LITHOLOGY OF CONFINING UNITS

UPPER- SAND AND GRAVEL REF- 69

LOWER- SAND AND GRAVEL REF- 69

LITHOLOGY OF AQUIFER- SAND AND GRAVEL REF- 69

AGE OF GEOLOGIC UNIT- LATE CRETACEOUS REF- 69

SPATIAL VARIATION- HETEROGENEOUS REF- 69

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 69

GEOMETRY(SHAPE)- TABULAR REF- 69

	THERMAL CONDUCTIVITY		
AQUIFER	UPPER CONFINEMENT	LOWER CONFINEMENT	

	TEMPERATURE				AQUIFER				UPPER CONFINEMENT				LOWER CONFINEMENT			
	DEG.CEL.				MCAL/CM SEC DEG C				MCAL/CM SEC DEG C				MCAL/CM SEC DEG C			
	MIN	MAX	REF		MIN	MAX	AVG	REF		MIN	MAX	REF		MIN	MAX	REF
SANDS AND GRAVELS																
JAMECO AQUIFER	NO DATA REPORTED FOR THIS GROUP															
POCOMOKE AQUIFER	NO DATA REPORTED FOR THIS GROUP															
MANOKIN AQUIFER	NO DATA REPORTED FOR THIS GROUP															
MAGOTHY AQUIFER	NO DATA REPORTED FOR THIS GROUP															
LLOYD AQUIFER	NO DATA REPORTED FOR THIS GROUP															
NONMARINE CRETACEOUS AQUIFER	NO DATA REPORTED FOR THIS GROUP															
MISSISSIPPI RIVER VALLEY ALLUVIUM	NO DATA REPORTED FOR THIS GROUP															
RED RIVER VALLEY ALLUVIUM	NO DATA REPORTED FOR THIS GROUP															
CHICOT AQUIFER-200 FT SAND																
	19	22	72													
	---	---			---	---	---			---	---			---	---	
AVERAGES	19	22														
CHICOT AQUIFER-500 FT SAND																
	21	24	72													
	---	---			---	---	---			---	---			---	---	
AVERAGES	21	24														
CHICOT AQUIFER-700 FT SAND																
	23	25	72													
	---	---			---	---	---			---	---			---	---	
AVERAGES	23	25														
COCKFIELD FORMATION	NO DATA REPORTED FOR THIS GROUP															

Table 10-2

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

COKER FORMATION

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 69

LOWER- AQUITARD REF- 69

LITHOLOGY OF CONFINING UNITS

UPPER- SAND AND GRAVEL REF- 69

LOWER- LIMESTONE REF- 69

LITHOLOGY OF AQUIFER- NO DATA REPORTED REF- 0

AGE OF GEOLOGIC UNIT- NO DATA REPORTED REF- 0

SPATIAL VARIATION- HETEROGENEOUS REF- 69

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 69

GEOMETRY(SHAPE)- TABULAR REF- 69

TRINITY GROUP

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 69

LOWER- AQUITARD REF- 69

LITHOLOGY OF CONFINING UNITS

UPPER- LIMESTONE REF- 69

LOWER- LIMESTONE REF- 69

LITHOLOGY OF AQUIFER- SANDS AND GRAVELS REF- 69

AGE OF GEOLOGIC UNIT- EARLY CRETACEOUS REF- 69

SPATIAL VARIATION- HOMOGENEOUS REF- 69

BOUNDARIES OF LATERAL UNIT- OUTCROP REF- 69

GEOMETRY(SHAPE)- TABULAR REF- 69

SANDS AND GRAVELS ,	THERMAL CHARACTERISTICS											
	TEMPERATURE				AQUIFER				THERMAL CONDUCTIVITY			
	DEG.CEL.				SEC DEG C				UPPER CONFINEMENT			
	MIN	MAX	REF		MIN	MAX	AVG	REF	MIN	MAX	REF	
MEMPHIS AQUIFER	NO DATA REPORTED FOR THIS GROUP											
SPARTA SAND	NO DATA REPORTED FOR THIS GROUP											
MERIDIAN-UPPER WILCOX AQUIFER	NO DATA REPORTED FOR THIS GROUP											
CARRIZO SAND		14	60	76								
		---	---		----	----	----		----	----		----
	AVERAGES	14,	60									
LOWER WILCOX AQUIFER	NO DATA REPORTED FOR THIS GROUP											
NACATOCH SAND	NO DATA REPORTED FOR THIS GROUP											
RIPLEY FORMATION	NO DATA REPORTED FOR THIS GROUP											
COFFEE SAND	NO DATA REPORTED FOR THIS GROUP											
TOKIO FORMATION	NO DATA REPORTED FOR THIS GROUP											
EUTAW FORMATION	NO DATA REPORTED FOR THIS GROUP											
TUSCALOOSA FORMATION	NO DATA REPORTED FOR THIS GROUP											
GORDO FORMATION	NO DATA REPORTED FOR THIS GROUP											
COKER FORMATION	NO DATA REPORTED FOR THIS GROUP											
TRINITY GROUP	NO DATA REPORTED FOR THIS GROUP											

Table 10-2

	TOTAL DISSOLVED SOLIDS			WATER QUALITY			SPECIFIC CONDUCTANCE			PH		
	MG/L			HARDNESS			MICRO OHMS					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
JAMECO AQUIFER												
	NO DATA REPORTED FOR THIS GROUP											
POCOMOKE AQUIFER												
	NO DATA REPORTED FOR THIS GROUP											
MANOKIN AQUIFER												
	191		75	84	170	75				6.3	7.3	75
AVERAGES	191			84	170					6.3	7.3	
MAGOTHY AQUIFER												
	100	1,000	71									
AVERAGES	100	1,000										
LLOYD AQUIFER												
	NO DATA REPORTED FOR THIS GROUP											
NONMARINE CRETACEOUS AQUIFER												
	100	1,000	71									
AVERAGES	100	1,000										
MISSISSIPPI RIVER VALLEY ALLUVIUM												
	18	4,190	77	0	1,790	77	32	6,430	77	4.3	8.9	77
AVERAGES	18	4,190		0	1,790		32	6,430		4.3	8.9	
RED RIVER VALLEY ALLUVIUM												
	51	1,850	77	10	1,180	77	54	2,680	77	5.1	8.2	77
AVERAGES	51	1,850		10	1,180		54	2,680		5.1	8.2	
CHICOT AQUIFER-200 FT SAND												
	270	748	72				279	1,440	72	7.4	8.6	72
AVERAGES	270	748					279	1,440		7.4	8.6	
CHICOT AQUIFER-500 FT SAND												
	175	1,030	72				221	703	72	6.8	8.2	72
AVERAGES	175	1,030					221	703		6.8	8.2	
CHICOT AQUIFER-700 FT SAND												
	184	740	72				244	1,300	72	7.1	8.6	72
AVERAGES	184	740					244	1,300		7.1	8.6	

Table 10-2

		TOTAL DISSOLVED SOLIDS			WATER QUALITY			SPECIFIC CONDUCTANCE			PH		
		MG/L			MG/L			MICRO OHMS					
		MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS	AVERAGES	20	1,510		0	288		42	2,710		4.3	9.0	
MERIDIAN-UPPER WILCOX AQUIFER		24	2,680	73	0	134	73	48	4,490	73	5.2	8.9	73
	AVERAGES	24	2,680		0	134		48	4,490		5.2	8.9	
CARRIZO SAND		115	1,700	76	---	---		---	---		---	---	
	AVERAGES	115	1,700										
LOWER WILCOX AQUIFER		13	1,810	73	1	112	73	19	3,520	73	5.2	8.6	73
	AVERAGES	13	1,810		1	112		19	3,520		5.2	8.6	
NACATOCH SAND		---	---		4	353	69	38	11,200	69	4.7	9.0	69
	AVERAGES	---	---		4	353		38	11,200		4.7	9.0	
RIPLEY FORMATION		31	1,010	69	1	952	69	28	2,150	69	4.0	8.9	69
	AVERAGES	31	1,010		1	952		28	2,150		4.0	8.9	
COFFEE SAND		16	761	69	4	410	69	17	1,190	69	5.4	8.5	69
	AVERAGES	16	761		4	410		17	1,190		5.4	8.5	
TOKIO FORMATION		---	---		2	558	69	41	4,760	69	5.9	9.0	69
	AVERAGES	---	---		2	558		41	4,760		5.9	9.0	
EUTAW FORMATION		37	2,680	69	1	186	69	54	4,880	69	6.1	8.8	69
	AVERAGES	37	2,680		1	186		54	4,880		6.1	8.8	
TUSCALOOSA FORMATION	NO DATA REPORTED FOR THIS GROUP												
GORDO FORMATION		28	865	69	5	110	69	61	1,610	69	6.0	8.5	69
	AVERAGES	28	865		5	110		61	1,610		6.0	8.5	

Table 10-2

SANDS AND GRAVELS	TOTAL DISSOLVED SOLIDS			WATER QUALITY			SPECIFIC CONDUCTANCE			PH		
	MG/L			HARDNESS			MICRO OHMS					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
COKER FORMATION	43	512	69	10	124	69	27	949	69	5.5	8.5	69
	-----	-----		---	-----		27	949	69	---	---	
AVERAGES	43	512		10	124		27	949		5.5	8.5	
TRINITY GROUP	0	300	69	4	200	69	49	3,340	69	6.1	9.2	69
	-----	-----		---	-----		-----	-----		---	---	
AVERAGES	0	300		4	200		49	3,340		6.1	9.2	
COCKFIELD FORMATION	25	4,870	73	0	440	73	25	8,430	73	5.8	8.9	73
	-----	-----		---	-----		-----	-----		---	---	
AVERAGES	25	4,870		0	440		25	8,430		5.8	8.9	
MEMPHIS AQUIFER	16	848	73	4	398	73	23	1,460	73	4.7	8.5	73
	-----	-----		---	-----		-----	-----		---	---	
AVERAGES	16	848		4	398		23	1,460		4.7	8.5	
SPARTA SAND	20	1,510	73	0	288	73	42	2,710	73	4.3	9.0	73
	-----	-----		---	-----		-----	-----		---	---	

Table 10-2

B-92

			WATER QUALITY											
			CA & MG MG/L			NA & K MG/L			CL MG/L			SO4 MG/L		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF		
SANDS AND GRAVELS														
JAMECO AQUIFER	NO DATA REPORTED FOR THIS GROUP													
POCOMOKE AQUIFER	NO DATA REPORTED FOR THIS GROUP													
MANOKIN AQUIFER							35.0	60.0	75					
	-----	-----		-----	-----		-----	-----		-----	-----			
AVERAGES							35.0	60.0						
MAGOTHY AQUIFER	NO DATA REPORTED FOR THIS GROUP													
LLOYD AQUIFER	NO DATA REPORTED FOR THIS GROUP													
NONMARINE CRETACEOUS AQUIFER	NO DATA REPORTED FOR THIS GROUP													
MISSISSIPPI RIVER VALLEY ALLUVIUM	0.4	606	77	2.2	978.0	77	0.3		77	0.0		77		
	-----	-----		-----	-----		-----	-----		-----	-----			
AVERAGES	0.4	606		2.2	978.0		0.3			0.0				
RED RIVER VALLEY ALLUVIUM	3.9	395	77	6.2	389.0	77	4.5	610.0	77	0.0	544	77		
	-----	-----		-----	-----		-----	-----		-----	-----			
AVERAGES	3.9	395		6.2	389.0		4.5	610.0		0.0	544			
CHICOT AQUIFER-200 FT SAND							19.0	300.0	72	0.0	3	72		
	-----	-----		-----	-----		-----	-----		-----	-----			
AVERAGES							19.0	300.0		0.0	3			
CHICOT AQUIFER-500 FT SAND							14.0	516.0	72	0.1	6	72		
	-----	-----		-----	-----		-----	-----		-----	-----			
AVERAGES							14.0	516.0		0.1	6			
CHICOT AQUIFER-700 FT SAND							16.0	316.0	72	1.0	5	72		
	-----	-----		-----	-----		-----	-----		-----	-----			
AVERAGES							16.0	316.0		1.0	5			
COCKFIELD FORMATION	0.0	161	73	1.4	1,923.0	73	2.0		73	0.0	464	73		
	-----	-----		-----	-----		-----	-----		-----	-----			
AVERAGES	0.0	161		1.4	1,923.0		2.0			0.0	464			

Table 10-2

SANDS AND GRAVELS	CA & MG MG/L			REF	MIN	NA & K MG/L		REF	WATER QUALITY CL MG/L		REF	SO4 MG/L			REF
	MIN	MAX				MAX			MIN	MAX		MIN	MAX		
MEMPHIS AQUIFER															
	0.8	110	73		1.9	69.0	73		0.0	174.0	73	0.0	98	73	
AVERAGES	0.8	110			1.9	69.0			0.0	174.0		0.0	98		
SPARTA SAND															
	0.0	108	73		3.2	609.0	73		1.0	638.0	73	0.0	216	73	
AVERAGES	0.0	108			3.2	609.0			1.0	638.0		0.0	216		
MERIDIAN-UPPER WILCOX AQUIFER															
	0.0	40	73		2.9	1,075.0	73		0.0	860.0	73	0.0	46	73	
AVERAGES	0.0	40			2.9	1,075.0			0.0	860.0		0.0	46		
CARRIZO SAND															
NO DATA REPORTED FOR THIS GROUP															
LOWER WILCOX AQUIFER															
	0.0	32	73		1.8	720.0	73		0.0	725.0	73	0.0	37	73	
AVERAGES	0.0	32			1.8	720.0			0.0	725.0		0.0	37		
NACATOCH SAND															
									3.1		69	0.2	120	69	
AVERAGES									3.1			0.2	120		
RIPLEY FORMATION															
	11.0	1	69		2.3	417.0	69		0.0	475.0	69	0.4		69	
AVERAGES	11.0	1			2.3	417.0			0.0	475.0		0.4			
COFFEE SAND															
	1.5	176	69		0.9	299.5	69		1.2	125.0	69	0.2	156	69	
AVERAGES	1.5	176			0.9	299.5			1.2	125.0		0.2	156		
TOKIO FORMATION															
									3.5		69	1.0	397	69	
AVERAGES									3.5			1.0	397		
EUTAW FORMATION															
	0.4	76	69		3.1	1,048.0	69		2.0		69	0.0	34	69	
AVERAGES	0.4	76			3.1	1,048.0			2.0			0.0	34		
TUSCALOOSA FORMATION															
NO DATA REPORTED FOR THIS GROUP															

Table 10-2

	CA & MG			NA & K			WATER QUALITY			CL			SO4		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS															
GORDO FORMATION															
	1.9	71	69	-----	-----		1.0	370.0	69	0.0	16	69			
AVERAGES	1.9	71					1.0	370.0		0.0	16				
COKER FORMATION															
	2.7	47	69	-----	-----		1.2	220.0	69	0.2	9	69			
AVERAGES	2.7	47					1.2	220.0		0.2	9				
TRINITY GROUP															
	-----	-----		-----	-----		3.1	365.0	69	1.0	560	69			
AVERAGES							3.1	365.0		1.0	560				

Table 10-2

			NO3			FE			WATER QUALITY			FLUORIDE			SILICATES		
			MG/L			MG/L						MG/L			MG/L		
MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS																	
JAMECO AQUIFER																	
NO DATA REPORTED FOR THIS GROUP																	
POCOMOKE AQUIFER																	
NO DATA REPORTED FOR THIS GROUP																	
MANOKIN AQUIFER																	
	----	----	4.0	12.0	75	----	----										
AVERAGES			4.0	12.0													
MAGOTHY AQUIFER																	
NO DATA REPORTED FOR THIS GROUP																	
LLOYD AQUIFER																	
NO DATA REPORTED FOR THIS GROUP																	
NONMARINE CRETACEOUS AQUIFER																	
NO DATA REPORTED FOR THIS GROUP																	
MISSISSIPPI RIVER VALLEY ALLUVIUM																	
	0.0	77	0.0	62.0	77	0.0	0.80	77	1	70	77						
AVERAGES	0.0		0.0	62.0		0.0	0.80		1	70							
RED RIVER VALLEY ALLUVIUM																	
	0.0	77	0.0	28.0	77	0.0	1.00	77	15	56	77						
AVERAGES	0.0		0.0	28.0		0.0	1.00		15	56							
CHICOT AQUIFER-200 FT SAND																	
	0.2	0.50	72	0.0	8.5	72	0.0	0.50	72	32	48	72					
AVERAGES	0.2	0.50		0.0	8.5		0.0	0.50		32	48						
CHICOT AQUIFER-500 FT SAND																	
	0.0	0.20	72	0.1	8.1	72	0.0	1.20	72	40	65	72					
AVERAGES	0.0	0.20		0.1	8.1		0.0	1.20		40	65						
CHICOT AQUIFER-700 FT SAND																	
	0.0	0.20	72	0.4	13.0	72	0.0	1.00	72	40	58	72					
AVERAGES	0.0	0.20		0.4	13.0		0.0	1.00		40	58						

Table 10-2

SANDS AND GRAVELS	NO3 MG/L			WATER QUALITY FE MG/L			FLUORIDE MG/L			SILICATES MG/L		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
COCKFIELD FORMATION	0.0	10.00	73	0.0	62.0	73	0.0	4.40	73	2	53	73
AVERAGES	0.0	10.00		0.0	62.0		0.0	4.40		2	53	
MEMPHIS AQUIFER	0.0		73	0.0	60.0	73	0.0	2.00	73	3	43	73
AVERAGES	0.0			0.0	60.0		0.0	2.00		3	43	
SPARTA SAND	0.0	14.00	73	0.0	23.0	73	0.0	5.40	73	0	62	73
AVERAGES	0.0	14.00		0.0	23.0		0.0	5.40		0	62	
MERIDIAN-UPPER WILCOX AQUIFER	0.0	17.00	73	0.0	8.7	73	0.0	7.00	73	0	41	73
AVERAGES	0.0	17.00	73	0.0	8.7	73						
CARRIZO SAND												
NO DATA REPORTED FOR THIS GROUP												
LOWER WILCOX AQUIFER	0.0	13.00	73	0.0	15.0	73	0.0	1.30	73	0	44	73
AVERAGES	0.0	13.00		0.0	15.0		0.0	1.30		0	44	
NACATOCH SAND	0.0	0.00	69	0.0	7.8	69						
AVERAGES	0.0	0.00		0.0	7.8							
RIPLEY FORMATION	0.0		69	0.0	28.0	69	0.0	4.40	69	1	38	69
AVERAGES	0.0			0.0	28.0		0.0	4.40		1	38	
COFFEE SAND	0.0	19.00	69	0.0	15.0	69	0.0	6.50	69	2	45	69
AVERAGES	0.0	19.00		0.0	15.0		0.0	6.50		2	45	
TOKIO FORMATION	0.0		69	0.0	54.0	69						
AVERAGES	0.0			0.0	54.0							
EUTAW FORMATION	0.0	7.60	69	0.0	9.9	69	0.0	5.00	69	0	20	69
AVERAGES	0.0	7.60		0.0	9.9		0.0	5.00		0	20	
TUSCALOOSA FORMATION												
NO DATA REPORTED FOR THIS GROUP												

Table 10-2

WATER QUALITY

SANDS AND GRAVELS	NO3 MG/L			FE MG/L			FLUORIDE MG/L			SILICATES MG/L		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
GORDO FORMATION	0.0	3.90	69	0.0	20.0	69	0.0	2.00	69	1	27	69
	----	----		----	----		----	----		---	---	
AVERAGES	0.0	3.90		0.0	20.0		0.0	2.00		1	27	
COKER FORMATION	0.0	28.00	69	0.3	15.0	69	0.0	0.60	69	4	6	69
	----	----		----	----		----	----		---	---	
AVERAGES	0.0	28.00		0.3	15.0		0.0	0.60		4	6	
TRINITY GROUP	0.0	2.80	69	0.0	11.0	69	----	----		---	---	
	----	----		----	----							
AVERAGES	0.0	2.80		0.0	11.0							

Table 10-2

	TRANSMISSIVITY				STORATIVITY			HYDROLOGIC CHARACTERISTICS				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS																	
NORTH CENTRAL-DIKE IMPOUNDED-OAHU		4,000.00		79													
AVERAGES		4,000.00															
WAIANAE VOLCANICS-DIKE IMPOUNDED-OAHU																	
PEARL HARBOR BASAL-OAHU		4,600.00	4,400.00	79	4.00000	6.00000	79	50	1,200	350	79						
AVERAGES		4,600.00	4,400.00		4.00000	6.00000		50	1,200	350							

	STORAGE			REGIONAL HYDROLOGIC CHARACTERISTICS				HYDRAULIC GRADIENT			POROSITY		
	MIN	MAX	REF	MIN	MAX	DEG	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS													
NORTH CENTRAL-DIKE IMPOUNDED-OAHU										79			
AVERAGES													
WAIANAE VOLCANICS-DIKE IMPOUNDED-OAHU													
PEARL HARBOR BASAL-OAHU													

AREAL EXTENT		GEOMETRY				THICKNESS		
K SQ. MI.		DEPTH BELOW SURFACE						
APPROX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF

VOLCANICS

NORTH CENTRAL-DIKE IMPOUNDED-OAHU
 NO DATA REPORTED FOR THIS GROUP

WAIANAE VOLCANICS-DIKE IMPOUNDED-OAHU
 NO DATA REPORTED FOR THIS GROUP

PEARL HARBOR BASAL-OAHU								
	C.19	78	80	2,000	1,100	78		
	-----		-----	-----	-----		-----	-----
AVERAGES	0.19		80	2,000	1,100			

Table 11-2

GEOLOGIC CHARACTERISTICS

VOLCANICS

NORTH CENTRAL-DIKE IMPOUNDED-OAHU

INTEGRITY OF CONFINING UNITS

UPPER- UNCONFINED REF- 79

LOWER- AQUITARD REF- 79

LITHOLOGY OF CONFINING UNITS

UPPER- NONE REF- 79

LOWER- DENSE LAVA FLOWS REF- 79

LITHOLOGY OF AQUIFER- ANDESITIC LAVA REF- 79

AGE OF GEOLOGIC UNIT- TERTIARY REF- 79

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE DIKES REF- 79

GEOMETRY(SHAPE)- NO DATA REPORTED REF- 0

WAIANAE VOLCANICS-DIKE IMPOUNDED-OAHU

INTEGRITY OF CONFINING UNITS

UPPER- NO DATA REPORTED REF- 80

LOWER- NO DATA REPORTED REF- 30

LITHOLOGY OF CONFINING UNITS

UPPER- NONE REF- 80

LOWER- DENSE ANDESITIC LAVA REF- 80

LITHOLOGY OF AQUIFER- ANDESITIC LAVA REF- 80

AGE OF GEOLOGIC UNIT- TERTIARY REF- 80

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- IMPERMEABLE DIKES REF- 80

GEOMETRY(SHAPE)- VARIABLE REF- 80

PEARL HARBOR BASAL-OAHU

INTEGRITY OF CONFINING UNITS

UPPER- AQUITARD REF- 78

LOWER- AQUITARD-SEA WATER REF- 78

LITHOLOGY OF CONFINING UNITS

UPPER- SEDIMENTARY REF- 78

LOWER- SEA WATER REF- 78

LITHOLOGY OF AQUIFER- BASALTIC LAVA REF- 78

AGE OF GEOLOGIC UNIT- TERTIARY REF- 78

SPATIAL VARIATION- HOMOGENEOUS-ANISOTROPIC REF- 78

BOUNDARIES OF LATERAL UNIT- DIKES AND STRUCTURES REF- 78

GEOMETRY(SHAPE)- ROUNDED REF- 78

Table 11-2

THERMAL CHARACTERISTICS

TEMPERATURE			
DEG. CEL.			
MIN	MAX	REF	

AQUIFER				
MCAL/CM		SEC	DEG	C
MIN	MAX	AVG	REF	

THERMAL CONDUCTIVITY			
UPPER CONFINEMENT			
MCAL/CM SEC DEG C			
EF	MIN	MAX	REF
1	0.000	0.000	0.000
2	0.000	0.000	0.000
3	0.000	0.000	0.000
4	0.000	0.000	0.000
5	0.000	0.000	0.000
6	0.000	0.000	0.000
7	0.000	0.000	0.000
8	0.000	0.000	0.000
9	0.000	0.000	0.000
10	0.000	0.000	0.000
11	0.000	0.000	0.000
12	0.000	0.000	0.000
13	0.000	0.000	0.000
14	0.000	0.000	0.000
15	0.000	0.000	0.000
16	0.000	0.000	0.000
17	0.000	0.000	0.000
18	0.000	0.000	0.000
19	0.000	0.000	0.000
20	0.000	0.000	0.000
21	0.000	0.000	0.000
22	0.000	0.000	0.000
23	0.000	0.000	0.000
24	0.000	0.000	0.000
25	0.000	0.000	0.000
26	0.000	0.000	0.000
27	0.000	0.000	0.000
28	0.000	0.000	0.000
29	0.000	0.000	0.000
30	0.000	0.000	0.000
31	0.000	0.000	0.000
32	0.000	0.000	0.000
33	0.000	0.000	0.000
34	0.000	0.000	0.000
35	0.000	0.000	0.000
36	0.000	0.000	0.000
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38	0.000	0.000	0.000
39	0.000	0.000	0.000
40	0.000	0.000	0.000
41	0.000	0.000	0.000
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45	0.000	0.000	0.000
46	0.000	0.000	0.000
47	0.000	0.000	0.000
48	0.000	0.000	0.000
49	0.000	0.000	0.000
50	0.000	0.000	0.000
51	0.000	0.000	0.000
52	0.000	0.000	0.000
53	0.000	0.000	0.000
54	0.000	0.000	0.000
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63	0.000	0.000	0.000
64	0.000	0.000	0.000
65	0.000	0.000	0.000
66	0.000	0.000	0.000
67	0.000	0.000	0.000
68	0.000	0.000	0.000
69	0.000	0.000	0.000
70	0.000	0.000	0.000
71	0.000	0.000	0.000
72	0.000	0.000	0.000
73	0.000	0.000	0.000
74	0.000	0.000	0.000
75	0.000	0.000	0.000
76	0.000	0.000	0.000
77	0.000	0.000	0.000
78	0.000	0.000	0.000
79	0.000	0.000	0.000
80	0.000	0.000	0.000
81	0.000	0.000	0.000
82	0.000	0.000	0.000
83	0.000	0.000	0.000

LOWER CONFINEMENT			
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	MIN	MAX	REF
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VOLCANICS

NORTH CENTRAL-DIKE IMPOUNDED-OAHU

NO DATA REPORTED FOR THIS GROUP

WAIANAE VOLCANICS-DIKE IMPOUNDED-OAHU

13 27 80

AVERAGES 18 27

PEARL HARBOR BASAL-OAHU

21 22 78

AVERAGES	21	22
----------	----	----

	TOTAL DISSOLVED SOLIDS			WATER QUALITY			SPECIFIC CONDUCTANCE			PH		
	MG/L			HARDNESS			MICRO OHMS					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS												
NORTH CENTRAL-DIKE IMPOUNDED-OAHU												
	NO DATA REPORTED FOR THIS GROUP											
WAIANAE VOLCANICS-DIKE IMPOUNDED-OAHU												
	175	1,700	80									
AVERAGES	175	1,700										
PEARL HARBOR BASAL-OAHU												
										7.0	8.0	78
AVERAGES										7.0	8.0	

	CA & MG			NA & K			CL			SO4		
	MG/L			MG/L			MG/L			MG/L		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS												
NORTH CENTRAL-DIKE IMPOUNDED-OAHU												
							14.0	250.0	79			
AVERAGES							14.0	250.0				
WAIANAE VOLCANICS-DIKE IMPOUNDED-OAHU												
				22.0	136.0	80	30.0	520.0	80	8.0	700	80
AVERAGES				22.0	136.0		30.0	520.0		8.0	700	
PEARL HARBOR BASAL-OAHU												
	8.0	14	78	5.0	22.0	78	22.0		78	5.5	5	78
AVERAGES	8.0	14		5.0	22.0		22.0			5.5	5	

Table 11-2

WATER QUALITY

	NO3			FE			FLUORIDE			SILICATES		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
VOLCANICS												
NORTH CENTRAL-DIKE IMPOUNDED-OAHU												
NO DATA REPORTED FOR THIS GROUP												
WAIANAE VOLCANICS-DIKE IMPOUNDED-OAHU												
	1.2	6.00	80	----	----		----	----		----	----	
AVERAGES	1.2	6.00										
PEARL HARBOR BASAL-OAHU												
	1.1	1.10	73	----	----		0.0	0.07	73	15	36	73
AVERAGES	1.1	1.10					0.0	0.07		15	36	

Table 11-2

REGION 12

	TRANSMISSIVITY				STORATIVITY			HYDROLOGIC CHARACTERISTICS				SPECIFIC CAPACITY			HYD CONDUCTIVITY		
	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	TYP	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS																	
TANANA RIVER BASIN								1,000	3,000		81						
AVERAGES								1,000	3,000								
ANCHORAGE AREA ARTESIAN								200	1,500	500	83						
AVERAGES								200	1,500	500							
MATANUSKA VALLEY-PALMER																	
NO DATA REPORTED FOR THIS GROUP																	
SEWARD ALLUVIUM								200	2,000	500	82						
AVERAGES	75.0	150.00	80.00	82	0.00100	0.01000	82	200	2,000	500							

	STORAGE			REGIONAL HYDROLOGIC CHARACTERISTICS				POROSITY		
	MIN	MAX	REF	MIN	MAX	DEG	REF	MIN	MAX	REF
SANDS AND GRAVELS										
TANANA RIVER BASIN										
NO DATA REPORTED FOR THIS GROUP										
ANCHORAGE AREA ARTESIAN								.3800	.9500	93
AVERAGES								.3800	.9500	
MATANUSKA VALLEY-PALMER										
NO DATA REPORTED FOR THIS GROUP										
SEWARD ALLUVIUM										
NO DATA REPORTED FOR THIS GROUP										

Table 12-2

	AREAL EXTENT		GEOMETRY DEPTH BELOW SURFACE				THICKNESS		
	K SQ.MI. APPROX	REF	MIN	FT MAX	TYP	REF	MIN	FT MAX	REF
SANDS AND GRAVELS									
TANANA RIVER BASIN	14.00	31	50	400	200	31	-----	-----	
AVERAGES	14.00		50	400	200				
ANCHORAGE AREA ARTESIAN	0.20	83	100	400	250	83	-----	-----	
AVERAGES	0.20		100	400	250				
MATANUSKA VALLEY-PALMER	-----		-----	-----	-----		0	200	84
AVERAGES							0	200	
SEWARD ALLUVIUM	-----		50	400	250	82	-----	-----	
AVERAGES			50	400	250				

Table 12-2

GEOLOGIC CHARACTERISTICS

SANDS AND GRAVELS

TANANA RIVER BASIN

INTEGRITY OF CONFINING UNITS
UPPER- NONE REF- 81

LOWER- AQUITARD REF- 81

LITHOLOGY OF CONFINING UNITS
UPPER- NONE REF- 81

LOWER- METAMORPHOSAL IGNEOUS & SEDIMENTARY ROCK REF- 81

LITHOLOGY OF AQUIFER- ALLUVIAL GRAVELS AND FANS REF- 81

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 81

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- TABULAR REF- 81

ANCHORAGE AREA ARTESIAN

INTEGRITY OF CONFINING UNITS
UPPER- AQUITARD REF- 83

LOWER- AQUICLUDE REF- 83

LITHOLOGY OF CONFINING UNITS
UPPER- SILTS AND CLAYS REF- 83

LOWER- SILTSTONE AND ARGILLITE REF- 83

LITHOLOGY OF AQUIFER- GLACIAL SAND AND GRAVEL REF- 83

AGE OF GEOLOGIC UNIT- PLEISTOCENE REF- 83

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- OCEAN AND BEDROCK REF- 83

GEOMETRY(SHAPE)- NO DATA REPORTED REF- 0

MATANUSKA VALLEY-PALMER

INTEGRITY OF CONFINING UNITS
UPPER- UNCONFINED TO AQUICLUDE REF- 84

LOWER- AQUITARD TO AQUICLUDE REF- 84

LITHOLOGY OF CONFINING UNITS

UPPER- GLACIAL TILL-SILTY W/CLAY "HARD PAN" REF- 84 LOWER- FRACTURED BEDROCK REF- 84

LITHOLOGY OF AQUIFER- GLACIAL OUTWASH SANDS AND GRAVELS REF- 84

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 84

SPATIAL VARIATION- NO DATA REPORTED REF- 0

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- ELONGATE REF- 84

SEWARD ALLUVIUM

INTEGRITY OF CONFINING UNITS
UPPER- AQUITARD REF- 82

LOWER- AQUICLUDE REF- 82

LITHOLOGY OF CONFINING UNITS

UPPER- GLACIAL AND ALLUVIAL SILTS REF- 82 LOWER- CRYSTALLINE BEDROCK REF- 82

LITHOLOGY OF AQUIFER- ALLUVIAL SAND AND GRAVEL REF- 82

AGE OF GEOLOGIC UNIT- QUATERNARY REF- 82

SPATIAL VARIATION- HETEROGENOUS-ANISOTROPIC REF- 82

BOUNDARIES OF LATERAL UNIT- NO DATA REPORTED REF- 0

GEOMETRY(SHAPE)- NO DATA REPORTED REF- 0

THERMAL CHARACTERISTICS

	TEMPERATURE				THERMAL CONDUCTIVITY											
	DEG. CEL.				AQUIFER				UPPER CONFINEMENT				LOWER CONFINEMENT			
	MIN	MAX	REF		MIN	MAX	AVG	REF	MIN	MAX	REF		MIN	MAX	REF	
SANDS AND GRAVELS																
TANANA RIVER BASIN																
		0	1	81												
AVERAGES		0	1													
ANCHORAGE AREA ARTESIAN																
		2	3	83												
AVERAGES		2	3													
MATANUSKA VALLEY-PALMER																
SEWARD ALLUVIUM																
		2	5	82												
AVERAGES		2	5													

NO DATA REPORTED FOR THIS GROUP

Table 12-2

	TOTAL DISSOLVED SOLIDS			WATER QUALITY						PH		
	MG/L			HARDNESS			SPECIFIC CONDUCTANCE					
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
TANANA RIVER BASIN	135	370	81	135	336	81	290	655	81			
AVERAGES	135	370		135	336		290	655				
ANCHORAGE AREA ARTESIAN	134	156	83	113	158	83	137	269	83	7.4	8.4	83
AVERAGES	134	156		113	158		137	269		7.4	8.4	
MATANUSKA VALLEY-PALMER	NO DATA REPORTED FOR THIS GROUP											
SEWARD ALLUVIUM	68	167	82	52	106	82	116	250	82			
AVERAGES	68	167		52	106		116	250				

	CA & MG			NA & K			CL			SO4		
	MG/L			MG/L			MG/L			MG/L		
	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
TANANA RIVER BASIN	72.0	72	31	8.6	8.6	31	3.5	3.5	81	19.0	19	81
AVERAGES	72.0	72		8.6	8.6		3.5	3.5		19.0	19	
ANCHORAGE AREA ARTESIAN				2.6	8.6	33	1.1	5.7	83	3.8	16	83
AVERAGES				2.6	8.6		1.1	5.7		3.8	16	
MATANUSKA VALLEY-PALMER	NO DATA REPORTED FOR THIS GROUP											
SEWARD ALLUVIUM							2.0	34.0	82	4.0	16	82
AVERAGES							2.0	34.0		4.0	16	

Table 12-2

				WATER QUALITY			FLUORIDE			SILICATES		
				NO3 MG/L			FE MG/L			MG/L		
				MIN	MAX	REF	MIN	MAX	REF	MIN	MAX	REF
SANDS AND GRAVELS												
TANANA RIVER BASIN												
				0.1	0.15	81	12.0	12.0	81	0.0	0.05	81
				----	----		----	----		----	----	
AVERAGES				0.1	0.15		12.0	12.0		0.0	0.05	
										19	19	81
										19	19	
ANCHORAGE AREA ARTESIAN												
				0.0	3.10	83	0.0	3.2	83	0.0	1.40	83
				----	----		----	----		----	----	
AVERAGES				0.0	3.10		0.0	3.2		0.0	1.40	
										12	16	83
										12	16	
MATANUSKA VALLEY-PALMER												
NO DATA REPORTED FOR THIS GROUP												
SEWARD ALLUVIUM												
				0.3	2.60	82	0.0	17.0	82	0.0	0.10	82
				----	----		----	----		----	----	
AVERAGES				0.3	2.60		0.0	17.0		0.0	0.10	
										4	46	82
										4	46	

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