GWDP
Q2 2019

PARAMETER	UNIT	Maximum Daily Limit for Downgradient Wells Only	QAL008A May 2019 05/13/19 (Downgradient)	Q	QAL008D May 2019 05/13/19 (Downgradient)	Q	QAL025D May 2019 05/15/19	Q	QAL026A May 2019 05/15/19	Q	QAL026D May 2019 05/15/19	Q	QAL029A May 2019 05/15/19	Q	QAL029D May 2019 05/15/19	Q	QAL050A May 2019 05/13/19 (Downgradient)	Q	QAL051A May 2019 05/13/19 (Downgradient)	Q	QAL051D May 2019 05/13/19 (Downgradient)	Q	QAL052A May 2019 05/13/19 (Downgradient)	Q	QAL053A May 2019 05/15/19	Q	QAL055A May 2019 05/13/19	Q	QAL056A May 2019 05/15/19	Q	QAL057A May 2019 05/15/19 (Downgradient)	Q	QAL057D May 2019 05/15/19 (Downgradient)	Q	QAL075A May 2019 05/13/19 (Downgradient)	Q	QAL075D May 2019 05/13/19 (Downgradient)	Q
Field																																						
D.O.	ppm	NA	8.8		6.6		4.1		10		11		12		7.4		10		10		3.1		3.0		5.9		8.4		10		10		8.1		10		0.3	
ORP	mV	NA	64		64		246		301		249		259		262		235		232		213		241		61		111		74		65		75		67		54	
pH	SU	6.5-9.7	9.0		8.5		8.7		6.4		9.0		7.8		6.8		8.7		8.8		8.4		8.5		8.2		8.2		9.0		8.8		8.2		8.5		8.0	
Specific Conductance	µS/cm @ 25°C	NA	74		106		96		83		63		543		617		148		91		112		116		115		601		66		111		274		84		122	
Temperature	°C	NA	15		12		7.4		7.4		7.2		8.1		8.6		11		9.3		9		10		8		10		12		11		11		9		9	
Turbidity	NTU	NA	<1		<1		<1		<1		<1		<1		<1		<1		1		<1		<1		<1		<1		<1		<1		<1		<1		<1	
Water Elevation	ft MSL	NA	1394.52		1354.23		1413.26		<1415.4	BP	1410.01		1414.54		1405.84		1365.38		1367.14		1367.13		1353.43		1386.48		1366.70		1395.29		1364.24		1364.28		1348.64		1350.16	
Metals																																						
Aluminum	ug/L	150	<50.0		<50.0		<50.0		144		<50.0		91.5		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
Antimony	ug/L	5.0	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	
Arsenic	ug/L	6.0	<1.0		3.0		2.9		<1.0		<1.0		<1.0		<1.0		<1.0		1.3		5.1		1.4		7.5		<1.0		<1.0		<1.0		2.3		1.2		1.9	
Barium	ug/L	1000	<5.0		7.2		5.3		6.9		<5.0		150		23.8		7.9		5.3		14.6		5.3		8.0		36.6		<5.0		6.1		12.5		5.8		5.8	
Beryllium	ug/L	3.0	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	
Boron	ug/L	285	<20.0	e	<20.0	e	<20.0	e	<20.0	e	<20.0	e	<20.0	e	<20.0	e	<20.0	e	<20.0	e	22.3	e	<20.0	e	36.1	e	<20.0	e	<20.0	e	<20.0	e	<20.0	e	<20.0	e	20.6	e
Cadmium	ug/L	3.0	<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20	
Chromium	ug/L	52	<1.0		1.7		<1.0		1.2		<1.0		1.0		<1.0		1.1		<1.0		<1.0		<1.0		<1.0		4.5		<1.0		1.1		<1.0		<1.0		1.9	
Cobalt	ug/L	23	<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0		<15.0	
Copper	ug/L	10	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		1.2		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	
Iron	ug/L	NA	<50.0		<50.0		<50.0		126		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
Lead	ug/L	3.0	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	
Lithium	ug/L	88	<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0		<8.0	
Manganese	ug/L	50	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e
Mercury	ng/L	NA	<0.50		<0.50		<0.50		0.610		<0.50		0.830		1.57		<0.50		<0.50		<0.50		<0.50		<0.50		<0.50		<0.50		<0.50		<0.50		<0.50		<0.50	
Molybdenum	ug/L	22	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e	<5.0	e
Nickel	ug/L	57	<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		3.2		<2.0		<2.0		<2.0		<2.0		<2.0	
Selenium	ug/L	5.0	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	
Silver	ug/L	0.40	<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20	
Strontium	ug/L	2300	10.4	e	40.9	e	32.3	e	27.3	e	11.4	e	174	e	38.7	e	36.6	e	20.0	e	87.3	e	48.8	e	78.8	e	131	e	9.5	e	19.4	e	118	e	17.7	e	53.5	e
Thallium	ug/L	1.0	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	
Uranium	ug/L	NA	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	
Vanadium	ug/L	3.1	2.0		2.2		4.0		<1.0		<1.0		<1.0		<1.0		1.0		4.0		2.3		1.7		1.5		<1.0		1.3		<1.0		<1.0		2.8		1.5	
Zinc	ug/L	1200	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
Major Anions																																						
Alkalinity, Bicarbonate	mg/L	NA	31.7		45.3		45.8		38.4		31.8		41.5		89.6		43.3		32.1		53.1		52.4		55.2		70.9		30.1		42.9		81.7		37.5		57.7	
Chloride	mg/L	NA	<1.0		3.1		<1.0		<1.0		<1.0		138		121		16.6		2.2		<1.0		1.3		<1.0		117		<1.0		8.9		33.2		<1.0		<1.0	
Fluoride	mg/L	1.0	<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10	
Nitrogen, Ammonia	mg/L	10	<0.020	e	<0.020	e	<0.040	e	<0.040	e	<0.040	e	<0.10	e	<0.10	e	<0.020	e	<0.020	e	<0.020	e	<0.020	e	<0.040	e	<0.040	e	<0.10	e	<0.10	e	<0.10	e	<0.020	e	<0.020	e
Nitrogen, Nitrate	mg/L	10	1.1	e	0.15	e	0.089	e	0.63	e	0.12	e	2.9	e	0.98	e	0.70	e	2.2	e	0.29	e	0.26	e	<0.050	e	0.64	e	1.0	e	0.81	e	0.44	e	0.92	e	<0.050	e
Nitrogen, Nitrite	mg/L	NA	<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050	
Nitrogen, Total Inorganic	mg/L	10	1.1		0.16		0.091		0.64		0.12		2.9		0.98		0.71		2.2		0.29		0.26		<0.10		0.64		1.0		0.81		0.44		0.92		<0.050	
Phosphorus, Total	mg/L	NA	0.063		<0.050		0.058		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		<0.050		0.060		<0.050		<0.050		<0.050		<0.050	
Sulfate	mg/L	250	<1.0		4.0		5.5		2.0		1.9		4.4		9.1		3.7		1.5		4.4		5.2		6.2		7.3		<1.0		<1.0		3.6		1.4		6.4	
Major Cations																																						
Calcium	mg/L	NA	8.0		15.7		12.9		13.2		10.6		51.8		14.3		21.0		13.3		16.0		17.0		15.8		54.5		7.4		15.1		38.4		12.6		18.6	
Magnesium	mg/L	NA	1.1		3.3		2.9		2.1		1.5		10.3		5.5		4.1		2.5		3.5		3.9		3.9		13.0		1.2		2.8		8.1		2.5		4.2	
Potassium	mg/L	NA	0.91		0.90		0.80		1.3		0.57		2.6		1.7		0.95		0.62		1.2		1.1		1.3		2.1		0.82		0.82		1.7		0.70		1.1	
Sodium	mg/L	NA	5.8	e	1.4	e	3.8	e	1.4	e	<1.0	e	33.2	e	104	e	3.2	e	1.3	e	2.9	e	1.6	e	2.0	e	45.1	e	4.5	e	3.8	e	3.2	e	1.4	e	1.5	e
General																																						
Hardness	mg/L	NA	25		53		44		42		33		172		58		69		44		54		58		55		190		23		49		129		42		64	

Notes:
e: estimated value. The laboratory statement of data qualifications indicates that a quality control limit for this parameter was exceeded.
nm: not measured. ns: not sampled.
*The 3.1 ug/L MDL for vanadium does not apply to monitoring wells QAL008A and QAL051A.
Value is outside of maximum daily limit as stipulated in Permit GW1810162 for compliance monitoring locations.