

**APPENDIX F**  
**OBSERVED HEAD DIFFERENCE AT CALIBRATION TARGETS (2014-2018)**  
**(PROVIDED ELECTRONICALLY)**

**TABLE F-1a. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2014)**

**Phase 6 Groundwater Flow and Transport Model**

**Nevada Environmental Response Trust Site**

**Henderson, Nevada**

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 2			
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
5	AA-MW-25	1747.60	54.0	2	Shallow	Qal	1747.43	Top	1752.82	Top
	MC-MW-10	1701.21	100.0	4	Shallow	UMCf (Middle WBZ)	1747.25	0.0039	1753.83	-0.022
	MW-08	1515.95	285.0	10	Deep	UMCf (Deep WBZ)	1808.15	-0.26	1794.62	-0.18
6	ADX-112	1683.00	124.7	6	Middle	UMCf (Middle WBZ)	1761.72	0.19	1767.80	0.11
	ADX-135	1665.15	142.75	7	Middle	UMCf (Middle WBZ)	1745.28	0.31	1757.76	0.19
	ADX-156	1637.10	171.0	8	Middle	UMCf (Deep WBZ)	1747.20	0.23	1756.04	0.16
	MW-AD	1769.30	38.0	3	Shallow	UMCf (Shallow WBZ)	1777.81	Top	1777.34	Top
7	ADY-166	1593.20	176.0	8	Middle	UMCf (Deep WBZ)	1756.08	-0.15	1746.92	-0.090
	ADY-36	1720.20	48.5	3	Shallow	UMCf (Shallow WBZ)	1736.41	Top	1735.43	Top
	ADY-70	1691.20	77.5	4	Shallow	UMCf (Middle WBZ)	1735.95	0.016	1735.57	-0.0049
8	ADYX-165	1588.14	185.0	8	Middle	UMCf (Deep WBZ)	1757.77	-0.14	1748.69	-0.071
	ADYX-38	1720.35	53.0	3	Shallow	xMcf/UMCf	1739.71	Top	1739.30	Top
9	AEX-166	1607.30	176.0	8	Middle	UMCf (Deep WBZ)	1752.22	-0.057	1745.88	0.0063
	AEX-35	1737.70	45.0	3	Shallow	xMcf/UMCf	1744.78	Top	1746.71	Top
10	AFX-148	1637.81	163.0	8	Middle	UMCf (Deep WBZ)	1766.82	-0.023	1768.12	-0.028
	AFX-195	1598.05	202.5	8	Middle	UMCf (Deep WBZ)	1771.52	-0.046	1770.31	-0.035
	AFX-30	1761.21	40.0	2	Shallow	Qal/xMcf/UMCf	1763.97	Top	1764.67	Top
	AFX-75	1714.66	85.0	4	Shallow	UMCf (Middle WBZ)	1761.71	0.049	1763.30	0.029
11	AGX-160	1580.83	170.0	8	Middle	UMCf (Deep WBZ)	1732.30	-0.18	1727.16	-0.11
	AGX-190	1551.08	200.0	8	Middle	UMCf (Deep WBZ)	1738.75	-0.19	1730.44	-0.11
	AGX-230	1511.37	240.0	9	Deep	UMCf (Deep WBZ)	1771.12	-0.33	1747.18	-0.18
	AGX-50	1690.67	60.0	3	Shallow	UMCf (Shallow WBZ)	1712.66	Top	1715.01	Top
	AGX-90	1650.64	100.0	5	Shallow	UMCf (Middle WBZ)	1719.28	-0.17	1719.05	-0.10
12	AK-145	1581.90	154.977	7	Middle	UMCf (Middle WBZ)	1736.00	-0.21	1725.41	-0.13
	AK-204	1522.27	214.0	8	Middle	UMCf (Deep WBZ)	1755.13	-0.24	1735.40	-0.14
	AK-25	1702.22	35.0	1	Shallow	Qal/xMcf	1711.20	Top	1710.17	Top
	AK-86	1641.04	96.0	5	Shallow	UMCf (Middle WBZ)	1715.85	-0.076	1714.12	-0.065
14	AMX-166	1585.60	175.5	8	Middle	UMCf (Deep WBZ)	1768.00	-0.32	1751.87	-0.17
	AMX-40	1711.20	50.0	3	Shallow	UMCf (Shallow WBZ)	1728.34	Top	1730.90	Top
	AMX-98	1655.60	105.5	5	Shallow	UMCf (Middle WBZ)	1744.84	-0.30	1739.60	-0.16
15	DMC-MW-26	1531.34	277.0	10	Deep	UMCc	1819.51	-0.32	1810.19	-0.24
	DPT-01	1686.45	121.5	5	Shallow	UMCf (Middle WBZ)	1770.09	Top	1773.04	Top
16	CP-1	1704.00	120.0	6	Middle	UMCf (Middle WBZ)	1795.21	-0.20	1792.28	-0.11
	MW-03	1774.01	52.0	3	Shallow	xMcf/UMCf	1781.47	Top	1784.52	Top
18	DX-121	1699.10	131.0	7	Middle	UMCf (Middle WBZ)	1779.78	0.27	1776.32	0.24
	DX-161	1659.10	171.0	8	Middle	UMCf (Deep WBZ)	1782.04	0.17	1773.33	0.19
	DX-270	1550.50	280.0	9	Deep	UMCf (Deep WBZ)	1834.00	-0.12	1811.18	-0.055
	DX-30	1790.20	40.0	2	Shallow	UMCf (Shallow WBZ)	1804.15	Top	1797.94	Top
	DX-75	1745.10	85.0	5	Shallow	UMCf (Middle WBZ)	1809.86	-0.13	1798.18	-0.0053
19	DY-106	1684.40	116.0	6	Middle	UMCf (Middle WBZ)	1790.49	-0.15	1777.83	-0.054
	DY-169	1621.40	179.0	8	Middle	UMCf (Deep WBZ)	1777.80	0.0073	1763.25	0.071
	DY-26	1764.60	36.0	3	Shallow	xMcf/UMCf	1778.85	Top	1773.47	Top
20	DZ-15	1812.03	25.0	3	Shallow	UMCf (Shallow WBZ)	1818.68	Top	1809.83	Top
	DZ-152	1674.68	162.0	7	Middle	UMCf (Deep WBZ)	1816.44	0.016	1808.54	0.0094
26	JX-11	1650.82	18.5	1	Shallow	Qal	1657.11	Top	1658.98	Top
	JX-86	1573.21	96.0	5	Shallow	UMCf (Middle WBZ)	1655.24	0.024	1658.02	0.012
42	LX-150	1736.50	160.0	6	Middle	UMCf (Deep WBZ)	1866.75	0.0045	1855.27	0.0055
	LX-55	1831.90	65.0	3	Shallow	Qal	1867.18	Top	1855.80	Top
46	M-132	1657.94	84.7	4	Shallow	UMCf (Shallow WBZ)	1718.30	-0.025	1721.08	-0.0083
	M-133	1676.71	64.7	4	Shallow	UMCf (Shallow WBZ)	1716.90	-0.0022	1720.02	0.013
	M-165	1626.92	114.7	6	Middle	UMCf (Middle WBZ)	1721.69	-0.053	1723.30	-0.030
	M-74	1718.41	24.0	1	Shallow	UMCf (Shallow WBZ)	1716.81	Top	1720.58	Top
47	M-134	1684.94	64.7	3	Shallow	UMCf (Shallow WBZ)	1719.68	-0.023	1722.42	-0.022
	M-135	1715.68	33.7	2	Shallow	UMCf (Shallow WBZ)	1718.96	Top	1721.73	Top
	M-136	1664.56	84.7	4	Shallow	UMCf (Shallow WBZ)	1723.42	-0.087	1725.19	-0.068
	M-161	1645.21	104.7	5	Shallow	UMCf (Middle WBZ)	1729.50	-0.15	1728.04	-0.090
48	M-148A	1753.14	44.7	2	Shallow	UMCf (Shallow WBZ)	1753.90	Top	1756.19	Top
	M-186	1688.30	109.7	5	Shallow	UMCf (Middle WBZ)	1755.35	-0.022	1757.66	-0.023
49	M-149	1687.21	110.0	5	Shallow	UMCf (Middle WBZ)	1752.28	-0.019	1758.34	-0.017
	M-153	1637.21	160.0	6	Middle	UMCf (Middle WBZ)	1766.70	-0.14	1764.33	-0.062
	M-31A	1752.12	45.0	2	Shallow	UMCf (Shallow WBZ)	1751.02	Top	1757.24	Top
50	M-151	1593.39	135.0	6	Middle	UMCf (Middle WBZ)	1712.61	Top	1708.31	Top
	M-155	1518.14	210.0	10	Deep	UMCf (Middle WBZ)	1730.69	-0.24	1722.89	-0.19
51	M-152	1560.69	135.0	6	Middle	UMCf (Middle WBZ)	1672.19	0.018	1675.89	0.023
	M-156	1510.66	185.0	7	Middle	UMCf (Middle WBZ)	1678.91	-0.028	1679.40	-0.0052
	M-44	1675.69	20.0	1	Shallow	Qal/xMcf/UMCf	1674.21	Top	1678.55	Top
	M-162	1640.99	104.7	5	Shallow	UMCf (Middle WBZ)	1726.21	-0.19	1725.07	-0.13
53	M-163	1660.92	84.7	4	Shallow	UMCf (Shallow WBZ)	1721.47	-0.17	1721.99	-0.13
	M-164	1680.46	64.7	3	Shallow	UMCf (Shallow WBZ)	1713.89	-0.054	1715.90	-0.024
	M-71	1715.19	29.75	1	Shallow	Qal/xMcf/UMCf	1712.03	Top	1715.05	Top
	M-5A	1704.26	45.0	3	Shallow	UMCf (Shallow WBZ)	1714.04	Top	1718.85	Top
68	TR-1	1453.06	296.5	10	Deep	UMCf (Middle WBZ)	1761.64	-0.19	1747.19	-0.11
	TR-2	1589.98	159.5	7	Middle	UMCf (Middle WBZ)	1726.80	-0.11	1725.92	-0.062
	TR-10	1761.79	90.0	2	Shallow	UMCf (Shallow WBZ)	1792.43	Top	1800.14	Top
76	TR-9	1611.85	240.0	8	Middle	UMCf (Middle WBZ)	1818.48	-0.17	1814.87	-0.098
	TR-3	1535.70	234.5	10	Deep	UMCf (Middle WBZ)	1772.84	-0.36	1764.90	-0.24
77	TR-4	1635.70	134.5	6	Middle	UMCf (Middle WBZ)	1736.74	Top	1741.33	Top
	TR-5	1561.49	236.0	10	Deep	UMCf (Middle WBZ)	1800.27	-0.22	1800.42	-0.19
78	TR-6	1727.74	70.0	3	Shallow	UMCf (Shallow WBZ)	1763.12	Top	1768.91	Top
	TR-7	1551.71	275.0	10	Deep	UMCf (Middle WBZ)	1818.63	-0.20	1817.66	-0.16
79	TR-8	1748.74	78.0	2	Shallow	UMCf (Shallow WBZ)	1779.30	Top	1785.82	Top
	TWA-180	1480.60	190.0	7	Middle	UMCf (Middle WBZ)	1655.07	-0.026	1656.06	-0.016
80	TWA-20	1645.90	25.0	1	Shallow	xMcf	1650.77	Top	1653.46	Top
	TWA-50	1615.20	55.0	3	Shallow	UMCf (Middle WBZ)	1649.41	0.044	1652.73	0.024
	TWB-140	1504.90	150.0	6	Middle	UMCf (Middle WBZ)	1639.93	0.014	1642.26	0.013
81	TWB-21	1628.60	26.0	2	Shallow	xMcf/UMCf	1641.69	Top	1643.80	Top
	TWB-36	1613.70	41.0	3	Shallow	UMCf (Shallow WBZ)	1641.35	0.023	1643.47	0.022
	TWB-51	1596.40	58.5	3	Shallow	UMCf (Middle WBZ)	1640.98	0.022	1643.27	0.016
	TWC-126	1514.60	136.0	6	Middle	UMCf (Middle WBZ)	1638.30	-0.00061	1640.26	0.0011
82	TWC-15	1630.00	20.0	2	Shallow	xMcf/UMCf	1638.23	Top	1640.40	Top
	TWC-27	1620.70	29.5	3	Shallow	UMCf (Shallow WBZ)	1638.16	0.0075	1640.34	0.0066
	TWC-35	1610.30	40.0	3	Shallow	UMCf (Shallow WBZ)	1638.20	0.0015	1640.57	-0.0087

**TABLE F-1a. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2014)**

Phase 6 Groundwater Flow and Transport Model

Nevada Environmental Response Trust Site

Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 2			
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
82	TWC-48	1592.50	58.0	4	Shallow	UMCf (Middle WBZ)	1638.18	0.0013	1640.36	0.00093
83	TWE-107	1517.00	117.0	6	Middle	UMCf (Middle WBZ)	1624.94	-0.0056	1626.22	-0.0029
	TWE-15	1616.90	16.5	1	Shallow	xMCf	1624.38	Top	1625.93	Top
	TWE-18	1610.70	23.0	2	Shallow	xMCf	1624.44	-0.0097	1626.02	-0.014
	TWE-33	1594.20	39.5	3	Shallow	UMCf (Shallow WBZ)	1624.74	-0.016	1626.19	-0.011
	TWE-51	1577.70	56.0	3	Shallow	UMCf (Middle WBZ)	1624.78	-0.010	1626.27	-0.0087
84	WS5-10	1704.53	20.0	1	Shallow	Qal	1713.01	Top	1713.51	Top
	WS5-40	1679.23	45.0	3	Shallow	UMCf (Shallow WBZ)	1712.92	0.0036	1713.44	0.0026
	WS5-80	1633.99	90.0	5	Shallow	UMCf (Shallow WBZ)	1714.91	-0.027	1714.50	-0.014

Notes:

ft amsl = feet above mean sea level

ft = feet

-- = Data Not Available

A positive vertical gradient is downward and a negative vertical gradient is upward.

A yellow highlight means the simulated vertical gradient has an opposite direction compared to the observed vertical gradient.

"Top" means the well has the highest midscreen elevation in the cluster. Each vertical gradient is calculated in comparison to "Top" well.

Head data and vertical gradient calculations are only shown when there are both observed and simulated data available in at least one well of a cluster.

No vertical gradient calculations are available for quarters not shown in the table.

Detailed explanations can be found in Section 6.2 of the report.

TABLE F-1b. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2015)

Phase 6 Groundwater Flow and Transport Model

Nevada Environmental Response Trust Site

Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2			
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
4	AA-BW-09A	1718.59	43.0	1	Shallow	Qal	--	--	--	--	1716.09	Top	1726.24	Top
	DMC-MW-28	1485.62	275.0	10	Deep	UMCc	--	--	--	--	1789.13	-0.31	1756.20	-0.13
	MCF-BW-09B	1693.63	68.0	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1716.99	-0.036	1724.06	0.087
5	AA-MW-25	1747.60	54.0	2	Shallow	Qal	--	--	--	--	1747.82	Top	1755.20	Top
	MC-MW-10	1701.21	100.0	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1747.66	0.0034	1756.70	-0.032
	MW-08	1515.95	285.0	10	Deep	UMCf (Deep WBZ)	--	--	--	--	1813.45	-0.28	1790.45	-0.15
6	ADX-112	1683.00	124.7	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1745.20	0.38	1759.15	0.21
	ADX-135	1665.15	142.75	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1727.40	0.48	1748.37	0.28
	ADX-156	1637.10	171.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1728.90	0.37	1746.35	0.23
	MW-AD	1769.30	38.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1777.60	Top	1777.03	Top
7	ADY-166	1593.20	176.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1732.80	0.022	1734.80	0.00035
	ADY-36	1720.20	48.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1735.55	Top	1734.85	Top
	ADY-70	1691.20	77.5	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1735.30	0.0086	1735.04	-0.0065
8	ADYX-165	1588.14	185.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1736.61	0.016	1737.63	0.0075
	ADYX-38	1720.35	53.0	3	Shallow	xMcf/UMCf	--	--	--	--	1738.77	Top	1738.62	Top
9	AEX-166	1607.30	176.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1695.45	0.38	1714.92	0.24
	AEX-35	1737.70	45.0	3	Shallow	xMcf/UMCf	--	--	--	--	1744.80	Top	1746.22	Top
10	AFX-148	1637.81	163.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1749.38	0.12	1759.01	0.044
	AFX-195	1598.05	202.5	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1753.08	0.065	1760.69	0.023
	AFX-30	1761.21	40.0	2	Shallow	Qal/xMcf/UMCf	--	--	--	--	1763.68	Top	1764.42	Top
	AFX-75	1714.66	85.0	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1761.06	0.056	1762.77	0.035
11	AGX-160	1580.83	170.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1728.65	-0.15	1725.23	-0.096
	AGX-190	1551.08	200.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1733.71	-0.15	1727.81	-0.094
	AGX-50	1690.67	60.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1712.21	Top	1714.70	Top
	AGX-90	1650.64	100.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1717.91	-0.14	1718.52	-0.095
12	AK-145	1581.90	154.977	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1736.02	-0.21	1725.38	-0.13
	AK-204	1522.27	214.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1774.80	-0.36	1745.20	-0.20
	AK-25	1702.22	35.0	1	Shallow	Qal/xMcf	--	--	--	--	1710.44	Top	1709.77	Top
	AK-86	1641.04	96.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1714.65	-0.069	1713.49	-0.061
14	AMX-166	1585.60	175.5	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1759.58	-0.40	1757.50	-0.21
	AMX-40	1711.20	50.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1729.00	Top	1731.18	Top
	AMX-98	1655.60	105.5	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1740.65	-0.21	1737.42	-0.11
15	B01	1758.39	49.5	2	Shallow	xMcf	--	--	--	--	1767.30	Top	1771.84	Top
	DMC-MW-26	1531.34	277.0	10	Deep	UMCc	--	--	--	--	1820.67	-0.24	1806.60	-0.15
16	DPT-01	1686.45	121.5	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1771.50	-0.058	1774.68	-0.039
	CP-1	1704.00	120.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1795.88	-0.20	1791.24	-0.075
	MW-03	1774.01	52.0	3	Shallow	xMcf/UMCf	--	--	--	--	1782.22	Top	1786.02	Top
18	DX-121	1699.10	131.0	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1763.70	0.43	1764.10	0.35
	DX-161	1659.10	171.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1768.15	0.27	1761.06	0.27
	DX-270	1550.50	280.0	9	Deep	UMCf (Deep WBZ)	--	--	--	--	1817.00	-0.058	1800.90	-0.019
	DX-30	1790.20	40.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1803.10	Top	1796.28	Top
	DX-75	1745.10	85.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1806.06	-0.066	1794.21	0.046
19	DY-106	1684.40	116.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1787.45	-0.11	1775.61	-0.036
	DY-169	1621.40	179.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1768.60	0.067	1757.15	0.11
	DY-26	1764.60	36.0	3	Shallow	xMcf/UMCf	--	--	--	--	1778.25	Top	1772.75	Top
20	DZ-15	1812.03	25.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1816.56	Top	1808.61	Top
	DZ-152	1674.68	162.0	7	Middle	UMCf (Deep WBZ)	--	--	--	--	1813.38	0.023	1806.82	0.013
26	JX-11	1650.82	18.5	1	Shallow	Qal	--	--	--	--	1656.13	Top	1658.49	Top
	JX-86	1573.21	96.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1654.47	0.021	1657.64	0.011
42	LX-150	1736.50	160.0	6	Middle	UMCf (Deep WBZ)	--	--	--	--	1867.30	-0.024	1855.54	-0.0088
	LX-55	1831.90	65.0	3	Shallow	Qal	--	--	--	--	1865.00	Top	1854.71	Top
46	M-132	1657.94	84.7	4	Shallow	UMCf (Shallow WBZ)	1719.07	-0.026	1721.47	-0.0067	1720.12	-0.047	1722.01	-0.024
	M-133	1676.71	64.7	4	Shallow	UMCf (Shallow WBZ)	1717.78	-0.0065	1720.47	0.014	1717.50	-0.0058	1720.34	0.0053
	M-165	1626.92	114.7	6	Middle	UMCf (Middle WBZ)	1722.28	-0.052	1723.62	-0.028	1721.93	-0.051	1723.45	-0.032
	M-74	1718.41	24.0	1	Shallow	UMCf (Shallow WBZ)	1717.51	Top	1721.07	Top	1717.26	Top	1720.56	Top
	M-134	1684.94	64.7	3	Shallow	UMCf (Shallow WBZ)	1717.58	-0.018	1721.37	0.031	1717.47	-0.010	1721.34	-0.016
47	M-135	1715.68	33.7	2	Shallow	UMCf (Shallow WBZ)	1717.04	Top	1722.33	Top	1717.16	Top	1720.86	Top
	M-136	1664.56	84.7	4	Shallow	UMCf (Shallow WBZ)	1722.15	-0.10	1724.04	-0.033	1721.76	-0.090	1723.87	-0.059
	M-161	1645.21	104.7	5	Shallow	UMCf (Middle WBZ)	1728.26	-0.16	1727.07	-0.067	1728.65	-0.16	1727.65	-0.096
	M-148A	1753.14	44.7	2	Shallow	UMCf (Shallow WBZ)	1753.21	Top	1755.84	Top	1752.55	Top	1755.51	Top
	M-186	1688.30	109.7	5	Shallow	UMCf (Middle WBZ)	1754.65	-0.022	1758.43	-0.040	1754.30	-0.027	1758.33	-0.043
48	M-186D	1635.16	163.0	6	Middle	UMCf (Middle WBZ)	1760.34	-0.060	1760.68	-0.041	--	--	--	--
	M-149	1687.21	110.0	5	Shallow	UMCf (Middle WBZ)	1751.82	-0.024	1758.22	-0.00065	1751.41	-0.025	1758.11	-0.016
	M-153	1637.21	160.0	6	Middle	UMCf (Middle WBZ)	1766.39	-0.14	1763.26	-0.044	1766.25	-0.14	1764.12	-0.061
	M-31A	1752.12	45.0	2	Shallow	UMCf (Shallow WBZ)	1750.23	Top	1758.18	Top	1749.80	Top	1757.10	Top
50	M-151	1593.39	135.0	6	Middle	UMCf (Middle WBZ)	1712.20	Top	1708.12	Top	--	--	--	--
	M-155	1518.14	210.0	10	Deep	UMCf (Middle WBZ)	1730.69	-0.25	1722.90	-0.20	--	--	--	--
	M-152	1560.69	135.0	6	Middle	UMCf (Middle WBZ)	1671.88	0.013	1675.73	0.023	1671.22	0.016	1675.40	0.026
51	M-156	1510.66	185.0	7	Middle	UMCf (Middle WBZ)	1678.48	-0.031	1679.18	-0.0046	1677.92	-0.029	1678.90	-0.0031
	M-44	1675.69	20.0	1	Shallow	Qal/xMcf/UMCf	1673.32	Top	1678.43	Top	1673.06	Top	1678.39	Top
	M-161D	1612.78	135.0	6	Middle	UMCf (Middle WBZ)	1733.98	-0.17	1730.34	-0.079	--	--	--	--
52	M-69	1718.39	29.6	2	Shallow	Qal/xMcf/UMCf	1715.93	Top	1721.96	Top	--	--	--	--
	M-162	1640.99	104.7	5	Shallow	UMCf (Middle WBZ)	1724.66	-0.18	1724.21	-0.12	1724.46	-0.17	1724.28	-0.12
	M-163	1660.92	84.7	4	Shallow	UMCf (Shallow WBZ)	1719.64	-0.16	1721.12	-0.10	1719.83	-0.15	1721.25	-0.11
	M-164	1680.46	64.7	3	Shallow	UMCf (Shallow WBZ)	1712.48	-0.040	1715.21	0.0088	1712.64	-0.025	1715.32	-0.0075
	M-71	1715.19	29.75	1	Shallow	Qal/xMcf/UMCf	1711.08	Top	1715.52	Top	1711.76	Top	1715.05	Top
68	M-5A	1704.26	45.0	3	Shallow	UMCf (Shallow WBZ)	1713.30	Top	1718.47	Top	1713.68	Top	1718.67	Top
	TR-1	1453.06	296.5	10	Deep	UMCf (Middle WBZ)	1761.42	-0.19	1747.08	-0.11	--	--	--	--
	TR-2	1589.98	159.5	7	Middle	UMCf (Middle WBZ)	1726.02	-0.11	1725.32	-0.060	1726.02	-0.11	1725.53	-0.060
69	MC-09R	1684.57	31.0	1	Shallow	Qal	--	--	--	--	1685.06	Top	1687.89	Top
	MC-96	1672.46	41.0	1	Shallow	Qal/UMCf	--	--	--	--	1684.84	0.018	1686.65	0.10
	TR-11	1494.37	220.											

**TABLE F-1b. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2015)**

Phase 6 Groundwater Flow and Transport Model

Nevada Environmental Response Trust Site

Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2			
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)

"Top" means the well has the highest midscreen elevation in the cluster. Each vertical gradient is calculated in comparison to "Top" well.

Head data and vertical gradient calculations are only shown when there are both observed and simulated data available in at least one well of a cluster.

No vertical gradient calculations are available for quarters not shown in the table.

Detailed explanations can be found in Section 6.2 of the report.

TABLE F-1c. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2016)

Phase 6 Groundwater Flow and Transport Model  
 Nevada Environmental Response Trust Site  
 Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2				Quarter 3		Quarter 4					
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
4	AA-BW-09A	1718.59	43.0	1	Shallow	Qal	--	--	--	--	1716.19	Top	1723.30	Top	1715.11	Top	1722.77	Top	--	--	--	--
	DMC-MW-28	1485.62	275.0	10	Deep	UMCc	--	--	--	--	1786.11	-0.30	1764.43	-0.18	1804.61	-0.38	1773.68	-0.22	--	--	--	--
	MCF-BW-09B	1693.63	68.0	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	1717.18	-0.083	1724.18	-0.057	--	--	--	--
5	AA-MW-25	1747.60	54.0	2	Shallow	Qal	--	--	--	--	1747.89	Top	1753.05	Top	--	--	--	--	--	--	--	--
	MC-MW-10	1701.21	100.0	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1747.73	0.0034	1754.06	-0.022	--	--	--	--	--	--	--	--
	MW-08	1515.95	285.0	10	Deep	UMCf (Deep WBZ)	--	--	--	--	1810.55	-0.27	1795.79	-0.18	--	--	--	--	--	--	--	--
6	ADX-112	1683.00	124.7	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1743.40	0.39	1757.71	0.21	--	--	--	--	--	--	--	--
	ADX-135	1665.15	142.75	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1724.15	0.51	1746.13	0.29	--	--	--	--	--	--	--	--
	ADX-156	1637.10	171.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1726.00	0.38	1744.19	0.24	--	--	--	--	--	--	--	--
	MW-AD	1769.30	38.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1776.83	Top	1776.21	Top	--	--	--	--	--	--	--	--
7	ADY-166	1593.20	176.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1731.65	0.030	1734.05	0.0050	--	--	--	--	--	--	--	--
	ADY-36	1720.20	48.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1735.40	Top	1734.68	Top	--	--	--	--	--	--	--	--
	ADY-70	1691.20	77.5	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1735.15	0.0086	1734.85	-0.0058	--	--	--	--	--	--	--	--
8	ADYX-165	1588.14	185.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1735.41	0.024	1736.83	0.011	--	--	--	--	--	--	--	--
	ADYX-38	1720.35	53.0	3	Shallow	xMCf/UMCf	--	--	--	--	1738.52	Top	1738.35	Top	--	--	--	--	--	--	--	--
9	AEX-166	1607.30	176.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1692.65	0.40	1713.01	0.25	--	--	--	--	--	--	--	--
	AEX-35	1737.70	45.0	3	Shallow	xMCf/UMCf	--	--	--	--	1744.35	Top	1745.76	Top	--	--	--	--	--	--	--	--
10	AFX-148	1637.81	163.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1747.68	0.13	1757.91	0.052	--	--	--	--	--	--	--	--
	AFX-195	1598.05	202.5	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1753.38	0.063	1760.59	0.023	--	--	--	--	--	--	--	--
	AFX-30	1761.21	40.0	2	Shallow	Qal/xMCf/UMCf	--	--	--	--	1763.68	Top	1764.31	Top	--	--	--	--	--	--	--	--
	AFX-75	1714.66	85.0	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1761.71	0.042	1762.92	0.030	--	--	--	--	--	--	--	--
11	AGX-160	1580.83	170.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1727.00	-0.14	1724.32	-0.090	--	--	--	--	--	--	--	--
	AGX-190	1551.08	200.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1733.91	-0.16	1727.83	-0.096	--	--	--	--	--	--	--	--
	AGX-230	1511.37	240.0	9	Deep	UMCf (Deep WBZ)	--	--	--	--	1750.32	-0.21	1736.58	-0.12	--	--	--	--	--	--	--	--
	AGX-50	1690.67	60.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1711.96	Top	1714.48	Top	--	--	--	--	--	--	--	--
12	AGX-90	1650.64	100.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1717.95	-0.15	1718.40	-0.098	--	--	--	--	--	--	--	--
	AK-145	1581.90	154.977	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1736.20	-0.22	1725.41	-0.13	--	--	--	--	--	--	--	--
	AK-204	1522.27	214.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1767.87	-0.32	1741.67	-0.18	--	--	--	--	--	--	--	--
	AK-25	1702.22	35.0	1	Shallow	Qal/xMCf	--	--	--	--	1710.15	Top	1709.56	Top	--	--	--	--	--	--	--	--
	AK-86	1641.04	96.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1714.45	-0.070	1713.33	-0.062	--	--	--	--	--	--	--	--
13	AMOW-3-165	1600.57	180.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1708.73	0.30	1717.55	0.21	--	--	--	--	--	--	--	--
	AMOW-3-52	1718.35	62.0	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1743.60	Top	1742.67	Top	--	--	--	--	--	--	--	--
14	AMX-166	1585.60	175.5	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1761.10	-0.26	1748.16	-0.14	--	--	--	--	--	--	--	--
	AMX-40	1711.20	50.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1729.05	Top	1731.15	Top	--	--	--	--	--	--	--	--
	AMX-98	1655.60	105.5	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1739.60	-0.19	1736.82	-0.10	--	--	--	--	--	--	--	--
15	B01	1758.39	49.5	2	Shallow	xMCf	--	--	--	--	1767.93	Top	1772.16	Top	--	--	--	--	--	--	--	--
	DMC-MW-26	1531.34	277.0	10	Deep	UMCc	--	--	--	--	1820.65	-0.23	1810.73	-0.17	--	--	--	--	--	--	--	--
	DPT-01	1686.45	121.5	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1773.07	-0.071	1774.52	-0.033	--	--	--	--	--	--	--	--
16	CP-1	1704.00	120.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1795.97	-0.20	1792.65	-0.11	--	--	--	--	--	--	--	--
	MW-03	1774.01	52.0	3	Shallow	xMCf/UMCf	--	--	--	--	1782.00	Top	1784.78	Top	--	--	--	--	--	--	--	--
18	DX-121	1699.10	131.0	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1757.60	0.50	1758.27	0.40	--	--	--	--	--	--	--	--
	DX-161	1659.10	171.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1763.35	0.30	1755.26	0.30	--	--	--	--	--	--	--	--
	DX-270	1550.50	280.0	9	Deep	UMCf (Deep WBZ)	--	--	--	--	1827.25	-0.10	1804.66	-0.042	--	--	--	--	--	--	--	--
	DX-30	1790.20	40.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1802.80	Top	1794.65	Top	--	--	--	--	--	--	--	--
	DX-350	1470.70	360.0	9	Deep	UMCf (Deep WBZ)	--	--	--	--	1830.70	-0.087	1806.28	-0.036	--	--	--	--	--	--	--	--
19	DX-75	1745.10	85.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1805.05	-0.050	1791.90	0.061	--	--	--	--	--	--	--	--
	DY-106	1684.40	116.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1786.65	-0.095	1774.75	-0.025	--	--	--	--	--	--	--	--
	DY-169	1621.40	179.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1766.90	0.084	1755.79	0.12	--	--	--	--	--	--	--	--
	DY-26	1764.60	36.0	3	Shallow	xMCf/UMCf	--	--	--	--	1779.00	Top	1772.73	Top	--	--	--	--	--	--	--	--
20	DZ-15	1812.03	25.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1816.46	Top	1808.25	Top	--	--	--	--	--	--	--	--
	DZ-152	1674.68	162.0	7	Middle	UMCf (Deep WBZ)	--	--	--	--	1813.03	0.025	1806.33	0.014	--	--	--	--	--	--	--	--
21	MCF-06A-R	1267.00	363.0	10	Deep	UMCf (Deep WBZ)	--	--	--	--	1529.64	0.15	1560.72	0.071	--	--	--	--	--	--	--	--
	MCF-06B	1555.77	74.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1575.15	0.0056	1583.02	-0.00070	--	--	--	--	--	--	--	--
	MCF-06C	1578.78	51.5	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1575.28	Top	1583.00	Top	--	--	--	--	--	--	--	--
26	JX-11	1650.82	18.5	1	Shallow	Qal	--	--	--	--	1655.23	Top	1658.05	Top	--	--	--	--	--	--	--	--
	JX-86	1573.21	96.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1653.52	0.022	1657.18	0.011	--	--	--	--	--	--	--	--
42	LX-150	1736.50	160.0	6	Middle	UMCf (Deep WBZ)	--	--	--	--	1867.50	-0.012	1855.63	-0.0027	--	--	--	--	--	--	--	--
	LX-55	1831.90	65.0	3	Shallow	Qal	--	--	--	--	1866.35	Top	1855.37	Top	--	--	--	--	--	--	--	--
46	M-132	1657.94	84.7	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1716.41	0.0089	1720.20	0.0057	--	--	--	--	--	--	--	--
	M-133	1676.71	64.7	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1716.22	0.018	1719.74	0.019	--	--	--	--	--	--	--	--
	M-165	1626.92	114.7	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1721.82	-0.053	1723.45	-0.032	--	--	--	--	--	--	--	--
	M-74	1718.41	24.0	1	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1716.95	Top	1720.54	Top	--	--	--	--	--	--	--	--
47	M-134	1684.94	64.7	3	Shallow	UMCf (Shallow WBZ)																

TABLE F-1c. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2016)

Phase 6 Groundwater Flow and Transport Model  
 Nevada Environmental Response Trust Site  
 Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2				Quarter 3		Quarter 4					
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
48	M-135	1715.68	33.7	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1717.38	Top	1721.16	Top	--	--	--	--	--	--	--	--
	M-136	1664.56	84.7	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1722.27	-0.096	1725.17	-0.078	--	--	--	--	--	--	--	--
	M-161	1645.21	104.7	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1728.97	-0.16	1727.98	-0.097	--	--	--	--	--	--	--	--
	M-148A	1753.14	44.7	2	Shallow	UMCf (Shallow WBZ)	1752.24	Top	1755.36	Top	1752.98	Top	1756.90	Top	1754.10	Top	1756.30	Top	--	--	--	--
	M-186	1688.30	109.7	5	Shallow	UMCf (Middle WBZ)	1753.81	-0.024	1756.90	-0.024	1754.32	-0.021	1758.36	-0.023	1755.65	-0.024	1757.83	-0.024	--	--	--	--
49	M-186D	1635.16	163.0	6	Middle	UMCf (Middle WBZ)	1761.88	-0.082	1761.46	-0.052	1766.81	-0.12	1763.93	-0.060	1768.51	-0.12	1764.78	-0.072	--	--	--	--
	M-149	1687.21	110.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1751.48	-0.021	1758.18	-0.015	--	--	--	--	--	--	--	--
	M-153	1637.21	160.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1766.59	-0.14	1764.32	-0.062	--	--	--	--	--	--	--	--
50	M-31A	1752.12	45.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1750.11	Top	1757.20	Top	--	--	--	--	--	--	--	--
	M-151	1593.39	135.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1711.95	Top	1708.06	Top	--	--	--	--	--	--	--	--
51	M-155	1518.14	210.0	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1730.69	-0.25	1722.94	-0.20	--	--	--	--	--	--	--	--
	M-152	1560.69	135.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1670.45	0.017	1675.03	0.029	--	--	--	--	--	--	--	--
	M-156	1510.66	185.0	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1677.08	-0.029	1678.50	-0.0010	--	--	--	--	--	--	--	--
52	M-44	1675.69	20.0	1	Shallow	Qal/xMCF/UMCf	--	--	--	--	1672.36	Top	1678.34	Top	--	--	--	--	--	--	--	--
	M-161D	1612.78	135.0	6	Middle	UMCf (Middle WBZ)	1733.55	-0.16	1730.34	-0.083	1734.01	-0.17	1730.54	-0.085	1734.35	-0.17	1730.73	-0.086	1734.15	-0.17	1730.64	-0.085
53	M-69	1718.39	29.6	2	Shallow	Qal/xMCF/UMCf	1716.23	Top	1721.60	Top	1716.18	Top	1721.54	Top	1716.26	Top	1721.60	Top	1716.58	Top	1721.65	Top
	M-162	1640.99	104.7	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1725.39	-0.18	1724.86	-0.13	--	--	--	--	--	--	--	--
	M-163	1660.92	84.7	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1720.89	-0.17	1721.90	-0.12	--	--	--	--	--	--	--	--
	M-164	1680.46	64.7	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1713.45	-0.050	1715.81	-0.018	--	--	--	--	--	--	--	--
68	M-71	1715.19	29.75	1	Shallow	Qal/xMCF/UMCf	--	--	--	--	1711.70	Top	1715.18	Top	--	--	--	--	--	--	--	--
	M-5A	1704.26	45.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1713.92	Top	1718.85	Top	--	--	--	--	--	--	--	--
	TR-1	1453.06	296.5	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1751.18	-0.15	1741.98	-0.092	--	--	--	--	--	--	--	--
69	TR-2	1589.98	159.5	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1726.02	-0.11	1725.58	-0.059	--	--	--	--	--	--	--	--
	MC-09R	1684.57	31.0	1	Shallow	Qal	--	--	--	--	1684.69	Top	1686.85	Top	--	--	--	--	--	--	--	--
	MC-96	1672.46	41.0	1	Shallow	Qal/UMCf	--	--	--	--	1684.35	0.028	1686.38	0.039	--	--	--	--	--	--	--	--
72	TR-11	1494.37	220.0	9	Deep	UMCf (Middle WBZ)	--	--	--	--	1722.49	-0.20	1701.45	-0.077	--	--	--	--	--	--	--	--
	MCF-31B	1303.41	220.0	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1509.63	-0.014	1512.39	-0.019	--	--	--	--	--	--	--	--
73	MW-04-HEND	1493.85	34.0	2	Shallow	Qal	--	--	--	--	1507.00	Top	1508.82	Top	--	--	--	--	--	--	--	--
	PC-134D	1533.82	85.0	4	Shallow	UMCf (Shallow WBZ)	1591.91	-0.065	1598.47	0.060	1592.29	-0.070	1598.74	0.057	1591.05	-0.051	1597.74	0.059	1592.80	-0.056	1598.89	0.010
74	PC-144	1584.32	34.7	1	Shallow	Qal/UMCf	1588.62	Top	1601.51	Top	1588.73	Top	1601.64	Top	1588.45	Top	1600.70	Top	1589.97	Top	1599.41	Top
	PC-136	1587.12	31.7	1	Shallow	Qal	1583.76	Top	1591.91	Top	1583.88	Top	1592.07	Top	1584.63	Top	1592.39	Top	1585.43	Top	1593.05	Top
	PC-137	1550.59	68.3	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1582.92	0.026	1592.15	-0.0021	--	--	--	--	--	--	--	--
	PC-137D	1533.79	85.0	4	Shallow	UMCf (Shallow WBZ)	1589.47	-0.11	1595.82	-0.073	1590.18	-0.12	1596.30	-0.079	1588.88	-0.080	1595.59	-0.060	1590.09	-0.087	1596.39	-0.063
76	TR-10	1761.79	90.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1790.96	Top	1799.40	Top	--	--	--	--	--	--	--	--
	TR-9	1611.85	240.0	8	Middle	UMCf (Middle WBZ)	--	--	--	--	1820.49	-0.20	1815.87	-0.11	--	--	--	--	--	--	--	--
77	TR-3	1535.70	234.5	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1772.84	-0.36	1764.91	-0.23	--	--	--	--	--	--	--	--
	TR-4	1635.70	134.5	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1737.00	Top	1741.50	Top	--	--	--	--	--	--	--	--
78	TR-5	1561.49	236.0	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1800.27	-0.22	1800.41	-0.19	--	--	--	--	--	--	--	--
	TR-6	1727.74	70.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1763.80	Top	1769.25	Top	--	--	--	--	--	--	--	--
79	TR-7	1551.71	275.0	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1820.43	-0.21	1818.53	-0.17	--	--	--	--	--	--	--	--
	TR-8	1748.74	78.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1779.07	Top	1785.70	Top	--	--	--	--	--	--	--	--
	TWA-180	1480.60	190.0	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1654.00	-0.027	1655.58	-0.016	--	--	--	--	--	--	--	--
80	TWA-20	1645.90	25.0	1	Shallow	xMCF	--	--	--	--	1649.60	Top	1652.92	Top	--	--	--	--	--	--	--	--
	TWA-50	1615.20	55.0	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1648.05	0.050	1652.10	0.027	--	--	--	--	--	--	--	--
	TWB-140	1504.90	150.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1639.15	0.019	1641.97	0.015	--	--	--	--	--	--	--	--
81	TWB-21	1628.60	26.0	2	Shallow	xMCF/UMCf	--	--	--	--	1641.50	Top	1643.80	Top	--	--	--	--	--	--	--	--
	TWB-36	1613.70	41.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1641.30	0.013	1643.54	0.017	--	--	--	--	--	--	--	--
	TWB-51	1596.40	58.5	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1640.57	0.029	1643.16	0.020	--	--	--	--	--	--	--	--
	TWC-126	1514.60	136.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1637.80	0.0061	1640.12	0.0044	--	--	--	--	--	--	--	--
82	TWC-15	1630.00	20.0	2	Shallow	xMCF/UMCf	--	--	--	--	1638.50	Top	1640.62	Top	--	--	--	--	--	--	--	--
	TWC-27	1620.70	29.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1638.41	0.0097	1640.56	0.0073	--	--	--	--	--	--	--	--
	TWC-35	1610.30	40.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1638.20	0.015	1640.66	-0.0018	--	--	--	--	--	--	--	--
	TWC-48	1592.50	58.0	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1637.95	0.015	1640.35	0.0074	--	--	--	--	--	--	--	--
83	TWE-107	1517.00	117.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1624.65	0.0010	1626.18	0.000094	--	--	--	--	--	--	--	--
	TWE-15	1616.90	16.5	1	Shallow	xMCF	--	--	--	--	1624.75	Top	1626.19	Top	--	--	--	--	--	--	--	--
	TWE-18	1610.70	23.0	2	Shallow	xMCF	--	--	--	--	1624.80	-0.0081	1626.27	-0.013	--	--	--	--	--	--	--	--
	TWE-33	1594.20	39.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1624.95	-0.0088	1626.38	-0.0081	--	--	--	--	--	--	--	--
84	TWE-51	1577.70	56.0	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1624.90	-0.0038	1626.41	-0.0057	--	--	--	--	--	--	--	--
	WSS-10	1704.53	20.0	1	Shallow	Qal	--	--	--	--	1712.91	Top	1713.45	Top	--	--	--	--	--	--	--	--
	WSS-40	1679.23	45.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1712.76	0.0059	1713.35	0.0039	--	--	--	--	--	--	--	--
84	WSS-80	1633.99	90.0	5	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1714.05	-0.016	1714.06	-0.0087	--	--	--	--	--	--	--	--

**TABLE F-1c. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2016)**

Phase 6 Groundwater Flow and Transport Model  
 Nevada Environmental Response Trust Site  
 Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2				Quarter 3	Quarter 3				Quarter 4			
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	

Notes:  
 ft amsl = feet above mean sea level  
 ft = feet  
 -- = Data Not Available  
 A positive vertical gradient is downward and a negative vertical gradient is upward.  
 A yellow highlight means the simulated vertical gradient has an opposite direction compared to the observed vertical gradient.  
 "Top" means the well has the highest midscreen elevation in the cluster. Each vertical gradient is calculated in comparison to "Top" well.  
 Head data and vertical gradient calculations are only shown when there are both observed and simulated data available in at least one well of a cluster.  
 No vertical gradient calculations are available for quarters not shown in the table.  
 Detailed explanations can be found in Section 6.2 of the report.



TABLE F-1d. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2017)

Phase 6 Groundwater Flow and Transport Model

Nevada Environmental Response Trust Site

Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 2				Quarter 3				Quarter 4		Quarter 4	
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
4	AA-BW-09A	1718.59	43.0	1	Shallow	Qal	1717.83	Top	1724.11	Top	--	--	--	--	--	--	--	--
	DMC-MW-28	1485.62	275.0	10	Deep	UMCc	1788.44	-0.30	1765.58	-0.18	--	--	--	--	--	--	--	--
	MCF-BW-09B	1693.63	68.0	3	Shallow	UMCf (Middle WBZ)	1719.02	-0.048	1727.63	-0.14	--	--	--	--	--	--	--	--
5	AA-MW-25	1747.60	54.0	2	Shallow	Qal	1750.05	Top	1754.12	Top	--	--	--	--	--	--	--	--
	MC-MW-10	1701.21	100.0	4	Shallow	UMCf (Middle WBZ)	1749.89	0.0034	1755.14	-0.022	--	--	--	--	--	--	--	--
	MW-08	1515.95	285.0	10	Deep	UMCf (Deep WBZ)	1805.94	-0.24	1793.47	-0.17	--	--	--	--	--	--	--	--
6	ADX-112	1683.00	124.7	6	Middle	UMCf (Middle WBZ)	1746.81	0.35	1759.29	0.20	--	--	--	--	--	--	--	--
	ADX-135	1665.15	142.75	7	Middle	UMCf (Middle WBZ)	1727.65	0.48	1747.93	0.27	--	--	--	--	--	--	--	--
	ADX-156	1637.10	171.0	8	Middle	UMCf (Deep WBZ)	1729.51	0.36	1746.24	0.23	--	--	--	--	--	--	--	--
	MW-AD	1769.30	38.0	3	Shallow	UMCf (Shallow WBZ)	1777.30	Top	1776.14	Top	--	--	--	--	--	--	--	--
7	ADY-166	1593.20	176.0	8	Middle	UMCf (Deep WBZ)	1734.00	0.020	1735.31	-0.00049	--	--	--	--	--	--	--	--
	ADY-36	1720.20	48.5	3	Shallow	UMCf (Shallow WBZ)	1736.60	Top	1735.25	Top	--	--	--	--	--	--	--	--
	ADY-70	1691.20	77.5	4	Shallow	UMCf (Middle WBZ)	1736.35	0.0086	1735.43	-0.0063	--	--	--	--	--	--	--	--
8	ADYX-165	1588.14	185.0	8	Middle	UMCf (Deep WBZ)	1737.81	0.013	1738.11	0.0051	--	--	--	--	--	--	--	--
	ADYX-38	1720.35	53.0	3	Shallow	xMcf/UMCf	1739.53	Top	1738.78	Top	--	--	--	--	--	--	--	--
9	AEX-166	1607.30	176.0	8	Middle	UMCf (Deep WBZ)	1695.71	0.37	1715.83	0.23	--	--	--	--	--	--	--	--
	AEX-35	1737.70	45.0	3	Shallow	xMcf/UMCf	1744.25	Top	1745.65	Top	--	--	--	--	--	--	--	--
10	AFX-148	1637.81	163.0	8	Middle	UMCf (Deep WBZ)	1749.55	0.12	1758.83	0.048	--	--	--	--	--	--	--	--
	AFX-195	1598.05	202.5	8	Middle	UMCf (Deep WBZ)	1756.08	0.053	1761.92	0.017	--	--	--	--	--	--	--	--
	AFX-30	1761.21	40.0	2	Shallow	Qal/xMcf/UMCf	1764.74	Top	1764.76	Top	--	--	--	--	--	--	--	--
	AFX-75	1714.66	85.0	4	Shallow	UMCf (Middle WBZ)	1762.91	0.039	1763.44	0.028	--	--	--	--	--	--	--	--
11	AGX-160	1580.83	170.0	8	Middle	UMCf (Deep WBZ)	1729.65	-0.15	1725.59	-0.097	--	--	--	--	--	--	--	--
	AGX-190	1551.08	200.0	8	Middle	UMCf (Deep WBZ)	1735.32	-0.16	1728.48	-0.097	--	--	--	--	--	--	--	--
	AGX-230	1511.37	240.0	9	Deep	UMCf (Deep WBZ)	1750.32	-0.21	1736.53	-0.12	--	--	--	--	--	--	--	--
	AGX-50	1690.67	60.0	3	Shallow	UMCf (Shallow WBZ)	1713.11	Top	1714.97	Top	--	--	--	--	--	--	--	--
	AGX-90	1650.64	100.0	5	Shallow	UMCf (Middle WBZ)	1719.18	-0.15	1718.66	-0.092	--	--	--	--	--	--	--	--
12	AK-145	1581.90	154.977	7	Middle	UMCf (Middle WBZ)	1736.20	-0.21	1725.36	-0.13	--	--	--	--	--	--	--	--
	AK-204	1522.27	214.0	8	Middle	UMCf (Deep WBZ)	1774.80	-0.35	1745.08	-0.19	--	--	--	--	--	--	--	--
	AK-25	1702.22	35.0	1	Shallow	Qal/xMcf	1711.51	Top	1710.17	Top	--	--	--	--	--	--	--	--
	AK-86	1641.04	96.0	5	Shallow	UMCf (Middle WBZ)	1714.85	-0.055	1713.47	-0.054	--	--	--	--	--	--	--	--
13	AMOW-3-165	1600.57	180.0	8	Middle	UMCf (Deep WBZ)	1711.55	0.29	1719.26	0.20	--	--	--	--	--	--	--	--
	AMOW-3-52	1718.35	62.0	3	Shallow	UMCf (Middle WBZ)	1745.25	Top	1743.38	Top	--	--	--	--	--	--	--	--
14	AMX-166	1585.60	175.5	8	Middle	UMCf (Deep WBZ)	1780.73	-0.41	1757.93	-0.21	--	--	--	--	--	--	--	--
	AMX-40	1711.20	50.0	3	Shallow	UMCf (Shallow WBZ)	1729.81	Top	1731.47	Top	--	--	--	--	--	--	--	--
	AMX-98	1655.60	105.5	5	Shallow	UMCf (Middle WBZ)	1742.91	-0.24	1738.42	-0.13	--	--	--	--	--	--	--	--
15	B01	1758.39	49.5	2	Shallow	xMcf	1768.48	Top	1772.43	Top	--	--	--	--	--	--	--	--
	DMC-MW-26	1531.34	277.0	10	Deep	UMCc	1821.82	-0.23	1811.29	-0.17	--	--	--	--	--	--	--	--
	DPT-01	1686.45	121.5	5	Shallow	UMCf (Middle WBZ)	1771.19	-0.038	1773.58	-0.016	--	--	--	--	--	--	--	--
16	CP-1	1704.00	120.0	6	Middle	UMCf (Middle WBZ)	1796.46	-0.21	1792.89	-0.12	--	--	--	--	--	--	--	--
	MW-03	1774.01	52.0	3	Shallow	xMcf/UMCf	1781.94	Top	1784.75	Top	--	--	--	--	--	--	--	--
18	DX-121	1699.10	131.0	7	Middle	UMCf (Middle WBZ)	1754.65	0.53	1755.25	0.43	--	--	--	--	--	--	--	--
	DX-161	1659.10	171.0	8	Middle	UMCf (Deep WBZ)	1759.60	0.33	1751.53	0.32	--	--	--	--	--	--	--	--
	DX-270	1550.50	280.0	9	Deep	UMCf (Deep WBZ)	1825.91	-0.096	1803.29	-0.039	--	--	--	--	--	--	--	--
	DX-30	1790.20	40.0	2	Shallow	UMCf (Shallow WBZ)	1802.90	Top	1793.97	Top	--	--	--	--	--	--	--	--
	DX-350	1470.70	360.0	9	Deep	UMCf (Deep WBZ)	1830.70	-0.087	1805.59	-0.036	--	--	--	--	--	--	--	--
19	DX-75	1745.10	85.0	5	Shallow	UMCf (Middle WBZ)	1805.00	-0.047	1790.83	0.070	--	--	--	--	--	--	--	--
	DY-106	1684.40	116.0	6	Middle	UMCf (Middle WBZ)	1787.10	-0.10	1774.66	-0.028	--	--	--	--	--	--	--	--
	DY-169	1621.40	179.0	8	Middle	UMCf (Deep WBZ)	1766.70	0.087	1755.26	0.12	--	--	--	--	--	--	--	--
	DY-26	1764.60	36.0	3	Shallow	xMcf/UMCf	1779.10	Top	1772.43	Top	--	--	--	--	--	--	--	--
20	DZ-15	1812.03	25.0	3	Shallow	UMCf (Shallow WBZ)	1816.86	Top	1808.18	Top	--	--	--	--	--	--	--	--
	DZ-152	1674.68	162.0	7	Middle	UMCf (Deep WBZ)	1813.08	0.028	1806.10	0.015	--	--	--	--	--	--	--	--
25	FX-180	1567.70	190.0	8	Middle	UMCf (Deep WBZ)	1757.70	-0.19	1745.29	-0.10	--	--	--	--	--	--	--	--
	FX-25	1722.30	36.0	2	Shallow	Qal/xMcf/UMCf	1727.66	Top	1729.63	Top	--	--	--	--	--	--	--	--

TABLE F-1d. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2017)

Phase 6 Groundwater Flow and Transport Model

Nevada Environmental Response Trust Site

Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 2				Quarter 3				Quarter 4		Quarter 4	
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
26	JX-11	1650.82	18.5	1	Shallow	Qal	1655.63	Top	1658.26	Top	--	--	--	--	--	--	--	--
	JX-86	1573.21	96.0	5	Shallow	UMCf (Middle WBZ)	1653.90	0.022	1657.38	0.011	--	--	--	--	--	--	--	--
42	LX-150	1736.50	160.0	6	Middle	UMCf (Deep WBZ)	1865.20	-0.017	1854.45	-0.0050	--	--	--	--	--	--	--	--
	LX-55	1831.90	65.0	3	Shallow	Qal	1863.61	Top	1853.97	Top	--	--	--	--	--	--	--	--
43	M-11	1770.70	43.0	2	Shallow	Qal/xMcf/UMCf	--	--	--	--	--	--	--	1771.33	Top	1772.40	Top	--
	M-258	1667.96	144.9	6	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1769.98	0.013	1773.56	-0.011	--
	M-259-100	1707.32	105.5	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1769.81	0.024	1771.25	0.018	--
	M-259-60	1746.81	66.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1770.27	0.044	1770.93	0.061	--
44	M-12A	1767.87	45.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1770.99	Top	1772.69	Top	--
	M-241	1665.38	147.5	6	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1774.92	-0.038	1776.01	-0.032	--
	M-255-100	1707.57	105.2	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1765.68	0.088	1770.81	0.031	--
	M-255-60	1747.49	65.3	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1771.04	-0.0025	1772.72	-0.0013	--
45	M-13	1774.99	38.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1770.36	Top	1773.46	Top	--
	M-239	1738.46	75.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1771.46	-0.030	1774.85	-0.038	--
	M-240	1708.53	105.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1771.37	-0.015	1775.11	-0.025	--
46	M-132	1657.94	84.7	4	Shallow	UMCf (Shallow WBZ)	1718.59	-0.026	1721.22	-0.014	--	--	--	--	--	--	--	--
	M-133	1676.71	64.7	4	Shallow	UMCf (Shallow WBZ)	1717.24	-0.0060	1720.18	0.0049	--	--	--	--	--	--	--	--
	M-165	1626.92	114.7	6	Middle	UMCf (Middle WBZ)	1721.56	-0.050	1723.28	-0.032	--	--	--	--	--	--	--	--
	M-74	1718.41	24.0	1	Shallow	UMCf (Shallow WBZ)	1716.99	Top	1720.39	Top	--	--	--	--	--	--	--	--
47	M-134	1684.94	64.7	3	Shallow	UMCf (Shallow WBZ)	1719.24	-0.0081	1722.31	-0.015	--	--	--	--	--	--	--	--
	M-135	1715.68	33.7	2	Shallow	UMCf (Shallow WBZ)	1718.99	Top	1721.85	Top	--	--	--	--	--	--	--	--
	M-136	1664.56	84.7	4	Shallow	UMCf (Shallow WBZ)	1724.16	-0.10	1725.56	-0.073	--	--	--	--	--	--	--	--
	M-161	1645.21	104.7	5	Shallow	UMCf (Middle WBZ)	1730.01	-0.16	1728.40	-0.093	--	--	--	--	--	--	--	--
48	M-148A	1753.14	44.7	2	Shallow	UMCf (Shallow WBZ)	1754.21	Top	1756.35	Top	--	--	--	--	--	--	--	--
	M-186	1688.30	109.7	5	Shallow	UMCf (Middle WBZ)	1755.67	-0.023	1757.82	-0.023	--	--	--	--	--	--	--	--
	M-186D	1635.16	163.0	6	Middle	UMCf (Middle WBZ)	1769.57	-0.13	1765.30	-0.076	--	--	--	--	--	--	--	--
49	M-149	1687.21	110.0	5	Shallow	UMCf (Middle WBZ)	1753.41	-0.0055	1758.72	-0.047	--	--	--	--	1753.16	-0.0063	1757.00	-0.024
	M-153	1637.21	160.0	6	Middle	UMCf (Middle WBZ)	1767.56	-0.13	1764.80	-0.080	--	--	--	--	--	--	--	--
	M-31A	1752.12	45.0	2	Shallow	UMCf (Shallow WBZ)	1753.05	Top	1755.65	Top	--	--	--	--	1752.75	Top	1755.47	Top
51	M-152	1560.69	135.0	6	Middle	UMCf (Middle WBZ)	1670.50	0.015	1675.07	0.0058	--	--	--	--	1667.59	0.031	1673.61	0.029
	M-156	1510.66	185.0	7	Middle	UMCf (Middle WBZ)	1676.81	-0.028	1678.38	-0.016	--	--	--	--	--	--	--	--
	M-44	1675.69	20.0	1	Shallow	Qal/xMcf/UMCf	1672.22	Top	1675.74	Top	--	--	--	--	1671.13	Top	1676.89	Top
	PC-183	1655.38	40.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	--	1671.68	-0.027	1675.31	0.078
	PC-184	1635.55	60.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	--	1670.82	0.0077	1674.97	0.048
52	PC-185	1615.48	80.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1670.48	0.011	1674.80	0.035	
	M-161D	1612.78	135.0	6	Middle	UMCf (Middle WBZ)	1735.29	-0.17	1731.09	-0.090	--	--	--	--	1734.78	-0.17	1730.75	-0.090
53	M-69	1718.39	29.6	2	Shallow	Qal/xMcf/UMCf	1717.55	Top	1721.57	Top	--	--	--	--	1716.31	Top	1721.28	Top
	M-162	1640.99	104.7	5	Shallow	UMCf (Middle WBZ)	1725.56	-0.18	1724.88	-0.13	--	--	--	--	--	--	--	--
	M-163	1660.92	84.7	4	Shallow	UMCf (Shallow WBZ)	1720.77	-0.16	1721.78	-0.12	--	--	--	--	--	--	--	--
	M-164	1680.46	64.7	3	Shallow	UMCf (Shallow WBZ)	1713.43	-0.045	1715.76	-0.017	--	--	--	--	--	--	--	--
54	M-71	1715.19	29.75	1	Shallow	Qal/xMcf/UMCf	1711.86	Top	1715.15	Top	--	--	--	--	--	--	--	--
	M-189	1770.71	42.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	--	1778.53	Top	1781.20	Top
	M-247-100	1708.28	105.5	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	1778.64	-0.0018	1782.78	-0.025
	M-247-60	1748.28	65.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	--	1779.12	-0.026	1782.05	-0.038
55	M-248	1668.36	145.4	6	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	1781.04	-0.025	1785.91	-0.046
	M-191	1771.14	42.5	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	--	1775.59	Top	1777.56	Top
	M-249-100	1708.81	104.6	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	1772.84	0.044	1777.54	0.00032
	M-249-60	1749.02	64.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	--	1773.57	0.091	1776.91	0.030
56	M-250	1668.81	144.4	6	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	1778.13	-0.025	1781.63	-0.040
	M-192	1770.69	42.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	--	1775.63	Top	1777.63	Top
	M-253-100	1706.36	105.8	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	1775.80	-0.0026	1778.63	-0.016
	M-253-60	1746.47	65.7	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	--	1775.54	0.0037	1777.51	0.0047
56	M-254	1668.85	143.4	6	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	1780.63	-0.049	1782.16	-0.044

TABLE F-1d. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2017)

Phase 6 Groundwater Flow and Transport Model

Nevada Environmental Response Trust Site

Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 2				Quarter 3				Quarter 4		Quarter 4	
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
57	M-196	1701.79	97.5	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1761.46	0.0031	1763.66	-0.012	
	M-52	1759.80	39.5	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1761.64	Top	1762.94	Top	
58	M-204	1627.57	105.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1702.72	-0.081	1703.88	-0.038	
	M-7B	1692.64	38.0	2	Shallow	Qal/xMcf/UMCf	--	--	--	--	--	--	--	1697.45	Top	1701.39	Top	
59	M-211	1695.47	35.0	2	Shallow	Qal/UMCf	--	--	--	--	--	--	--	1692.87	Top	1696.53	Top	
	M-212	1665.54	65.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1693.23	-0.012	1697.10	-0.019	
	M-213	1625.59	105.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1693.89	-0.015	1698.50	-0.028	
60	M-216	1697.15	35.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1706.50	Top	1709.66	Top	
	M-217	1672.11	60.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1706.74	-0.0096	1710.07	-0.017	
	M-218	1627.04	105.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1717.43	-0.16	1715.76	-0.087	
61	M-221	1672.32	80.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1721.85	-0.011	1727.37	0.14	
	M-222	1647.57	105.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1726.82	-0.072	1729.28	0.070	
	M-65	1725.40	26.7	1	Shallow	Qal/xMcf/UMCf	--	--	--	--	--	--	--	1721.24	Top	1734.70	Top	
	M-65D	1687.30	65.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1721.47	-0.0060	1727.22	0.20	
	VMW-02D	1652.15	100.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1725.69	-0.061	1728.28	0.088	
62	M-223	1732.28	47.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1748.61	Top	1754.70	Top	
	M-225	1669.89	110.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1752.81	-0.067	1757.00	-0.037	
63	M-226	1738.86	47.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1755.02	Top	1760.54	Top	
	M-227	1716.28	70.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1754.58	0.019	1760.31	0.010	
	M-228	1681.17	105.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1755.72	-0.012	1760.90	-0.0063	
64	M-229	1709.95	47.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1739.66	Top	1742.85	Top	
	M-230	1677.50	80.0	5	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1739.75	-0.0028	1743.61	-0.024	
	M-231	1647.48	110.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1744.81	-0.082	1746.48	-0.058	
65	M-242	1690.61	45.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1710.43	Top	1714.42	Top	
	M-243	1671.02	65.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1710.70	-0.014	1714.70	-0.014	
	M-244	1638.63	97.5	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1711.80	-0.026	1715.39	-0.019	
66	M-251-100	1711.42	97.5	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1774.14	-0.017	1777.04	-0.021	
	M-251-60	1751.64	57.3	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1773.47	Top	1776.20	Top	
	M-252	1671.54	137.3	6	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1768.10	0.067	1777.91	-0.021	
67	M-256-60	1747.27	65.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1770.81	Top	1772.22	Top	
	M-257	1666.91	145.4	6	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	1764.35	0.080	1773.19	-0.012	
68	M-5A	1704.26	45.0	3	Shallow	UMCf (Shallow WBZ)	1715.23	Top	1719.48	Top	1715.27	Top	1719.48	Top	--	--	--	--
	TR-1	1453.06	296.5	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1773.39	-0.23	1753.05	-0.13	--	--	--	--
	TR-2	1589.98	159.5	7	Middle	UMCf (Middle WBZ)	1726.57	-0.099	1725.83	-0.056	--	--	--	--	--	--	--	--
69	MC-09R	1684.57	31.0	1	Shallow	Qal	1685.04	Top	1687.00	Top	--	--	--	--	--	--	--	--
	MC-96	1672.46	41.0	1	Shallow	Qal/UMCf	1684.69	0.029	1686.53	0.039	--	--	--	--	--	--	--	--
	TR-11	1494.37	220.0	9	Deep	UMCf (Middle WBZ)	1728.67	-0.23	1710.75	-0.12	--	--	--	--	--	--	--	--
73	PC-134D	1533.82	85.0	4	Shallow	UMCf (Shallow WBZ)	1590.02	-0.090	1596.68	-0.068	--	--	--	--	1588.02	-0.12	1594.68	-0.085
	PC-144	1584.32	34.7	1	Shallow	Qal/UMCf	1585.46	Top	1593.27	Top	--	--	--	--	1582.21	Top	1590.41	Top
74	PC-136	1587.12	31.7	1	Shallow	Qal	1584.01	Top	1592.37	Top	--	--	--	--	1584.02	Top	1591.92	Top
	PC-137	1550.59	68.3	3	Shallow	UMCf (Shallow WBZ)	1585.56	-0.042	1593.59	-0.034	--	--	--	--	--	--	--	--
	PC-137D	1533.79	85.0	4	Shallow	UMCf (Shallow WBZ)	1587.86	-0.072	1595.20	-0.053	--	--	--	--	1586.49	-0.046	1594.07	-0.040
75	PC-180	1656.44	40.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1668.88	-0.14	1673.46	0.078	
	PC-181	1636.43	60.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1669.82	-0.087	1674.03	0.017	
	PC-182	1616.45	80.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	1669.59	-0.051	1674.09	0.010	
	PC-72	1671.60	25.0	1	Shallow	Qal	--	--	--	--	--	--	--	1666.77	Top	1674.64	Top	
76	TR-10	1761.79	90.0	2	Shallow	UMCf (Shallow WBZ)	1793.32	Top	1800.58	Top	--	--	--	--	--	--	--	--
	TR-9	1611.85	240.0	8	Middle	UMCf (Middle WBZ)	1821.42	-0.19	1816.33	-0.11	--	--	--	--	--	--	--	--
79	TR-7	1551.71	275.0	10	Deep	UMCf (Middle WBZ)	1821.35	-0.20	1818.96	-0.16	--	--	--	--	--	--	--	--
	TR-8	1748.74	78.0	2	Shallow	UMCf (Shallow WBZ)	1780.97	Top	1786.65	Top	--	--	--	--	--	--	--	--
80	TWA-180	1480.60	190.0	7	Middle	UMCf (Middle WBZ)	1654.10	-0.024	1655.64	-0.015	--	--	--	--	--	--	--	--
	TWA-20	1645.90	25.0	1	Shallow	xMcf	1650.10	Top	1653.18	Top	--	--	--	--	--	--	--	--

**TABLE F-1d. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2017)**

Phase 6 Groundwater Flow and Transport Model

Nevada Environmental Response Trust Site

Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 2				Quarter 3				Quarter 4		Quarter 4	
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
80	TWA-50	1615.20	55.0	3	Shallow	UMCf (Middle WBZ)	1648.60	0.049	1652.38	0.026	--	--	--	--	--	--	--	--
81	TWB-140	1504.90	150.0	6	Middle	UMCf (Middle WBZ)	1639.40	0.013	1642.12	0.012	--	--	--	--	--	--	--	--
	TWB-21	1628.60	26.0	2	Shallow	xMCf/UMCf	1641.00	Top	1643.57	Top	--	--	--	--	--	--	--	--
	TWB-36	1613.70	41.0	3	Shallow	UMCf (Shallow WBZ)	1640.01	0.066	1642.92	0.044	--	--	--	--	--	--	--	--
	TWB-51	1596.40	58.5	3	Shallow	UMCf (Middle WBZ)	1640.50	0.016	1643.15	0.013	--	--	--	--	--	--	--	--
82	TWC-126	1514.60	136.0	6	Middle	UMCf (Middle WBZ)	1637.91	-0.00052	1640.20	0.0011	--	--	--	--	--	--	--	--
	TWC-15	1630.00	20.0	2	Shallow	xMCf/UMCf	1637.85	Top	1640.33	Top	--	--	--	--	--	--	--	--
	TWC-27	1620.70	29.5	3	Shallow	UMCf (Shallow WBZ)	1637.76	0.0097	1640.26	0.0075	--	--	--	--	--	--	--	--
	TWC-35	1610.30	40.0	3	Shallow	UMCf (Shallow WBZ)	1637.80	0.0025	1640.49	-0.0080	--	--	--	--	--	--	--	--
	TWC-48	1592.50	58.0	4	Shallow	UMCf (Middle WBZ)	1637.90	-0.0013	1640.35	-0.00047	--	--	--	--	--	--	--	--
83	TWE-107	1517.00	117.0	6	Middle	UMCf (Middle WBZ)	1625.16	-0.0066	1626.45	-0.0039	--	--	--	--	--	--	--	--
	TWE-15	1616.90	16.5	1	Shallow	xMCf	1624.50	Top	1626.06	Top	--	--	--	--	--	--	--	--
	TWE-18	1610.70	23.0	2	Shallow	xMCf	1624.55	-0.0081	1626.15	-0.013	--	--	--	--	--	--	--	--
	TWE-33	1594.20	39.5	3	Shallow	UMCf (Shallow WBZ)	1624.86	-0.016	1626.33	-0.012	--	--	--	--	--	--	--	--
	TWE-51	1577.70	56.0	3	Shallow	UMCf (Middle WBZ)	1624.80	-0.0077	1626.36	-0.0076	--	--	--	--	--	--	--	--
84	WS5-10	1704.53	20.0	1	Shallow	Qal	1713.26	Top	1713.59	Top	--	--	--	--	--	--	--	--
	WS5-40	1679.23	45.0	3	Shallow	UMCf (Shallow WBZ)	1713.12	0.0055	1713.50	0.0037	--	--	--	--	--	--	--	--
	WS5-80	1633.99	90.0	5	Shallow	UMCf (Shallow WBZ)	1714.61	-0.019	1714.31	-0.010	--	--	--	--	--	--	--	--

Notes:

ft amsl = feet above mean sea level

ft = feet

-- = Data Not Available

A positive vertical gradient is downward and a negative vertical gradient is upward.

A yellow highlight means the simulated vertical gradient has an opposite direction compared to the observed vertical gradient.

"Top" means the well has the highest midscreen elevation in the cluster. Each vertical gradient is calculated in comparison to "Top" well.

Head data and vertical gradient calculations are only shown when there are both observed and simulated data available in at least one well of a cluster.

No vertical gradient calculations are available for quarters not shown in the table.

Detailed explanations can be found in Section 6.2 of the report.

TABLE F-1e. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2018)

Phase 6 Groundwater Flow and Transport Model  
 Nevada Environmental Response Trust Site  
 Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2				Quarter 3		Quarter 4					
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
1	AA-01	1716.02	39.0	1	Shallow	Qal	1708.46	Top	1710.37	Top	--	--	--	--	--	--	--	--	--	--	--	--
	MCF-01A	1409.44	345.0	10	Deep	UMCf (Deep WBZ)	1722.53	-0.046	1721.49	-0.036	--	--	--	--	--	--	--	--	--	--	--	--
	MCF-01B	1683.95	70.0	3	Shallow	UMCf (Shallow WBZ)	1708.29	0.0053	1710.51	-0.0044	--	--	--	--	--	--	--	--	--	--	--	--
2	AA-07	1570.12	40.0	1	Shallow	Qal	--	--	--	--	1572.70	Top	1576.81	Top	--	--	--	--	--	--	--	--
	MCF-07	1250.07	360.0	10	Deep	UMCf (Deep WBZ)	--	--	--	--	1538.46	0.11	1560.77	0.050	--	--	--	--	--	--	--	--
3	AA-09	1646.76	47.5	1	Shallow	Qal	--	--	--	--	1656.71	Top	1660.21	Top	--	--	--	--	--	--	--	--
	ES-5	1612.92	77.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1655.67	0.031	1658.53	0.050	--	--	--	--	--	--	--	--
	MCF-09A	1414.26	280.0	10	Deep	UMCf (Deep WBZ)	--	--	--	--	1654.48	0.0096	1659.88	0.0014	--	--	--	--	--	--	--	--
4	AA-BW-09A	1718.59	43.0	1	Shallow	Qal	--	--	--	--	1716.81	Top	1723.54	Top	--	--	--	--	--	--	--	--
	DMC-MW-28	1485.62	275.0	10	Deep	UMCc	--	--	--	--	1796.68	-0.34	1769.64	-0.20	--	--	--	--	--	--	--	--
	MCF-BW-09B	1693.63	68.0	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1717.77	-0.038	1729.30	-0.23	--	--	--	--	--	--	--	--
5	AA-MW-25	1747.60	54.0	2	Shallow	Qal	--	--	--	--	1747.13	Top	1752.64	Top	--	--	--	--	--	--	--	--
	MC-MW-10	1701.21	100.0	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1747.03	0.0022	1753.69	-0.022	--	--	--	--	--	--	--	--
	MW-08	1515.95	285.0	10	Deep	UMCf (Deep WBZ)	--	--	--	--	1815.18	-0.29	1798.03	-0.20	--	--	--	--	--	--	--	--
6	ADX-112	1683.00	124.7	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1747.35	0.34	1759.71	0.18	--	--	--	--	--	--	--	--
	ADX-135	1665.15	142.75	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1731.80	0.43	1750.64	0.24	--	--	--	--	--	--	--	--
	ADX-156	1637.10	171.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1729.51	0.35	1747.56	0.21	--	--	--	--	--	--	--	--
	MW-AD	1769.30	38.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1776.40	Top	1775.48	Top	--	--	--	--	--	--	--	--
7	ADY-166	1593.20	176.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1732.92	0.021	1734.22	0.0023	--	--	--	--	--	--	--	--
	ADY-36	1720.20	48.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1735.65	Top	1734.51	Top	--	--	--	--	--	--	--	--
	ADY-70	1691.20	77.5	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1735.34	0.011	1734.60	-0.0031	--	--	--	--	--	--	--	--
8	ADYX-165	1588.14	185.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1736.72	0.015	1736.98	0.0071	--	--	--	--	--	--	--	--
	ADYX-38	1720.35	53.0	3	Shallow	xMCF/UMCf	--	--	--	--	1738.66	Top	1737.92	Top	--	--	--	--	--	--	--	--
9	AEX-166	1607.30	176.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1692.65	0.40	1712.13	0.26	--	--	--	--	--	--	--	--
	AEX-35	1737.70	45.0	3	Shallow	xMCF/UMCf	--	--	--	--	1744.90	Top	1745.48	Top	--	--	--	--	--	--	--	--
10	AFX-148	1637.81	163.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1751.34	0.11	1759.46	0.041	--	--	--	--	--	--	--	--
	AFX-195	1598.05	202.5	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1756.83	0.046	1762.03	0.015	--	--	--	--	--	--	--	--
	AFX-30	1761.21	40.0	2	Shallow	Qal/xMCF/UMCf	--	--	--	--	1764.38	Top	1764.46	Top	--	--	--	--	--	--	--	--
	AFX-75	1714.66	85.0	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1762.51	0.040	1763.06	0.030	--	--	--	--	--	--	--	--
11	AGX-160	1580.83	170.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1731.45	-0.17	1726.34	-0.11	--	--	--	--	--	--	--	--
	AGX-190	1551.08	200.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1735.06	-0.16	1728.20	-0.097	--	--	--	--	--	--	--	--
	AGX-230	1511.37	240.0	9	Deep	UMCf (Deep WBZ)	--	--	--	--	1750.32	-0.21	1736.38	-0.12	--	--	--	--	--	--	--	--
	AGX-50	1690.67	60.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1712.64	Top	1714.60	Top	--	--	--	--	--	--	--	--
	AGX-90	1650.64	100.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1718.28	-0.14	1718.20	-0.090	--	--	--	--	--	--	--	--
12	AK-145	1581.90	154.977	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1736.20	-0.21	1725.25	-0.13	--	--	--	--	--	--	--	--
	AK-204	1522.27	214.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1735.53	-0.14	1725.34	-0.087	--	--	--	--	--	--	--	--
	AK-25	1702.22	35.0	1	Shallow	Qal/xMCF	--	--	--	--	1710.62	Top	1709.62	Top	--	--	--	--	--	--	--	--
	AK-86	1641.04	96.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1714.94	-0.071	1713.41	-0.062	--	--	--	--	--	--	--	--
13	AMOW-3-165	1600.57	180.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1710.80	0.28	1718.10	0.20	--	--	--	--	--	--	--	--
	AMOW-3-52	1718.35	62.0	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1744.25	Top	1742.16	Top	--	--	--	--	--	--	--	--
14	AMX-166	1585.60	175.5	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1778.42	-0.40	1756.52	-0.20	--	--	--	--	--	--	--	--
	AMX-40	1711.20	50.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1728.75	Top	1730.81	Top	--	--	--	--	--	--	--	--
	AMX-98	1655.60	105.5	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1740.55	-0.21	1737.07	-0.11	--	--	--	--	--	--	--	--
15	B01	1758.39	49.5	2	Shallow	xMCF	--	--	--	--	1766.43	Top	1771.40	Top	--	--	--	--	--	--	--	--
	DMC-MW-26	1531.34	277.0	10	Deep	UMCc	--	--	--	--	1812.58	-0.20	1806.63	-0.16	--	--	--	--	--	--	--	--
	DPT-01	1686.45	121.5	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1769.32	-0.040	1772.63	-0.017	--	--	--	--	--	--	--	--
16	CP-1	1704.00	120.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1796.46	-0.22	1792.88	-0.12	--	--	--	--	--	--	--	--
	MW-03	1774.01	52.0	3	Shallow	xMCF/UMCf	--	--	--	--	1781.29	Top	1784.42	Top	--	--	--	--	--	--	--	--
17	CTMW-02D	1715.82	41.5	3	Shallow	UMCf (Shallow WBZ)	1734.36	-0.033	1738.27	-0.030	1733.83	0.0030	1738.00	0.0022	--	--	--	--	--	--	--	--
	CTMW-02S	1735.82	21.5	1	Shallow	Qal	1734.56	-1.5	1738.38	-1.3	1733.89	Top	1738.04	Top	--	--	--	--	--	--	--	--
	CTMW-04D	1715.67	41.5	3	Shallow	UMCf (Shallow WBZ)	1734.39	-0.034	1738.19	-0.026	1733.84	0.0025	1737.91	0.0065	--	--	--	--	--	--	--	--
	CTMW-04S	1735.67	21.5	1	Shallow	Qal	1734.52	-1.2	1738.28	-0.87	1733.92	-0.20	1737.98	0.45	--	--	--	--	--	--	--	--
	CTMW-05D	1713.15	44.0	3	Shallow	UMCf (Shallow WBZ)	1734.27	-0.025	1737.99	-0.015	1733.59	0.013	1737.65	0.017	--	--	--	--	--	--	--	--
	CTMW-05S	1735.65	21.5	1	Shallow	Qal	1734.39	-0.96	1738.09	-0.59	1733.80	0.53	1737.79	1.5	--	--	--	--	--	--	--	--
	CTMW-06D	1713.17	44.0	3	Shallow	UMCf (Shallow WBZ)	1733.87	-0.0082	1737.88	-0.010	1733.45	0.019	1737.67	0.016	--	--	--	--	--	--	--	--
	CTMW-06S	1735.67	21.5	1	Shallow	Qal	1734.25	-0.79	1738.11	-0.64	1733.70	1.3	1737.83	1.4	--	--	--	--	--	--	--	--
	CTMW-07D	1650.41	107.5	5	Shallow	UMCf (Shallow WBZ)	1736.86	-0.037	1739.36	-0.020	1736.67	-0.033	1739.27	-0.014	--	--	--	--	--	--	--	--
CTMW-07S	1736.39	21.5	1	Shallow	Qal	1733.68	Top	1737.65	Top	--	--	--	--	--	--	--	--	--	--	--	--	
18	DX-121	1699.10	131.0	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1755.21	0.52	1754.84	0.43	--	--	--	--	--	--	--	--
	DX-161	1659.10	171.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1760.25	0.32	1751.18	0.33	--	--	--	--	--	--	--	--
	DX-270	1550.50	280.0	9	Deep	UMCf (Deep WBZ)	--	--	--	--	1827.70	-0.10	1803.61	-0.041	--	--	--	--	--	--	--	--
	DX-30	1790.20	40.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1802.70	Top	1793.87</									

TABLE F-1e. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2018)

Phase 6 Groundwater Flow and Transport Model  
 Nevada Environmental Response Trust Site  
 Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2				Quarter 3		Quarter 4					
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
18	DX-75	1745.10	85.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1805.00	-0.051	1789.86	0.089	--	--	--	--	--	--	--	--
19	DY-106	1684.40	116.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1786.16	-0.099	1773.41	-0.028	--	--	--	--	--	--	--	--
	DY-169	1621.40	179.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1764.90	0.093	1753.24	0.13	--	--	--	--	--	--	--	--
20	DZ-15	1812.03	25.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1778.20	Top	1771.17	Top	--	--	--	--	--	--	--	--
	DZ-152	1674.68	162.0	7	Middle	UMCf (Deep WBZ)	--	--	--	--	1812.66	0.027	1805.54	0.015	--	--	--	--	--	--	--	--
21	ES-13	1533.12	97.5	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1572.27	0.078	1589.05	0.037	--	--	--	--	--	--	--	--
	MCF-06A-R	1267.00	363.0	10	Deep	UMCf (Deep WBZ)	--	--	--	--	1530.07	0.15	1560.95	0.096	--	--	--	--	--	--	--	--
	MCF-06B	1555.77	74.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1575.67	0.0078	1586.49	0.18	--	--	--	--	--	--	--	--
22	MCF-06C	1578.78	51.5	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1575.85	Top	1590.74	Top	--	--	--	--	--	--	--	--
	ES-23A	1562.52	40.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	--	--	--	--	--	--	--	--	1573.39	Top	1573.39	Top
23	ES-23B	1422.45	180.0	7	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	--	--	--	1564.81	0.061	1569.28	0.029	--
	ES-7	1608.43	70.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1626.11	Top	1632.48	Top	--	--	--	--	--	--	--	--
24	MCF-24B	1520.00	160.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1612.20	0.16	1625.59	0.078	--	--	--	--	--	--	--	--
	ES-8A	1646.68	70.0	3	Shallow	UMCf (Shallow WBZ)	1669.30	Top	1664.93	Top	--	--	--	--	--	--	--	--	--	--	--	--
	ES-8B	1616.60	100.0	4	Shallow	UMCf (Middle WBZ)	1667.83	0.049	1664.16	0.026	--	--	--	--	--	--	--	--	--	--	--	--
25	MCF-32A	1367.88	360.0	10	Deep	UMCf (Deep WBZ)	1718.33	-0.18	1690.49	-0.092	--	--	--	--	--	--	--	--	--	--	--	--
	MCF-32B	1578.31	150.0	5	Shallow	UMCf (Middle WBZ)	1678.48	-0.13	1670.13	-0.076	--	--	--	--	--	--	--	--	--	--	--	--
26	FX-180	1567.70	190.0	8	Middle	UMCf (Deep WBZ)	--	--	--	--	1757.70	-0.19	1745.17	-0.10	--	--	--	--	--	--	--	--
	FX-25	1722.30	36.0	2	Shallow	Qal/xMCF/UMCf	--	--	--	--	1727.57	Top	1729.49	Top	--	--	--	--	--	--	--	--
27	JX-11	1650.82	18.5	1	Shallow	Qal	--	--	--	--	1656.46	Top	1658.63	Top	--	--	--	--	--	--	--	--
	JX-86	1573.21	96.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	1654.69	0.023	1657.72	0.012	--	--	--	--	--	--	--	--
28	LWVPS-MW107A	1518.49	29.65	1	Shallow	Qal	--	--	--	--	1526.50	Top	1529.21	Top	1526.82	Top	1530.79	Top	1526.95	Top	1529.57	Top
	LWVPS-MW107B	1492.30	55.9	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1530.86	-0.17	1531.57	-0.090	1531.14	-0.16	1531.68	-0.034	1531.22	-0.16	1531.90	-0.089
	LWVPS-MW107C	1438.18	110.15	5	Shallow	UMCf (Semi-Consolidated)	--	--	--	--	1541.72	-0.19	1537.46	-0.10	1541.42	-0.18	1533.84	-0.038	1541.47	-0.18	1537.51	-0.099
29	LWVPS-MW108A	1513.16	30.75	1	Shallow	Qal	--	--	--	--	1531.12	Top	1531.66	Top	1531.01	Top	1531.96	Top	1531.29	Top	1532.55	Top
	LWVPS-MW108B	1487.70	56.15	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1537.60	-0.25	1534.92	-0.13	1537.59	-0.26	1532.90	-0.037	1538.23	-0.27	1536.08	-0.14
	LWVPS-MW108C	1434.60	109.45	5	Shallow	UMCf (Semi-Consolidated)	--	--	--	--	1540.18	-0.12	1536.41	-0.060	1539.70	-0.11	1533.57	-0.020	1539.82	-0.11	1537.12	-0.058
30	LWVPS-MW204	1460.71	60.15	1	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	--	1493.83	Top	1497.51	Top	
	LWVPS-MW204B	1409.53	111.35	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	--	--	--	1494.53	-0.014	1497.88	-0.0073	
31	LWVPS-MW205B	1442.66	74.75	1	Shallow	Qal	--	--	--	--	1492.06	0.0026	1494.94	0.0043	--	--	--	--	1492.04	0.0093	1495.57	0.036
	LWVPS-MW205C	1407.18	110.15	4	Shallow	Qal	--	--	--	--	1491.72	0.0055	1494.79	0.0042	--	--	--	--	1491.72	0.0092	1495.43	0.023
	WMW4.9S	1492.99	25.0	1	Shallow	Qal	--	--	--	--	1492.19	Top	1495.15	Top	--	--	--	--	1492.51	Top	1497.39	Top
32	LWVPS-MW206A	1479.29	49.65	1	Shallow	Qal	--	--	--	--	1493.18	Top	1496.01	Top	--	--	--	--	1493.33	Top	1496.61	Top
	LWVPS-MW206B	1449.15	79.7	1	Shallow	Qal	--	--	--	--	1492.68	0.017	1495.77	0.0079	--	--	--	--	1492.91	0.014	1496.41	0.0065
	LWVPS-MW206C	1418.89	110.15	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1492.68	0.0083	1495.83	0.0029	--	--	--	--	1492.80	0.0088	1496.41	0.0033
	LWVPS-MW206D	1392.87	135.15	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	--	--	--	--	1493.97	-0.0074	1496.99	-0.0045
33	LWVPS-MW206E	1328.83	200.25	7	Middle	UMCf (Semi-Consolidated)	--	--	--	--	--	--	--	--	--	--	--	--	1492.49	0.0056	1496.32	0.0019
	LWVPS-MW209	1436.17	81.15	3	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	--	--	1489.93	-0.0028	1492.97	-0.0011
	LWVPS-MW209A	1472.29	45.15	1	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	--	--	1489.83	Top	1492.93	Top
	LWVPS-MW209B	1397.31	120.15	5	Shallow	UMCf-cg	--	--	--	--	--	--	--	--	--	--	--	--	1489.77	0.00080	1492.86	0.00090
34	LWVPS-MW209C	1356.71	160.75	7	Middle	UMCf-cg	--	--	--	--	--	--	--	--	--	--	--	--	1489.65	0.0016	1492.81	0.0011
	LWVPS-MW210A	1470.00	45.15	1	Shallow	Qal	--	--	--	--	1488.77	Top	1490.90	Top	--	--	--	--	1488.92	Top	1491.28	Top
	LWVPS-MW210B	1435.14	79.95	3	Shallow	Qal	--	--	--	--	1489.12	-0.010	1491.09	-0.0055	--	--	--	--	1489.22	-0.0086	1491.44	-0.0045
	LWVPS-MW210C	1404.82	110.15	5	Shallow	UMCf-cg	--	--	--	--	1489.24	-0.0072	1491.18	-0.0043	--	--	--	--	1489.36	-0.0068	1491.53	-0.0038
	LWVPS-MW210D	1379.75	135.2	6	Middle	UMCf-cg	--	--	--	--	--	--	--	--	--	--	--	--	1489.43	-0.0057	1491.53	-0.0027
35	LWVPS-MW210E	1359.66	155.25	7	Middle	UMCf-cg	--	--	--	--	--	--	--	--	--	--	--	--	1489.30	-0.0034	1491.45	-0.0015
	LWVPS-MW212A	1475.47	44.15	2	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	--	--	1492.00	Top	1495.33	Top
	LWVPS-MW212B	1449.62	69.65	3	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	--	--	1490.69	0.051	1494.64	0.027
	LWVPS-MW212C	1409.64	110.15	5	Shallow	UMCf-cg	--	--	--	--	--	--	--	--	--	--	--	--	1490.30	0.026	1494.44	0.014
36	LWVPS-MW212D	1384.36	135.25	6	Middle	UMCf-cg	--	--	--	--	--	--	--	--	--	--	--	--	1490.55	0.016	1494.51	0.0090
	LWVPS-MW217A	1468.81	61.15	1	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	--	--	1493.41	Top	1497.11	Top
	LWVPS-MW217B	1419.98	110.15	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	--	--	--	--	1494.01	-0.012	1497.42	-0.0063
37	LWVPS-MW217C	1364.79	165.25	6	Middle	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	--	--	--	--	1494.05	-0.0062	1497.47	-0.0035
	LWVPS-MW218A	1471.66	45.15	1	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	--	--	1490.27	Top	1493.37	Top
	LWVPS-MW218B	1406.54	110.15	5	Shallow	UMCf/UMCf-cg	--	--	--	--	--	--	--	--	--	--	--	--	1490.20	0.0011	1493.38	-0.00013
38	LWVPS-MW218C	1370.47	145.75	6	Middle	UMCf/UMCf-cg	--	--	--	--	--	--	--	--	--	--	--	--	1489.80	0.0046	1493.16	0.0020
	LWVPS-MW219A	1470.35	42.45	1	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	--	--	1485.27	Top	1487.70	Top
39	LWVPS-MW219B	1427.66	85.15	4	Shallow	UMCf/Horse Springs	--	--	--	--	--	--	--	--	--	--	--	--	1483.95	0.031	1487.15	0.013

TABLE F-1e. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2018)

Phase 6 Groundwater Flow and Transport Model  
 Nevada Environmental Response Trust Site  
 Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2				Quarter 3		Quarter 4				
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)
37	LVWPS-MW219C	1387.53	125.25	6	Middle	UMCf/Horse Springs	--	--	--	--	--	--	--	--	--	--	1483.89	0.017	1487.20	0.0061	
38	LVWPS-MW220A	1447.37	70.15	3	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	1490.05	Top	1493.46	Top	
	LVWPS-MW220B	1373.37	144.25	6	Middle	UMCf-cg	--	--	--	--	--	--	--	--	--	--	1489.89	0.0022	1493.31	0.0020	
39	LVWPS-MW222A	1432.81	90.15	5	Shallow	UMCf/UMCf-cg	--	--	--	--	--	--	--	--	--	--	1491.85	Top	1496.21	Top	
	LVWPS-MW222B	1362.75	160.15	7	Middle	UMCf-cg	--	--	--	--	--	--	--	--	--	--	1492.26	-0.0059	1496.22	-0.00014	
	LVWPS-MW222C	1299.07	223.75	10	Deep	UMCf-cg	--	--	--	--	--	--	--	--	--	--	1494.57	-0.020	1497.20	-0.0075	
40	LVWPS-MW224A	1462.96	65.15	3	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	1493.28	Top	1497.58	Top	
	LVWPS-MW224B	1411.03	116.65	5	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	--	--	1493.44	-0.0031	1497.77	-0.0036	
	LVWPS-MW224C	1343.61	184.25	8	Middle	UMCf (Semi-Consolidated)	--	--	--	--	--	--	--	--	--	--	1492.68	0.0050	1497.55	0.00026	
41	LVWPS-MW225A	1469.51	59.15	2	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	1494.99	-0.015	1498.91	-0.026	
	LVWPS-MW225B	1428.08	100.25	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	--	--	--	--	--	--	1495.04	-0.0051	1498.96	-0.0081	
	MW-13-HEND	1485.43	43.0	1	Shallow	Qal	--	--	--	--	--	--	--	--	--	--	1494.75	Top	1498.50	Top	
42	LX-150	1736.50	160.0	6	Middle	UMCf (Deep WBZ)	--	--	--	1863.61	-0.018	1853.60	-0.0058	--	--	--	--	--	--	--	
	LX-55	1831.90	65.0	3	Shallow	Qal	--	--	--	1861.87	Top	1853.05	Top	--	--	--	--	--	--	--	
46	M-132	1657.94	84.7	4	Shallow	UMCf (Shallow WBZ)	--	--	--	1718.72	-0.026	1721.18	-0.015	--	--	--	--	--	--	--	
	M-133	1676.71	64.7	4	Shallow	UMCf (Shallow WBZ)	--	--	--	1717.37	-0.0060	1720.15	0.0025	--	--	--	--	--	--	--	
	M-165	1626.92	114.7	6	Middle	UMCf (Middle WBZ)	--	--	--	1721.79	-0.051	1723.29	-0.033	--	--	--	--	--	--	--	
	M-74	1718.41	24.0	1	Shallow	UMCf (Shallow WBZ)	--	--	--	1717.12	Top	1720.25	Top	--	--	--	--	--	--	--	
47	M-134	1684.94	64.7	3	Shallow	UMCf (Shallow WBZ)	--	--	--	1717.35	-0.011	1721.26	-0.016	--	--	--	--	--	--	--	
	M-135	1715.68	33.7	2	Shallow	UMCf (Shallow WBZ)	--	--	--	1717.02	Top	1720.77	Top	--	--	--	--	--	--	--	
	M-136	1664.56	84.7	4	Shallow	UMCf (Shallow WBZ)	--	--	--	1722.10	-0.099	1724.82	-0.079	--	--	--	--	--	--	--	
	M-161	1645.21	104.7	5	Shallow	UMCf (Middle WBZ)	--	--	--	1728.56	-0.16	1727.57	-0.096	--	--	--	--	--	--	--	
48	M-148A	1753.14	44.7	2	Shallow	UMCf (Shallow WBZ)	--	--	--	1753.90	Top	1756.16	Top	--	--	--	--	--	--	--	
	M-186	1688.30	109.7	5	Shallow	UMCf (Middle WBZ)	--	--	--	1755.38	-0.023	1757.64	-0.023	--	--	--	--	--	--	--	
	M-186D	1635.16	163.0	6	Middle	UMCf (Middle WBZ)	--	--	--	1770.05	-0.14	1765.50	-0.079	--	--	--	--	--	--	--	
49	M-149	1687.21	110.0	5	Shallow	UMCf (Middle WBZ)	--	--	--	1752.98	-0.0096	1758.53	-0.050	--	--	--	--	--	--	--	
	M-153	1637.21	160.0	6	Middle	UMCf (Middle WBZ)	--	--	--	1767.85	-0.13	1764.89	-0.084	--	--	--	--	--	--	--	
	M-31A	1752.12	45.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	1752.36	Top	1755.26	Top	--	--	--	--	--	--	--	
50	M-151	1593.39	135.0	6	Middle	UMCf (Middle WBZ)	--	--	--	1712.18	Top	1708.11	Top	--	--	--	--	--	--	--	
	M-155	1518.14	210.0	10	Deep	UMCf (Middle WBZ)	--	--	--	1729.51	-0.23	1722.30	-0.19	--	--	--	--	--	--	--	
51	M-152	1560.69	135.0	6	Middle	UMCf (Middle WBZ)	--	--	--	1670.44	0.015	1675.00	0.0060	--	--	--	--	--	--	--	
	M-156	1510.66	185.0	7	Middle	UMCf (Middle WBZ)	--	--	--	1677.00	-0.029	1678.43	-0.017	--	--	--	--	--	--	--	
	M-44	1675.69	20.0	1	Shallow	Qal/xMCF/UMCf	--	--	--	1672.20	Top	1675.70	Top	--	--	--	--	--	--	--	
52	M-161D	1612.78	135.0	6	Middle	UMCf (Middle WBZ)	--	--	--	1733.95	-0.17	1730.31	-0.087	--	--	--	--	1733.82	-0.18	1730.31	-0.086
	M-69	1718.39	29.6	2	Shallow	Qal/xMCF/UMCf	--	--	--	1715.63	Top	1721.16	Top	--	--	--	--	1715.30	Top	1721.23	Top
53	M-162	1640.99	104.7	5	Shallow	UMCf (Middle WBZ)	1721.15	-0.13	1724.00	-0.12	1724.15	-0.17	1724.08	-0.12	--	--	--	--	--	--	--
	M-163	1660.92	84.7	4	Shallow	UMCf (Shallow WBZ)	1718.58	-0.13	1722.59	-0.14	1719.55	-0.15	1721.07	-0.11	--	--	--	--	--	--	--
	M-164	1680.46	64.7	3	Shallow	UMCf (Shallow WBZ)	1712.63	-0.030	1717.95	-0.084	1712.61	-0.033	1715.28	-0.0081	--	--	--	--	--	--	--
	M-71	1715.19	29.75	1	Shallow	Qal/xMCF/UMCf	1711.59	Top	1715.02	Top	1711.48	Top	1715.00	Top	--	--	--	--	--	--	--
61	M-221	1672.32	80.0	4	Shallow	UMCf (Shallow WBZ)	1720.11	0.025	1732.81	0.071	--	--	--	--	--	--	--	--	--	--	--
	M-222	1647.57	105.0	5	Shallow	UMCf (Middle WBZ)	1724.07	-0.034	1731.68	0.063	--	--	--	--	--	--	--	--	--	--	--
	M-65	1725.40	26.7	1	Shallow	Qal/xMCF/UMCf	1721.45	Top	1736.60	Top	--	--	--	--	--	--	--	1720.85	Top	1735.01	Top
	M-65D	1687.30	65.0	4	Shallow	UMCf (Shallow WBZ)	1718.93	0.066	1732.89	0.097	--	--	--	--	--	--	--	--	--	--	--
	VMW-02D	1652.15	100.0	5	Shallow	UMCf (Middle WBZ)	1722.04	-0.0081	1730.81	0.079	--	--	--	--	--	--	--	1725.00	-0.057	1728.03	0.095
68	VMW-02I	1689.65	62.5	3	Shallow	UMCf (Shallow WBZ)	1715.43	0.17	1734.71	0.053	--	--	--	--	--	--	--	1718.93	0.054	1727.05	0.22
	M-5A	1704.26	45.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	1714.12	Top	1718.84	Top	--	--	--	--	--	--	--	--
69	TR-1	1453.06	296.5	10	Deep	UMCf (Middle WBZ)	--	--	--	1773.58	-0.24	1753.09	-0.14	--	--	--	--	--	--	--	
	TR-2	1589.98	159.5	7	Middle	UMCf (Middle WBZ)	--	--	--	1726.76	-0.11	1725.85	-0.061	--	--	--	--	--	--	--	
	MC-09R	1684.57	31.0	1	Shallow	Qal	--	--	--	1685.58	Top	1687.91	Top	--	--	--	--	--	--	--	
70	MC-96	1672.46	41.0	1	Shallow	Qal/UMCf	--	--	--	1685.24	0.028	1687.41	0.041	--	--	--	--	--	--	--	
	TR-11	1494.37	220.0	9	Deep	UMCf (Middle WBZ)	--	--	--	1724.40	-0.20	1708.55	-0.11	--	--	--	--	--	--	--	
	MCF-03A	1409.23	374.0	10	Deep	UMCf (Deep WBZ)	1755.72	-0.046	1733.25	-0.024	--	--	--	--	--	--	--	--	--	--	
71	MCF-03B	1716.46	67.0	3	Shallow	UMCf (Shallow WBZ)	1741.62	Top	1725.78	Top	--	--	--	--	--	--	--	--	--	--	
	MCF-16B	1391.05	298.7	10	Deep	UMCf (Middle WBZ)	--	--	--	1631.13	-0.013	1633.62	-0.0050	--	--	--	--	--	--	--	
	MCF-16C	1626.88	63.0	2	Shallow	Qal/UMCf	--	--	--	1628.01	Top	1632.44	Top	--	--	--	--	--	--	--	
73	PC-134D	1533.82	85.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	1588.33	-0.11	1594.49	-0.083	--	--	--	--	1588.89	-0.11	1594.70	-0.082
	PC-144	1584.32	34.7	1	Shallow	Qal/UMCf	--	--	--	1582.71	Top	1590.28	Top	--	--	--	--	1583.36	Top	1590.54	Top
74	PC-136	1587.12	31.7	1	Shallow	Qal	--	--	--	1584.17	Top	1591.69	Top	--	--	--	--	1584.56	Top	1591.80	Top
	PC-137	1550.59	68.3	3	Shallow	UMCf (Shallow WBZ)	--	--	--	1585.15	-0.027	1592.64	-0.026	--	--	--	--	--	--	--	
	PC-137D	1533.79	85.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	1586.95	-0.052	1594.01	-0.044	--	--	--	--	1587.22	-0.050	1594.08	-0.043
76	TR-10	1761.79	90.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	1791.61	Top	1799.72	Top	--	--	--	--	--	--	--	
	TR-9	1611.85	240.0	8	Middle	UMCf (Middle WBZ)	--	--	--	1822.26	-0.20	1816.75	-0.11	--	--	--	--	--	--	--	
77	TR-3	1535.70	234.5	10	Deep	UMCf (Middle WBZ)	--	--	--	1785.61	-0.48	1771.21	-0.29	--	--	--	--	--	--	--	

TABLE F-1e. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (MONITORING WELLS IN 2018)

Phase 6 Groundwater Flow and Transport Model  
 Nevada Environmental Response Trust Site  
 Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2				Quarter 3		Quarter 4					
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
77	TR-4	1635.70	134.5	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1737.72	Top	1741.78	Top	--	--	--	--	--	--	--	--
78	TR-5	1561.49	236.0	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1808.00	-0.27	1804.20	-0.21	--	--	--	--	--	--	--	--
	TR-6	1727.74	70.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1763.50	Top	1769.09	Top	--	--	--	--	--	--	--	--
79	TR-7	1551.71	275.0	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1822.22	-0.21	1819.36	-0.17	--	--	--	--	--	--	--	--
	TR-8	1748.74	78.0	2	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1780.18	Top	1786.25	Top	--	--	--	--	--	--	--	--
80	TWA-180	1480.60	190.0	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1652.79	-0.015	1654.96	-0.010	--	--	--	--	--	--	--	--
	TWA-20	1645.90	25.0	1	Shallow	xMcf	--	--	--	--	1650.28	Top	1653.25	Top	--	--	--	--	--	--	--	--
	TWA-50	1615.20	55.0	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1649.00	0.042	1652.56	0.022	--	--	--	--	--	--	--	--
81	TWB-140	1504.90	150.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1639.60	0.014	1642.17	0.012	--	--	--	--	--	--	--	--
	TWB-21	1628.60	26.0	2	Shallow	xMcf/UMCf	--	--	--	--	1641.34	Top	1643.70	Top	--	--	--	--	--	--	--	--
	TWB-36	1613.70	41.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1641.01	0.022	1643.38	0.022	--	--	--	--	--	--	--	--
	TWB-51	1596.40	58.5	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1640.66	0.021	1643.19	0.016	--	--	--	--	--	--	--	--
82	TWC-126	1514.60	136.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1638.00	-0.0012	1640.19	0.00087	--	--	--	--	--	--	--	--
	TWC-15	1630.00	20.0	2	Shallow	xMcf/UMCf	--	--	--	--	1637.86	Top	1640.29	Top	--	--	--	--	--	--	--	--
	TWC-27	1620.70	29.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1637.79	0.0075	1640.23	0.0067	--	--	--	--	--	--	--	--
	TWC-35	1610.30	40.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1637.87	-0.00051	1640.47	-0.0093	--	--	--	--	--	--	--	--
	TWC-48	1592.50	58.0	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1637.89	-0.00080	1640.29	-0.00053	--	--	--	--	--	--	--	--
83	TWE-107	1517.00	117.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1624.81	-0.0046	1626.09	-0.0031	--	--	--	--	--	--	--	--
	TWE-15	1616.90	16.5	1	Shallow	xMcf	--	--	--	--	1624.35	Top	1625.78	Top	--	--	--	--	--	--	--	--
	TWE-18	1610.70	23.0	2	Shallow	xMcf	--	--	--	--	1624.36	-0.0016	1625.84	-0.010	--	--	--	--	--	--	--	--
	TWE-33	1594.20	39.5	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1624.65	-0.013	1626.02	-0.011	--	--	--	--	--	--	--	--
	TWE-51	1577.70	56.0	3	Shallow	UMCf (Middle WBZ)	--	--	--	--	1624.60	-0.0064	1626.06	-0.0071	--	--	--	--	--	--	--	--
84	WSS-10	1704.53	20.0	1	Shallow	Qal	--	--	--	--	1713.12	Top	1713.47	Top	--	--	--	--	--	--	--	--
	WSS-40	1679.23	45.0	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1712.99	0.0051	1713.38	0.0035	--	--	--	--	--	--	--	--
	WSS-80	1633.99	90.0	5	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1714.34	-0.017	1714.12	-0.0092	--	--	--	--	--	--	--	--

Notes:

ft amsl = feet above mean sea level

ft = feet

-- = Data Not Available

A positive vertical gradient is downward and a negative vertical gradient is upward.

A yellow highlight means the simulated vertical gradient has an opposite direction compared to the observed vertical gradient.

"Top" means the well has the highest midscreen elevation in the cluster. Each vertical gradient is calculated in comparison to "Top" well.

Head data and vertical gradient calculations are only shown when there are both observed and simulated data available in at least one well of a cluster.

No vertical gradient calculations are available for quarters not shown in the table.

Detailed explanations can be found in Section 6.2 of the report.



**TABLE F-2a. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (TRANSDUCERS IN 2017)**

Phase 6 Groundwater Flow and Transport Model

Nevada Environmental Response Trust Site

Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 3				Quarter 4			
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)
T3	M-152	1560.69	135.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1670.84	0.016	1673.61	0.029
	M-44	1675.69	20.0	1	Shallow	Qal/xMCf/UMCf	1672.59	--	1675.88	--	1672.65	Top	1676.89	Top
T4	M-162D	1610.04	135.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1737.67	-0.24	1731.00	-0.15
	M-71	1715.19	29.75	1	Shallow	Qal/xMCf/UMCf	1711.55	--	1715.10	--	1712.63	Top	1715.03	Top
T8	PC-136	1587.12	31.7	1	Shallow	Qal	--	--	--	--	1584.19	Top	1591.92	Top
	PC-137D	1533.79	85.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1586.65	-0.046	1594.07	-0.040

Notes:

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"Top" means the well has the highest midscreen elevation in the cluster. Each vertical gradient is calculated in comparison to "Top" well.

Head data and vertical gradient calculations are only shown when there are both observed and simulated data available in at least one well of a cluster.

No vertical gradient calculations are available for quarters not shown in the table.

Detailed explanations can be found in Section 6.2 of the report.

TABLE F-2b. OBSERVED VERSUS SIMULATED HEAD DIFFERENCE/VERTICAL GRADIENT AT CALIBRATION TARGETS (TRANSDUCERS IN 2018)

Phase 6 Groundwater Flow and Transport Model  
 Nevada Environmental Response Trust Site  
 Henderson, Nevada

Cluster ID	Well Name	Midscreen Elevation (ft amsl)	Midscreen Depth Below Ground Surface (ft)	Layer	Water Bearing Zone	Screened Interval	Quarter 1				Quarter 2				Quarter 3		Quarter 3				Quarter 4			
							Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)	Observed Water Elevation (ft)	Observed Vertical Gradient (ft/ft)	Simulated Water Elevation (ft)	Simulated Vertical Gradient (ft/ft)		
T1	AA-07	1570.12	40.0	1	Shallow	Qal	--	--	--	--	1572.72	Top	1576.81	Top	--	--	--	--	--	--	--	--		
	MCF-07	1250.07	360.0	10	Deep	UMCf (Deep WBZ)	--	--	--	--	1538.69	0.11	1560.77	0.050	--	--	--	--	--	--	--	--		
T2	AA-09	1646.76	47.5	1	Shallow	Qal	--	--	--	--	1656.62	Top	1660.21	Top	--	--	--	--	--	--	--	--		
	MCF-09B	1578.00	115.0	4	Shallow	UMCf (Middle WBZ)	--	--	--	--	1656.58	0.00047	1659.43	0.011	--	--	--	--	--	--	--	--		
T3	M-152	1560.69	135.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1671.32	0.0074	1675.00	0.0060	--	--	--	--	--	--	--	--		
	M-156	1510.66	185.0	7	Middle	UMCf (Middle WBZ)	--	--	--	--	1685.76	-0.082	1678.43	-0.017	--	--	--	--	--	--	--	--		
	M-44	1675.69	20.0	1	Shallow	Qal/xMCF/UMCf	1671.00	--	1675.80	--	1672.17	Top	1675.70	Top	1672.05	--	1675.63	--	1672.03	--	1675.58	--		
T4	M-162D	1610.04	135.0	6	Middle	UMCf (Middle WBZ)	--	--	--	--	1737.03	-0.20	1730.82	-0.15	--	--	--	--	--	--	--	--		
	M-163	1660.92	84.7	4	Shallow	UMCf (Shallow WBZ)	1718.91	-0.054	1722.59	-0.14	1725.72	-0.18	1721.07	-0.11	--	--	--	--	--	--	--	--		
	M-71	1715.19	29.75	1	Shallow	Qal/xMCF/UMCf	1715.97	Top	1715.02	Top	1716.14	Top	1715.00	Top	--	--	--	--	1711.43	--	1715.02	--		
T5	MCF-01A	1409.44	345.0	10	Deep	UMCf (Deep WBZ)	1721.98	-0.049	1721.49	-0.040	--	--	--	--	--	--	--	--	--	--	--	--		
	MCF-01B	1683.95	70.0	3	Shallow	UMCf (Shallow WBZ)	1708.50	Top	1710.51	Top	--	--	--	--	--	--	--	--	--	--	--	--		
T6	MCF-16A	1315.17	374.5	10	Deep	UMCf (Deep WBZ)	--	--	--	--	1651.65	-0.075	1643.93	-0.037	--	--	--	--	--	--	--	--		
	MCF-16B	1391.05	298.7	10	Deep	UMCf (Middle WBZ)	--	--	--	--	1631.00	-0.012	1633.62	-0.0050	--	--	--	--	--	--	--	--		
	MCF-16C	1626.88	63.0	2	Shallow	Qal/UMCf	--	--	--	--	1628.27	Top	1632.44	Top	--	--	--	--	--	--	--	--		
T7	MCF-32A	1367.88	360.0	10	Deep	UMCf (Deep WBZ)	1718.43	-0.19	1690.49	-0.097	--	--	--	--	--	--	--	--	--	--	--	--		
	MCF-32B	1578.31	150.0	5	Shallow	UMCf (Middle WBZ)	1678.43	Top	1670.13	Top	--	--	--	--	--	--	--	--	--	--	--	--		
T8	PC-136	1587.12	31.7	1	Shallow	Qal	--	--	--	--	1584.49	Top	1591.69	Top	--	--	--	--	--	--	--	--		
	PC-137	1550.59	68.3	3	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1585.30	-0.022	1592.64	-0.026	--	--	--	--	--	--	--	--		
	PC-137D	1533.79	85.0	4	Shallow	UMCf (Shallow WBZ)	--	--	--	--	1587.94	-0.065	1594.01	-0.044	--	--	--	--	1589.38	--	1594.08	--		

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