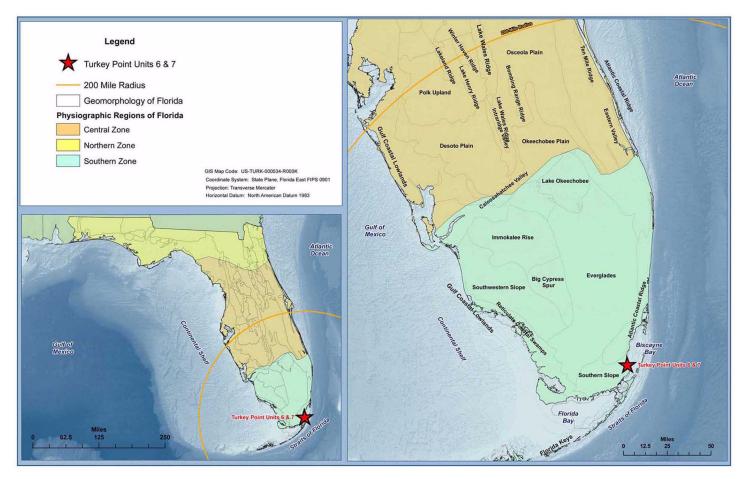
PTN COL 2.4-4

Figure 2.4.12-201 Physiographic Features



Modified from References 201 and 202

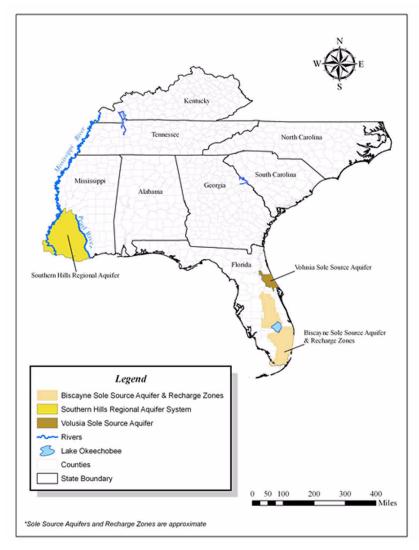
Note: Florida is within the Atlantic Coastal Plan physiographic province.

2.4.12-101 Revision 4

Figure 2.4.12-202 Regional Generalized Hydrostatigraphic Column

Series		Geologic unit		Marker units and horizons	Lithology	Hydrogeologic unit		Approximate thickness (feet)	
HOLOCENE and PLEISTOCENE		Undifferentiated and various Pleistocene-aged formations			Quartz sand; silt; clay; shell; limestone; sandy shelly limestone	IAL SYSTEM	WATER-TABLE / BISCAYNE AQUIFER		EXPLANATION  * Geologic unit(s) missing in some areas  APPZ Avon Park
PLIOCENE		TAMIAMI FORMATION			Silt; sandy clay; sandy, shelly limestone; calcareous sand- stone; and quartz sand	SURFICIAL AQUIFER SYSTEM	CONFINING BEDS LOWER TAMIAMI AQUIFER	20-400	
MIOCE	ATE	HAWTHORN GROUP	PEACE RIVER FORMATION		Interbedded sand, silt, gravel, clay, carbonate, and phosphatic sand	INTERMEDIATE AQUIFER SYSTEM OR CONFINING UNIT	CONFINING UNIT SANDSTONE AQUIFER OR PZ1(2) CONFINING UNIT	0-900	permeable zone BZ Boulder Zone LHMU Lower Hawthorn marker unit PZ1, Permeable PZ2, zones in west- central Florida  MAP Middle Avon Park marker horizon GLAUC Glauconite
AND LA OLIGOC			ARCADIA FORMATION	LHMU	Sandy micritic limestone; marlstone; shell beds; dolomite; phosphatic sand and carbonate; sand; silt; and clay	INTERMEI SYS CONFI	MID-HAWTHORN AQUIFER OR PZ2  CONFINING UNIT		
			BASAL HAWTHORN UNIT				LOWER HAWTHORN PZ3	0-300	
EARLY OLIGOCENE		SUWANNEE LIMESTONE			Fossiliferous, calcarenitic limestone	SYSTEM	UPPER FLORIDAN AQUIFER	100-800	marker horizon PLEISTOCENE-AGED FORMATIONS
	LATE	OCALA LIMESTONE			Chalky to fossiliferous, mud-rich to calcarenitic limestone		(UF)		IN SOUTHEASTERN FLORIDA:
EOCENE	MIDDLE		VON PARK DRMATION	MAP	Fine-grained, micritic to fossiliferous limestone; dolomitic limestone; and dolostone. Also contains in the lower part anhydrite/	AQUIFER	MIDDLE CONFINING UNIT (MC1)  APPZ	0-600	Satilla Formation (formerly Pamlico Sand) Miami Limestone Fort Thompson Formation Anastasia Formation
	MIE	-???		GLAUC	gypsum as bedded deposits, or more commonly as pore filling material. Glauconitic	FLORIDAN	LOWER FLORIDAN	0-1,800	Key Largo Limestone
	EARLY	OLDSMAR FORMATION			limestone near top of Oldsmar Formation in some areas		AQUIFER BZ	0-700	
PALEOCENE		CEDAR KEYS FORMATION			Dolomite and dolomitic limestone				
					Massive anhydrite beds		SUB-FLORIDAN CONFINING UNIT	1,200?	]

Figure 2.4.12-203 Approximate Boundaries of EPA Region 4 Sole Source
Aquifers



PTN COL 2.4-4

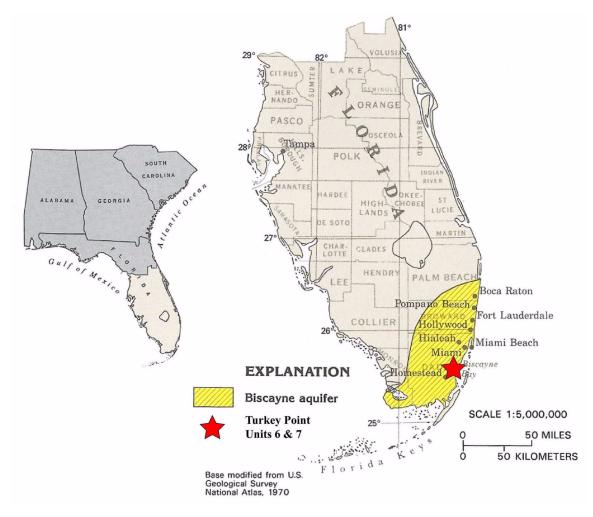
## Figure 2.4.12-204 Site Hydrostatigraphic Column

ERATHEM	SYSTEM	SERIES	HYDRO- GEOLOGIC UNIT		STRATIGRAPHIC UNIT		LITHOLOGY	APPROXIMATE TOP ELEVATION (ft NAVD 88)	APPROXIMATE THICKNESS (ft)
		HOLOCENE			(	organic muck	organic soil and silt	0	3
CENEZOIC	짪	빌		Biscayne aquifer	Mi	ami Limestone	sandy, oolitic limestone	-3	25
	QUATERNARY	OCEN	Surficial aquifer system		Key	Largo Limestone	well indurated, vuggy, coralline limestone	-28	22
	QUAT	PLEISTOCENE			Fort Thompson Formation		poor/well indurated fossiliferous limestone	-50	65
		PLIOCENE		Semi-confining unit	Tamiami Formation		sand and silt with calcarenitic limestone	-115	105
	TERTIARY	MIOCENE		Intermediate confining unit	Hawthorn Group	Peace River Formation	silty calcareous sand and silt	formation contact base signal	0
			Intermedi		Haw	Arcadia Formation	calcareous wackestone with indurated limestones, sandstone, and sand	-455 drilling ended	>160 at -616.5 ft NAVD 88

Color represents similar composition (carbonate, clastics, and organics).

PTN COL 2.4-4

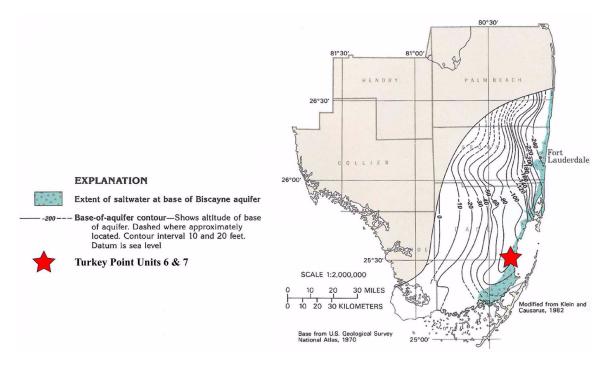
Figure 2.4.12-205 Location of the Biscayne Aquifer in Southeast Florida



2.4.12-105 Revision 4

PTN COL 2.4-4

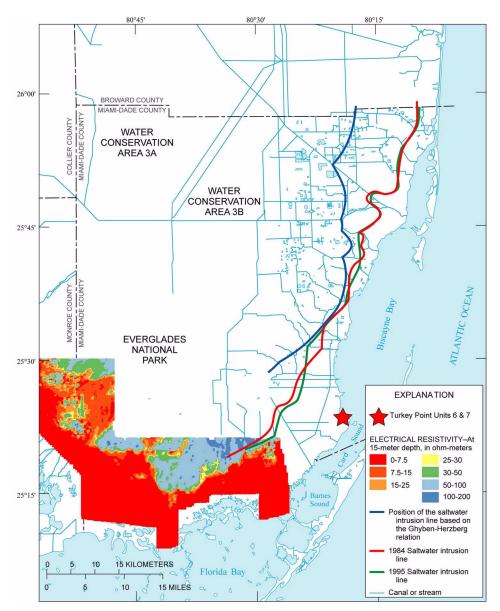
Figure 2.4.12-206 Base of the Biscayne Aquifer



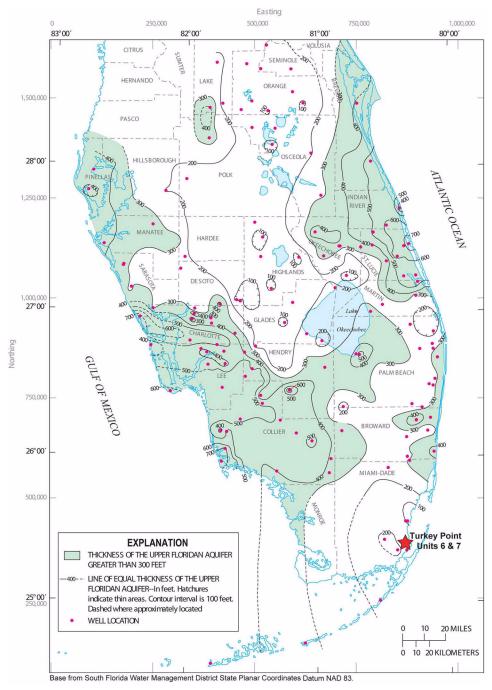
Modified from Reference 210

2.4.12-106 Revision 4

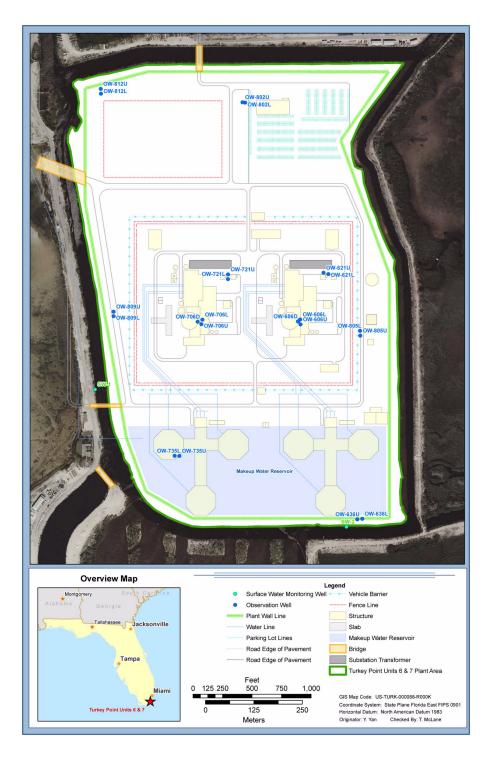
PTN COL 2.4-4 Figure 2.4.12-207 Location of the Freshwater-Saltwater Interface



PTN COL 2.4-4 Figure 2.4.12-208 Thickness of the Upper Floridan Aquifer



PTN COL 2.4-4 Figure 2.4.12-209 Units 6 & 7 Observation Well Locations



## Figure 2.4.12-210 Industrial Wastewater Facility

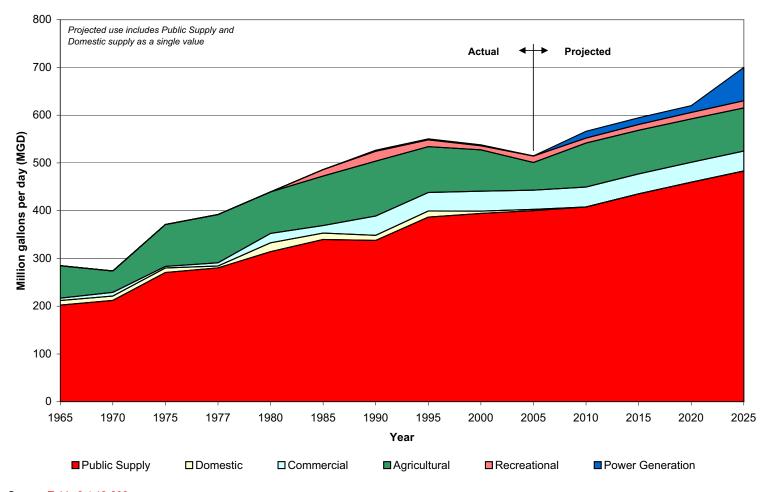


PTN COL 2.4-4 Figure 2.4.12-211 Upper Floridan Aquifer Production Wells for Unit 5



PTN COL 2.4-4

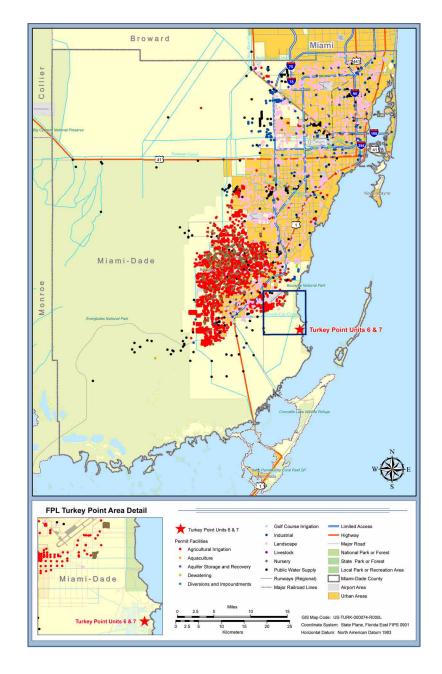
Figure 2.4.12-212 Withdrawals of Groundwater in Miami-Dade County



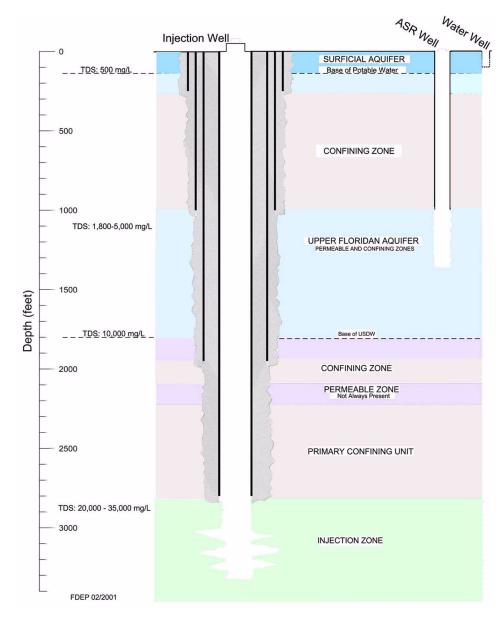
Source: Table 2.4.12-202

2.4.12-112 Revision 4

PTN COL 2.4-4 Figure 2.4.12-213 SFWMD Freshwater Well Permits in Miami-Dade County

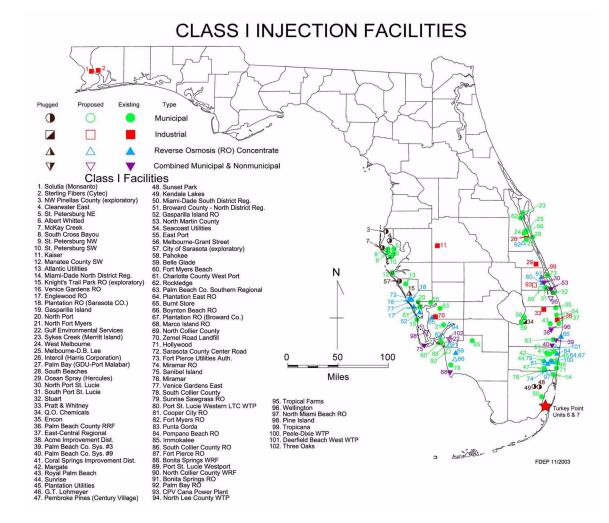


PTN COL 2.4-4 Figure 2.4.12-214 Typical Municipal Class 1 Injection Well, ASR Well and Water Well in Southeast Florida



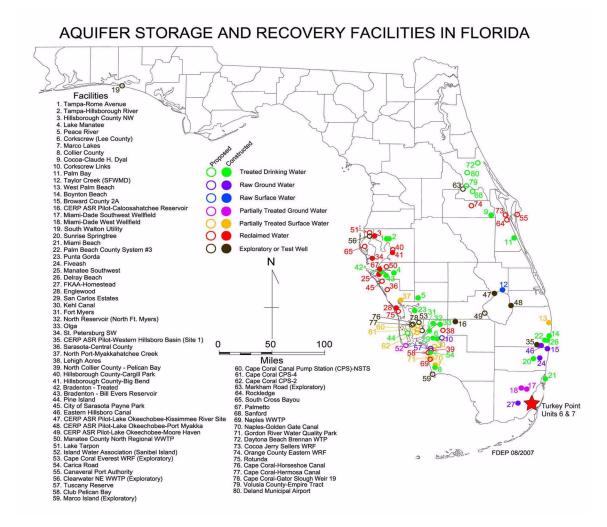
PTN COL 2.4-4

Figure 2.4.12-215 Locations of Class I Injection Facilities in Florida



2.4.12-115 Revision 4

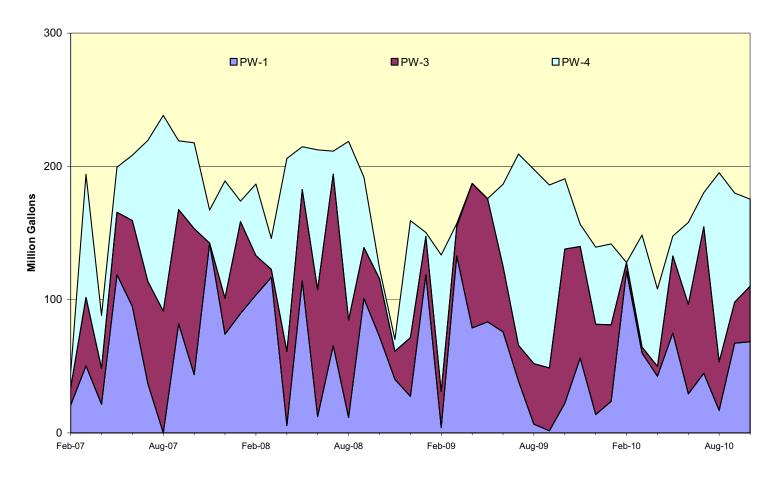
PTN COL 2.4-4 Figure 2.4.12-216 Location of Aquifer Storage and Recovery Facilities in Florida



2.4.12-116 Revision 4

PTN COL 2.4-4

Figure 2.4.12-217 Turkey Point Upper Floridan Aquifer Saline Groundwater Use



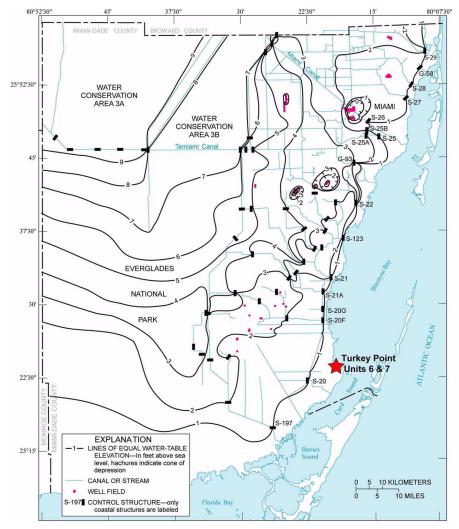
2.4.12-117 Revision 4

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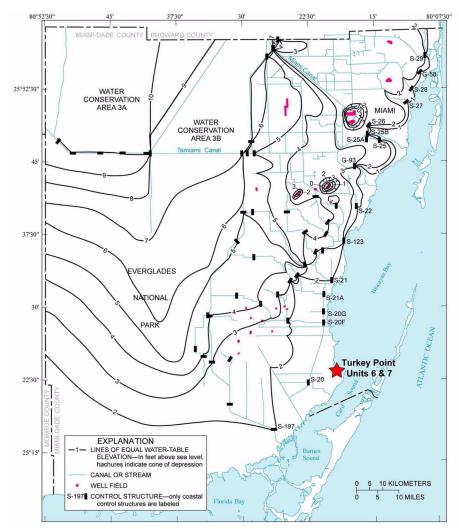
Figure 2.4.12-218 Location of Radial Collector Wells



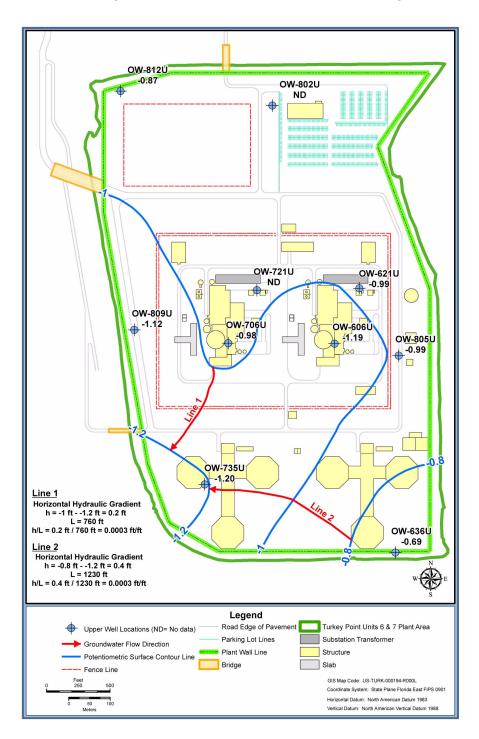
PTN COL 2.4-4 Figure 2.4.12-219 May 1993 Biscayne Aquifer Potentiometric Surface Map



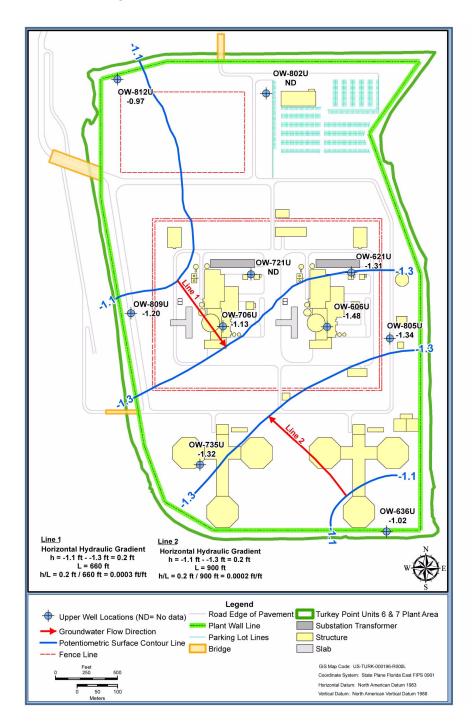
PTN COL 2.4-4 Figure 2.4.12-220 November 1993 Biscayne Aquifer Potentiometric Surface Map



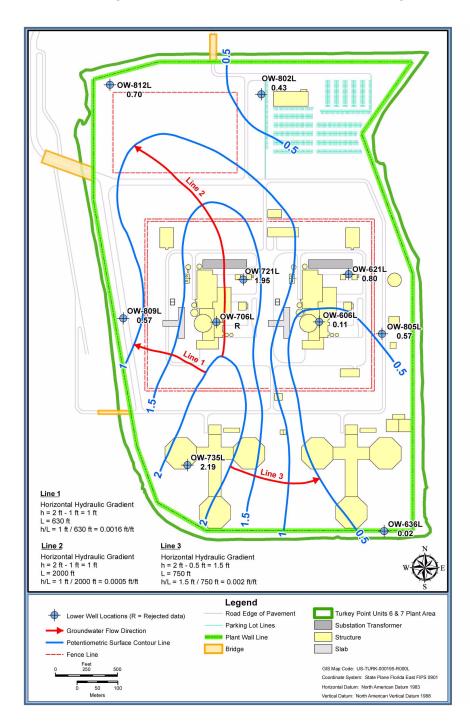
PTN COL 2.4-4 Figure 2.4.12-221 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, June 29, 2008 (Sheet 1 of 2) High Tide



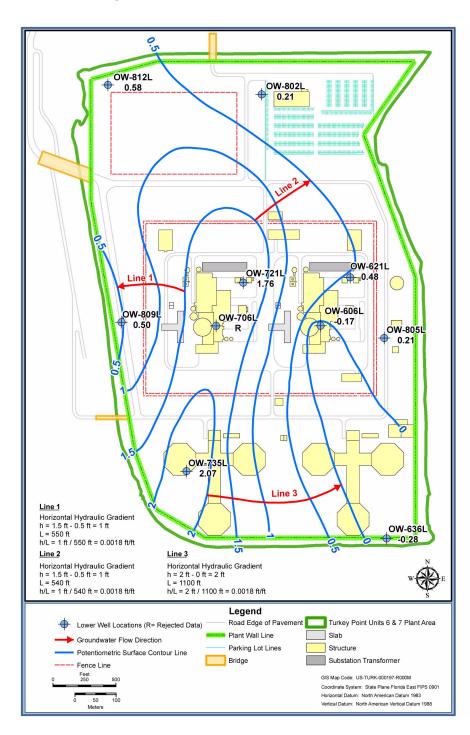
PTN COL 2.4-4 Figure 2.4.12-221 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, June 29, 2008 (Sheet 2 of 2) Low Tide



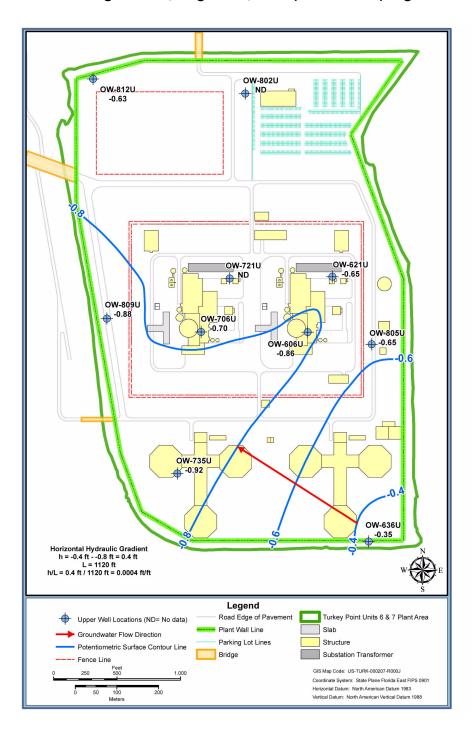
PTN COL 2.4-4 Figure 2.4.12-222 Biscayne Aquifer Potentiometric Surface Map, Lower Monitoring Interval, June 29, 2008 (Sheet 1 of 2) High Tide



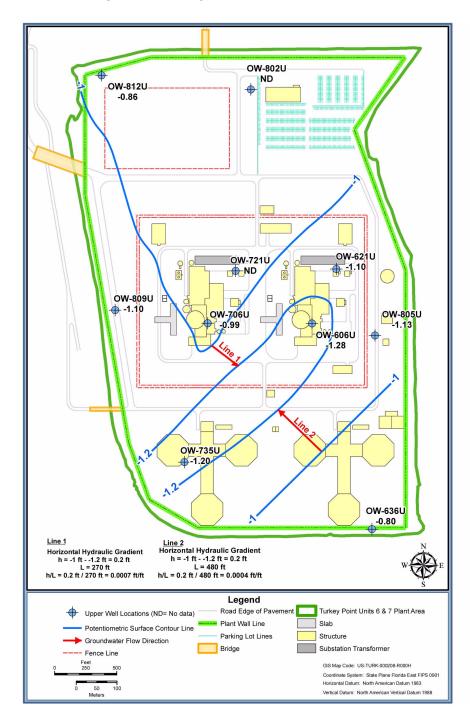
PTN COL 2.4-4 Figure 2.4.12-222 Biscayne Aquifer Potentiometric Surface Map, Lower Monitoring Interval, June 29, 2008 (Sheet 2 of 2) Low Tide



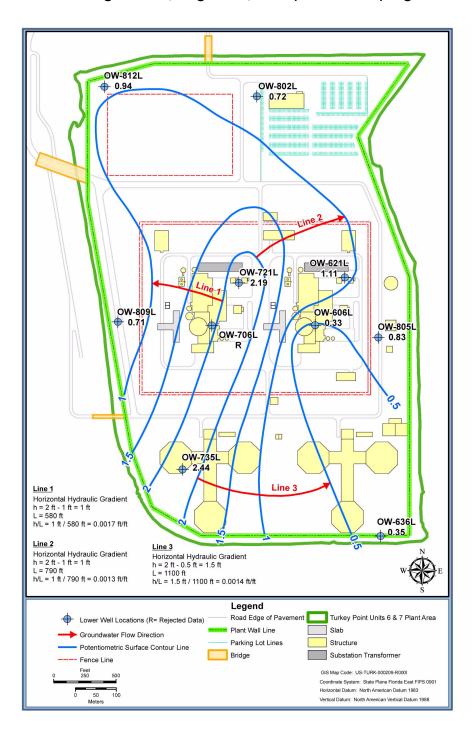
PTN COL 2.4-4 Figure 2.4.12-223 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, August 15, 2008 (Sheet 1 of 2) High Tide



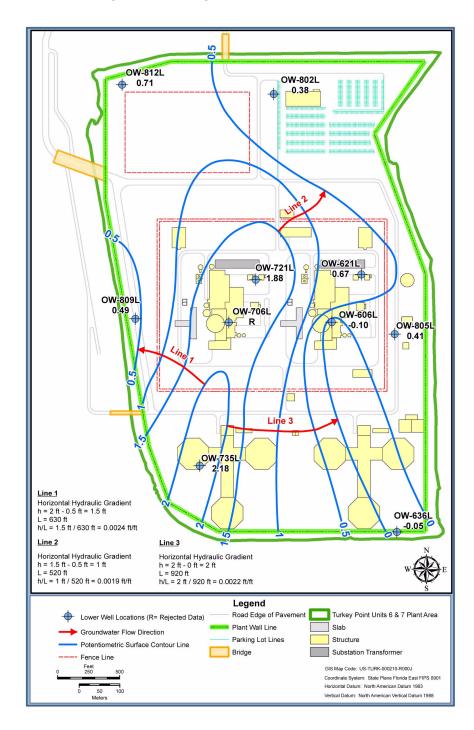
PTN COL 2.4-4 Figure 2.4.12-223 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, August 15, 2008 (Sheet 2 of 2) Low Tide



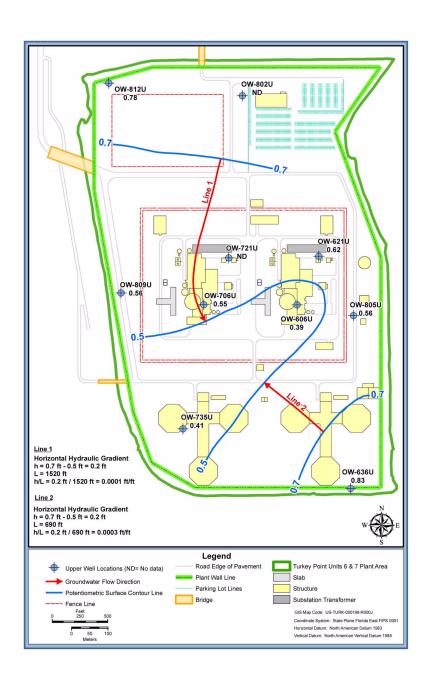
PTN COL 2.4-4 Figure 2.4.12-224 Biscayne Aquifer Potentiometric Surface Map, Lower Monitoring Interval, August 15, 2008 (Sheet 1 of 2) High Tide



PTN COL 2.4-4 Figure 2.4.12-224 Biscayne Aquifer Potentiometric Surface Map, Lower Monitoring Interval, August 15, 2008 (Sheet 2 of 2) Low Tide



PTN COL 2.4-4 Figure 2.4.12-225 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, October 5, 2008 (Sheet 1 of 2) High Tide



PTN COL 2.4-4 Figure 2.4.12-225 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, October 5, 2008 (Sheet 2 of 2) Low Tide

