

**Table D6-11 Summary of Aquifer Characteristics** (Page 1 of 3)

Hydrostratigraphic Unit	Thickness (feet) [typical]	Porosity <sup>1</sup>	Transmissivity (gallons per day/foot) <sup>2</sup>		Storativity		Horizontal Hydraulic Conductivity (feet/day) <sup>3</sup>		Vertical Hydraulic Conductivity <sup>4</sup> (centimeters per second)
			N of Fault <sup>5</sup>	S of Fault <sup>5</sup>	N of Fault	S of Fault	N of Fault	S of Fault	
DE	0 to 120 [40]	0.28	NM <sup>6</sup>	10 to 1100	NM	ND <sup>7</sup>	NM	0.03 to 3.7	- <sup>8</sup>
Upper No Name Shale	0 to 50 [5 to 15]	NA <sup>9</sup>	NA	NA	NA	NA	NA	NA	-
FG Horizon (includes LFG, MFG and UFG)	30 to 150 [50]	0.28	30 to 90	120 to 300	ND	ND	0.08 to 0.24	0.3 to 0.8	-
Lost Creek Shale	5 to 45 [10 to 25]	NA	NA	NA	NA	NA	NA	NA	5.4E-05 to 5.6E-06
HJ Horizon (includes LHJ, MHJ and UHJ)	100 to 160 [120]	0.28	220 to 2700	365 to 1820	6.6E-05 to 1.5E-04	3.5E-05 to 9.1E-04	0.2 to 3.0	0.4 to 2.0	-
Sage Brush Shale	5 to 75 [20 to 30]	NA	NA	NA	NA	NA	NA	NA	3.1E-07 to 1.4E-06
UKM	20 to 75 [50]	0.28	520 to 860	195 to 700	ND	ND	1.4 to 2.3	0.5 to 1.9	-

**Table D6-11 Summary of Aquifer Characteristics** (Page 2 of 3)

Hydrostratigraphic Unit	Horizontal Hydraulic Gradient (foot/foot) [Direction]		Vertical Hydraulic Gradient (relative to overlying aquifer)		Groundwater Velocity (feet/year)		Hydraulic Communication	
	N of Fault	S of Fault	N of Fault	S of Fault	N of Fault	S of Fault	With Overlying	With Underlying
DE	0.007 [WSW]	0.007 [WSW]	-	-	NM	0.27-33.7	No overlying exists	NT <sup>10</sup>
Upper No Name Shale	NA	NA	NA	NA	NA	NA	NA	NA
FG Horizon (includes LFG, MFG and UFG)	0.005 [WSW]	0.007 [WSW]	-0.04 to 0.28	0.0 to 0.04	0.5 to 1.6	2.7 to 7.3	NT	Yes-minor
Lost Creek Shale	NA	NA	NA	NA	NA	NA	NA	NA
HJ Horizon (includes LHJ, MHJ and UHJ)	0.005 [WSW]	0.006 [WSW]	0.02 to 0.13	-0.02 to 0.37	1.3 to 19.6	3.1 to 15.6	Yes-minor	Yes-minor
Sage Brush Shale	NA	NA	NA	NA	NA	NA	NA	NA
UKM	0.005 [WSW]	0.006 [WSW]	0.05 to 0.26	0.05 to 0.19	9.1 to 15.0	3.9 to 14.9	Yes-minor	ND

**Table D6-11 Summary of Aquifer Characteristics (Page 3 of 3)**

Hydrostratigraphic Unit	Representative Values							
	Transmissivity (gallons per day/foot <sup>2</sup> )		Hydraulic Conductivity (feet/day)		Hydraulic Gradient (foot/foot)		Groundwater Velocity (feet/year) <sup>11</sup>	
	N of Fault	S of Fault	N of Fault	S of Fault	N of Fault	S of Fault	N of Fault	S of Fault
DE	-	550	-	1.8	0.007	0.007	-	16.8
FG Horizon	60	210	0.16	0.56	0.005	0.007	1.0	5.1
HJ Horizon	474	570	0.53	0.64	0.005	0.006	3.4	5.0
UKM	690	450	1.84	1.20	0.005	0.006	12.0	9.4

<sup>1</sup> Specific yield not determined because all aquifers except DE are confined systems.

<sup>2</sup> Transmissivity is "effective" -influenced by fault, actual transmissivity may be up to 2 X greater.

<sup>3</sup> Hydraulic conductivity is "effective" - influenced by fault, actual hydraulic conductivity may be up to 2 X greater.

<sup>4</sup> Determined from constant head permeability tests.

<sup>5</sup> Fault is minor and may not extend across entire permit area:

For this tabulation, it is assumed that Well LC27M (UKM) is north of the fault, and Wells LC31M (DE), LCM30 (DE), LC22M (HJ), LC28M (UKM), LC23M (UKM) and LC21M (LFG) are located south of the fault.

<sup>6</sup> NM -No monitor wells completed in this unit on this side of fault.

<sup>7</sup> ND - Not Determined - all pump tests in this aquifer were single well tests.

<sup>8</sup> Dash (-) indicates no data available.

<sup>9</sup> NA - Not an aquifer, no wells completed in this unit.

<sup>10</sup> NT - No overlying/underlying wells measured during pump tests in the DE and LFG.

<sup>11</sup> Groundwater velocity under static, nonpumping conditions.