

REGIONAL WATER LEVELS

Marsland Expansion Area

Area ID	General Well ID	Surveyed Top East Coordinate ¹	Surveyed Top North Coordinate ¹	Ground Level Elevation (Ft AMSL)	Distance from Ground To Measurement Point	Screened Formation	Screened Interval Depths	WATER LEVELS FOR ALL SAMPLING DATES BELOW								
								October 17, 2013	January 21, 2014	April 22, 2014	July 14, 2014	October 29, 2014	January 21, 2015	April 7, 2015	July 17, 2015	April 7, 2016
Marsland	Monitor 1	1131520.75	429027.93	4101.48	1.8	Chadron Formation	905'-935'	3703.9	3701.0	3699.2	3697.7	3696.1	3695.0	3694.8	3694.5	3691.38
Marsland	Monitor 2	1126362.36	439439.08	4197.20	2.3	Chadron Formation	980'-1015'	3699.2	3697.4	3695.6	3694.0	3692.2	3691.4	3691.4	3691.1	3687.8
Marsland	Monitor 3	1121518.68	446287.71	4260.20	1.2	Chadron Formation	1015'-1045'	3695.9	3694.8	3692.8	3691.4	3689.4	3688.9	3689.1	3688.8	3685.3
Marsland	Monitor 4A	1121344.14	450083.52	4326.32	3.4	Chadron Formation	1080'-1110'	3695.4	3693.1	3691.0	3689.6	3687.9	3687.2	3687.6	3687.3	3683.52
Marsland	Monitor 5	1119235.50	447734.36	4337.40	3.4	Chadron Formation	1070'-1120'	3695.4	3693.4	3691.5	3690.1	3688.2	3687.5	3687.9	3687.6	3684
Marsland	Monitor 6	1124385.19	442856.47	4213.80	2.6	Chadron Formation	992'-1025'	3698.2	3696.2	3694.3	3693.1	3691.1	3690.2	3690.6	3690.4	3686.7
Marsland	Monitor 7	1120757.21	440358.40	4243.18	3.1	Chadron Formation	1003'-1016', 1026'-1046'	3698.3	3696.4	3694.5	3693.0	3691.3	3690.5	3690.5	3690.0	3686.38
Marsland	Monitor 8	1117004.89	450973.82	4352.40	3.5	Chadron Formation	1087'-1127'	3695.4	3692.3	3690.2	3688.8	3687.1	3686.4	3686.9	3686.5	3684.8
Marsland	Monitor 9	1120642.67	456122.81	4364.60	2.42	Chadron Formation	1110'-1140'	3697.3	3693.0	3688.2	3686.9	3685.0	3684.5	3685.3	3684.8	3680.92
Marsland	Monitor 10	1124017.93	435031.37	4160.49	3.5	Chadron Formation	935'-970'	3699.0	3697.2	3696.2	3694.7	3692.7	3691.8	3692.0	3691.8	3688.49
Marsland	Monitor 11	1129466.62	432062.91	4124.17	3.9	Chadron Formation	902'-947'	3700.2	3698.4	3696.6	3695.0	3693.5	3692.3	3692.4	3691.9	3688.77
Marsland	CPW-2010-1	1121527.67	446224.84	4259.75	1.6	Chadron Formation	1015'-1048'	3696.1	3694.1	3692.1	3690.6	3688.8	3688.3	3688.3	3688.0	3684.45
Marsland	CPW-2010-1A	1121450.20	446202.00	4261.08	2.2	Chadron Formation	1025'-1055'	3696.3	3694.3	3692.3	3690.9	3689.1	3688.6	3688.9	3688.6	3685.18

¹ Survey Coordinates are 1927 North American Datum, 2601 Nebraska North

REGIONAL WATER LEVELS

THREE CROW EXPANSION AREA

Area ID	General Well ID	Surveyed Top East Coordinate ¹	Surveyed Top North Coordinate ¹	Ground Level Elevation (Ft AMSL)	Distance from Ground To Measurement Point	Screened Formation	Screened Interval Depths	WATER LEVELS FOR ALL SAMPLING DATES BELOW					
								April 21, 2008	January 9, 2009	January 30, 2009	January 22, 2010	May 15, 2014	April 7, 2016
Three Crow	CPW 2006-2	1068178.21	492983.11	3913.63	1.10	Chadron Formation	791'-816', 841'-871'	3722.26	3721.22	3721.01	3717.26	3693.53	3685.73
Three Crow	COW 2006-1	1063782.51	494341.24	3905.80	1.15	Chadron Formation	764'-799', 809'-829'	3724.93	3723.94	3723.64	3720.36	3697.70	3690.55
Three Crow	COW 2006-2	1066684.93	494512.66	3932.71	1.00	Chadron Formation	781'-786', 806'-816', 826'-851'	3721.50	3721.11	3720.85	3717.13	3693.81	3686.61
Three Crow	COW 2006-3	1068713.99	494006.65	3902.78	0.90	Chadron Formation	731'-756', 796'-811'	3718.77	3720.43	3720.22	3716.73	3692.88	3685.38
Three Crow	COW 2006-4	1068924.73	490369.75	3954.67	1.15	Chadron Formation	783'-813', 823'-848', 858'-878'	3722.61	3720.81	3720.46	3717.02	3692.97	3685.62
Three Crow	COW 2006-5	1070868.10	490191.11	3982.26	0.45	Chadron Formation	851'-881', 891'-901'	3721.64	3720.26	3720.03	3716.46	3691.16	3684.21
Three Crow	COW 2006-6	1076490.66	489608.94	3978.68	1.00	Chadron Formation	836'-881'	N/A ²	3713.43	3712.89	3708.23	Not Measured	Not Measured
Three Crow	COW 2006-7	1076915.32	493451.66	3921.97	1.80	Chadron Formation	645'-665', 675'-695'	N/A ²	3711.76	3712.20	3707.55	Not Measured	Not Measured
Three Crow	UBCOW 2006-1	1068222.59	492976.82	3913.96	1.10	Chadron Formation	654'-674', 684'-704', 714'-744'	3721.88	3720.51	3720.36	3716.73	Not Measured	3685.86
Three Crow	UBCOW 2006-2	1068906.48	490371.92	3954.03	1.52	Chadron Formation	666'-676', 696'-716', 736'-766'	3721.75	3720.84	3720.61	3716.96	Not Measured	3685.65

¹ Survey Coordinates are 1927 North American Datum, 2601 Nebraska North

² Well was not drilled at this sample date

REGIONAL WATER LEVELS

North Trend Expansion Area

Area ID	General Well ID	Surveyed Top East Coordinate ¹	Surveyed Top North Coordinate ¹	Ground Level Elevation (Ft AMSL)	Distance from Ground To Measurement Point	Screened Formation	Screen Interval Depths	WATER LEVELS FOR ALL SAMPLING DATES BELOW		
								June 28, 2006	February 16, 2007	April 16, 2008
North Trend	COW 2004-1	1085606.42	525988.48	3631.88	1.1	Chadron Formation	537'-557'	3699.81	3707.40	3707.22
North Trend	COW 2004-2	1083807.09	519628.76	3652.06	1.9	Chadron Formation	569'-594'	3704.41	3708.60	3709.53
North Trend	COW 2004-3	1080497.45	521312.27	3682.83	1.7	Chadron Formation	596'-616', 621'-631', 641'-646'	3710.59	3714.90	3717.57
North Trend	COW 2004-4	1080512.23	526200.97	3685.95	0.8	Chadron Formation	585'-600', 610'-630', 635'-645'	3705.30	3712.70	3714.19
North Trend	COW 2004-5	1082950.49	523539.30	3669.24	1.8	Chadron Formation	658'-688', 698'-713'	3704.85	3707.30	3712.22
North Trend	COW 2004-6	1082056.90	528907.80	3667.81	1.9	Chadron Formation	426'-476'	N/A ²	N/A ²	3720.88
North Trend	CPW 2004-2	1081697.12	521622.58	3678.60	1.5	Chadron Formation	615'-660', 670'-685'	3705.99	3710.60	3713.38
North Trend	RC-1 ³	1083422.10	515489.20	3646.70	1.0	Chadron Formation	330'-350'	Not Measured	Not Measured	3696.40
North Trend	RC-2	1082715.40	516909.30	3656.90	1.0	Chadron Formation	572'-592'	3703.93	3706.30	3700.26
North Trend	Well 97 ³	1085579.77	517549.98	3657.00	1.0	Chadron Formation	N/A	Not Measured	Not Measured	3690.72
North Trend	Well 123 ³	1086278.27	516504.11	3658.43	1.2	Chadron Formation	N/A	Not Measured	Not Measured	3672.11

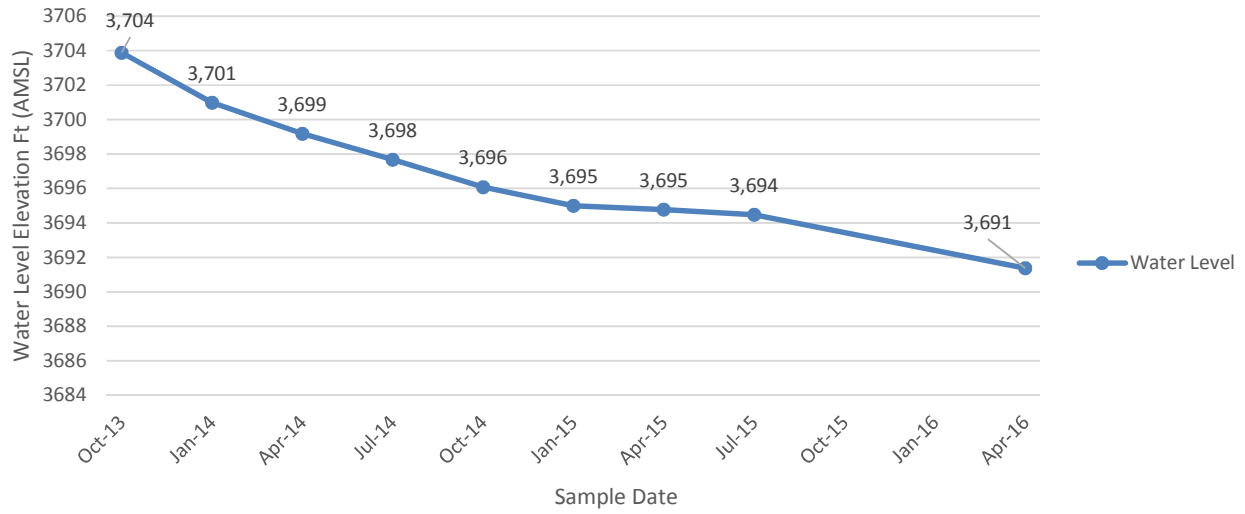
¹ Survey Coordinates are 1927 North American Datum, 2601 Nebraska North

² Well was not drilled at this sample date

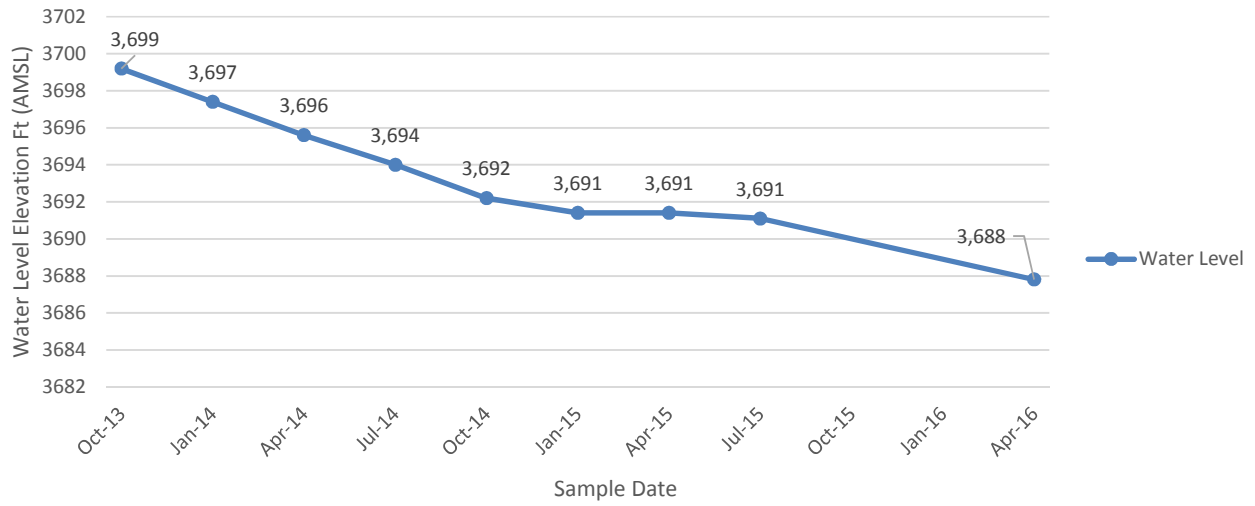
³ No Hydrographs plotted for wells with one data point

All of the above wells have been abandoned except RC-1, Well 97 and Well 123 which are privately owned

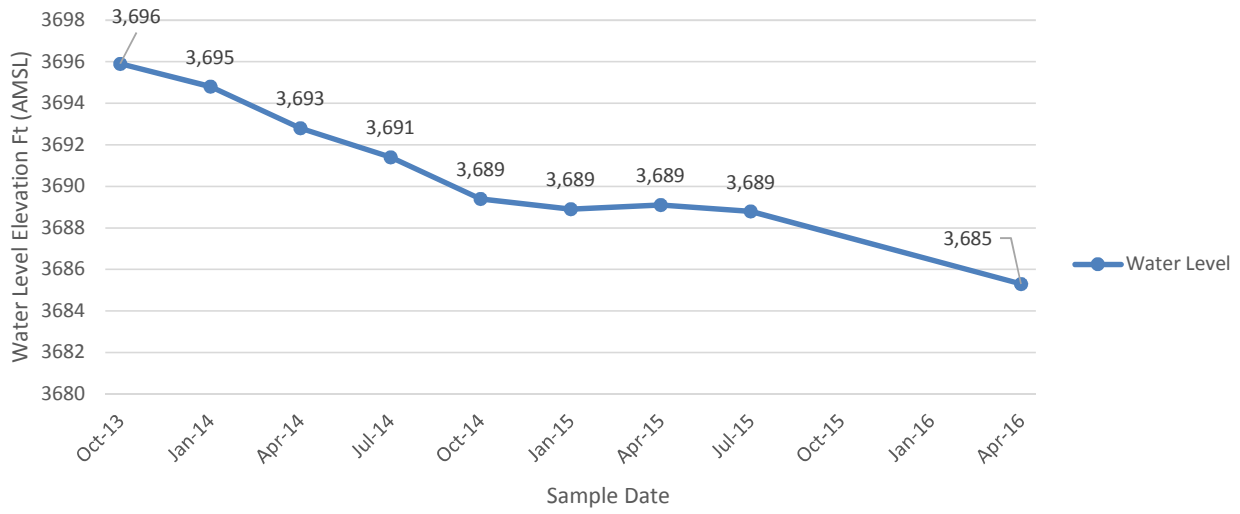
Marsland Well - Monitor 1



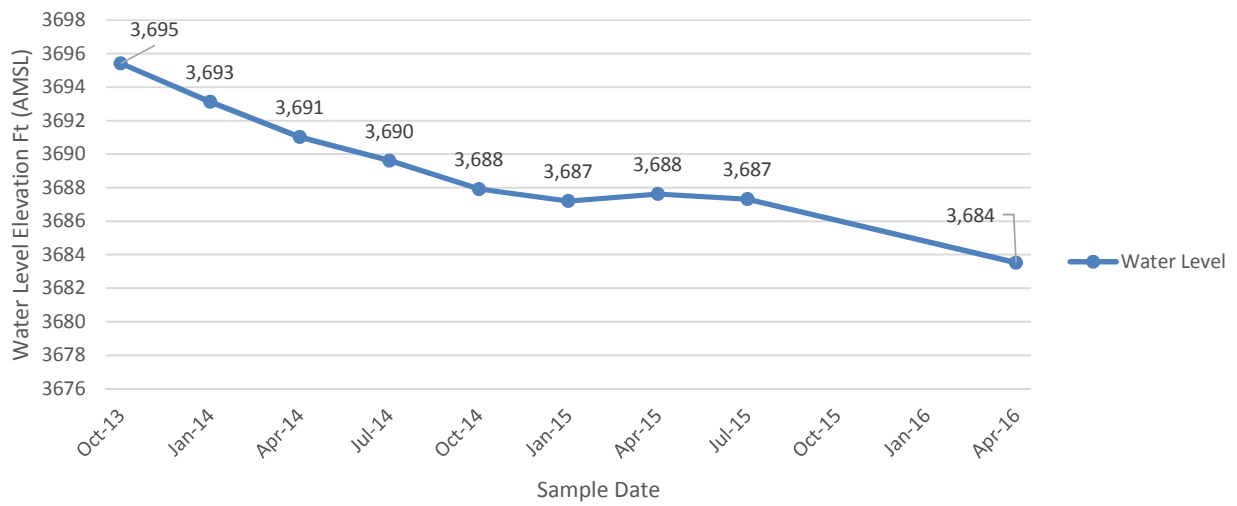
Marsland Well - Monitor 2



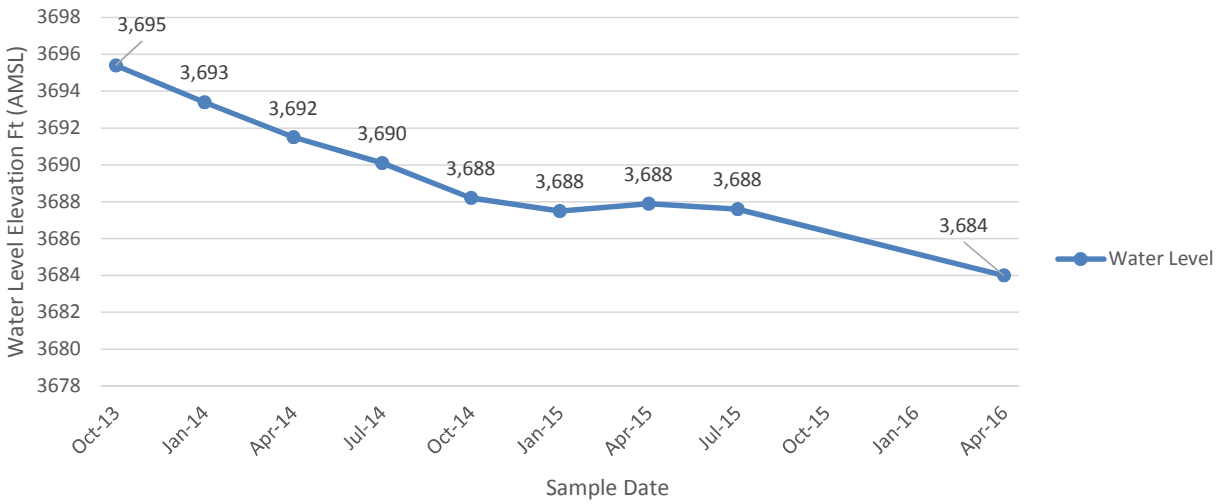
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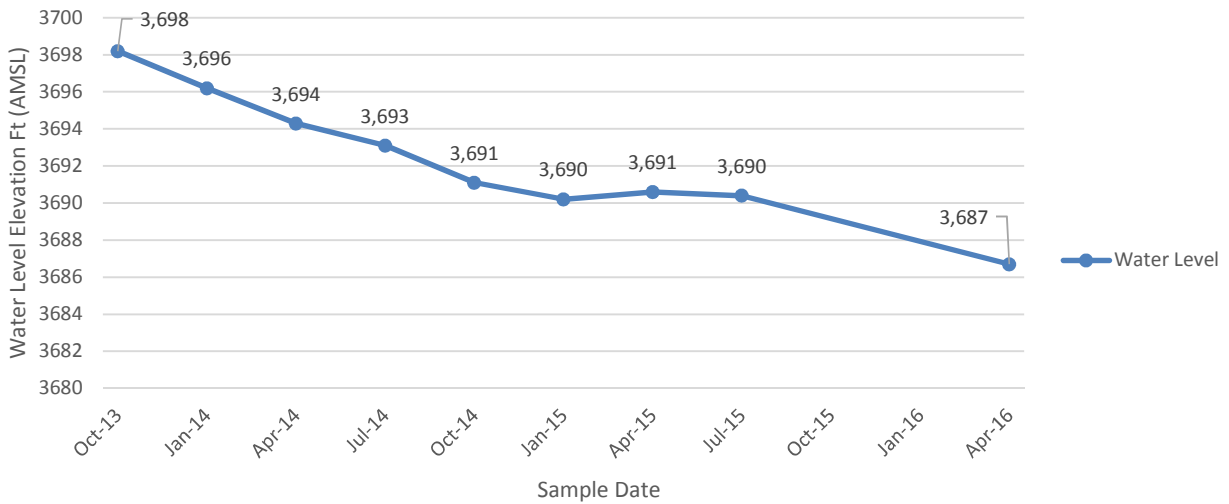
Marsland Well - Monitor 4A



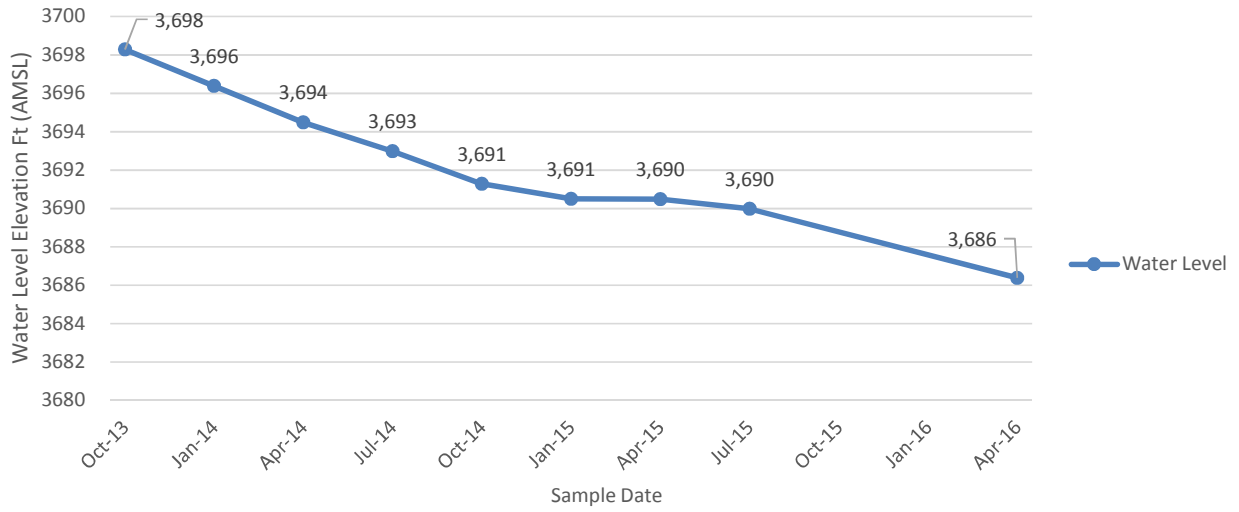
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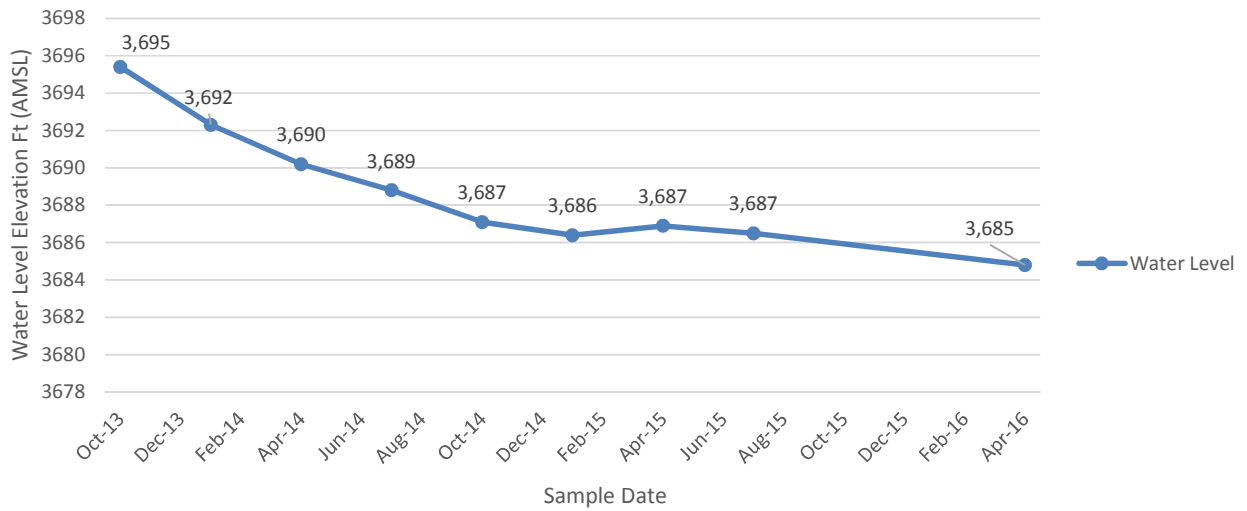
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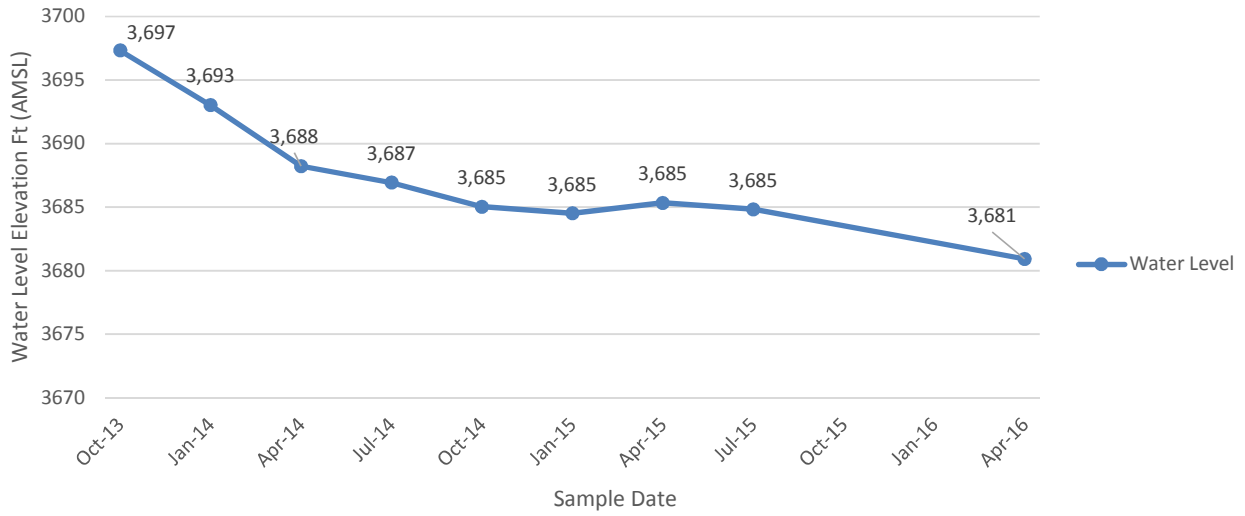
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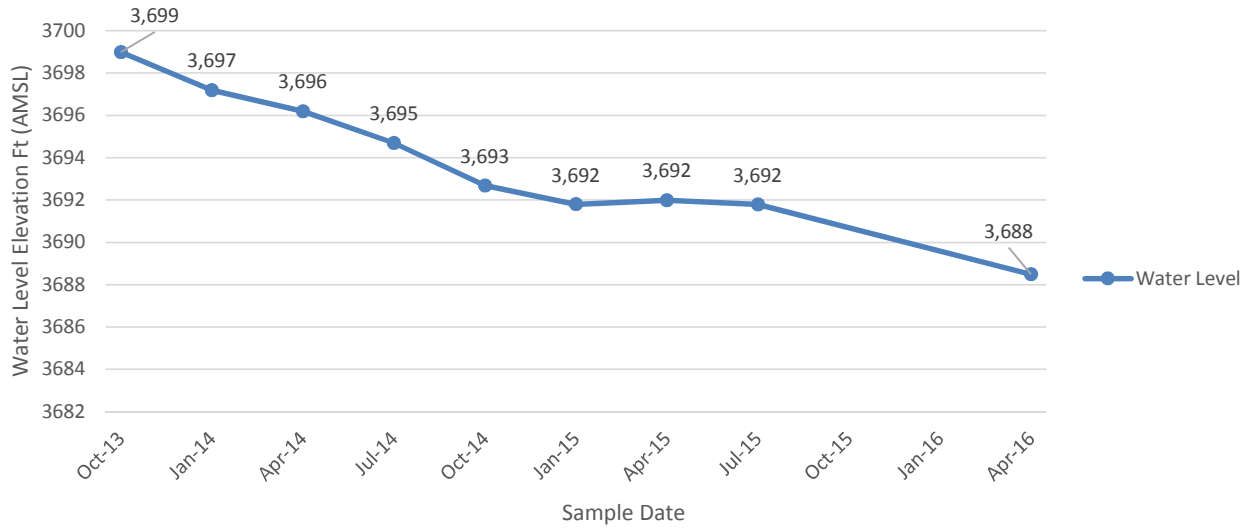
Marsland Well - Monitor 8



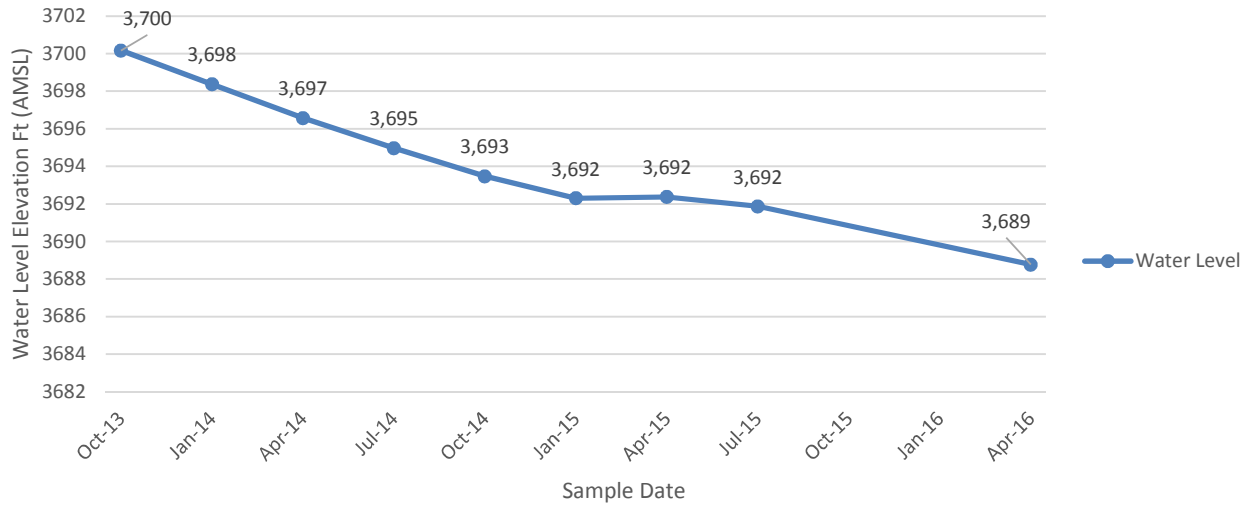
Marsland Well - Monitor 9



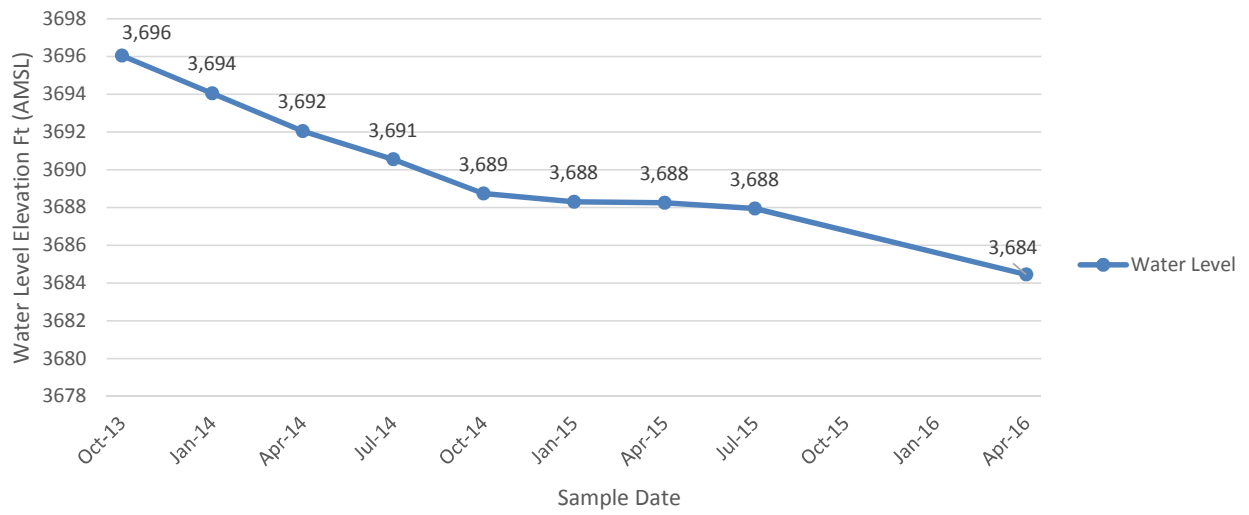
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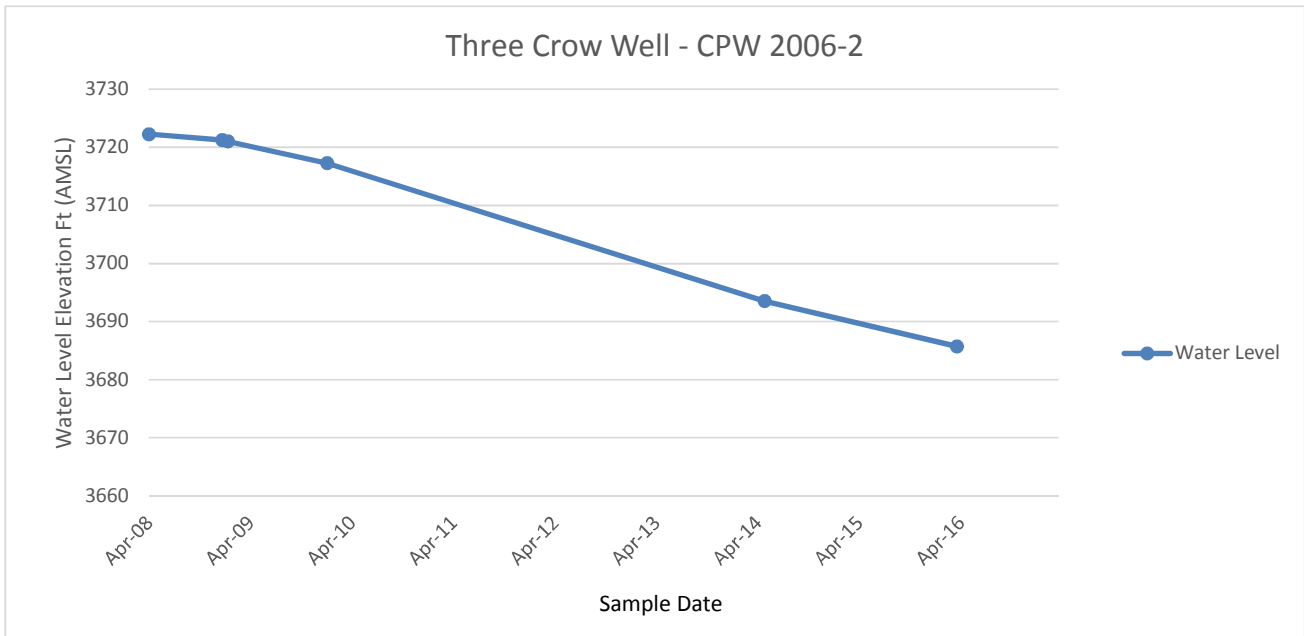
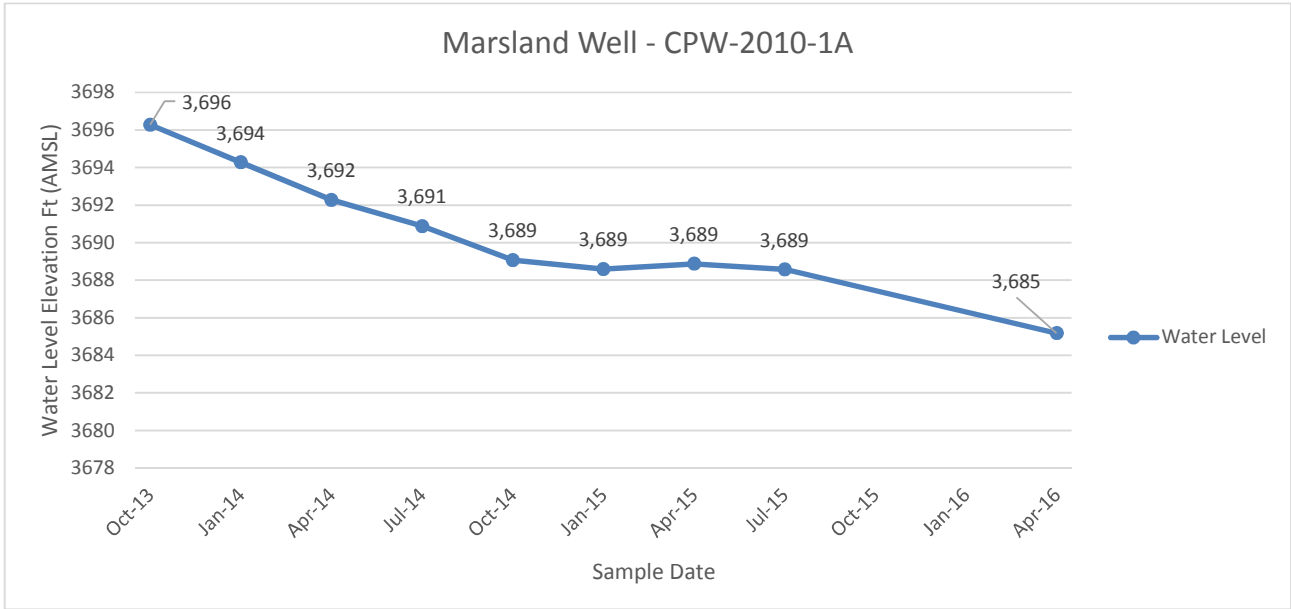


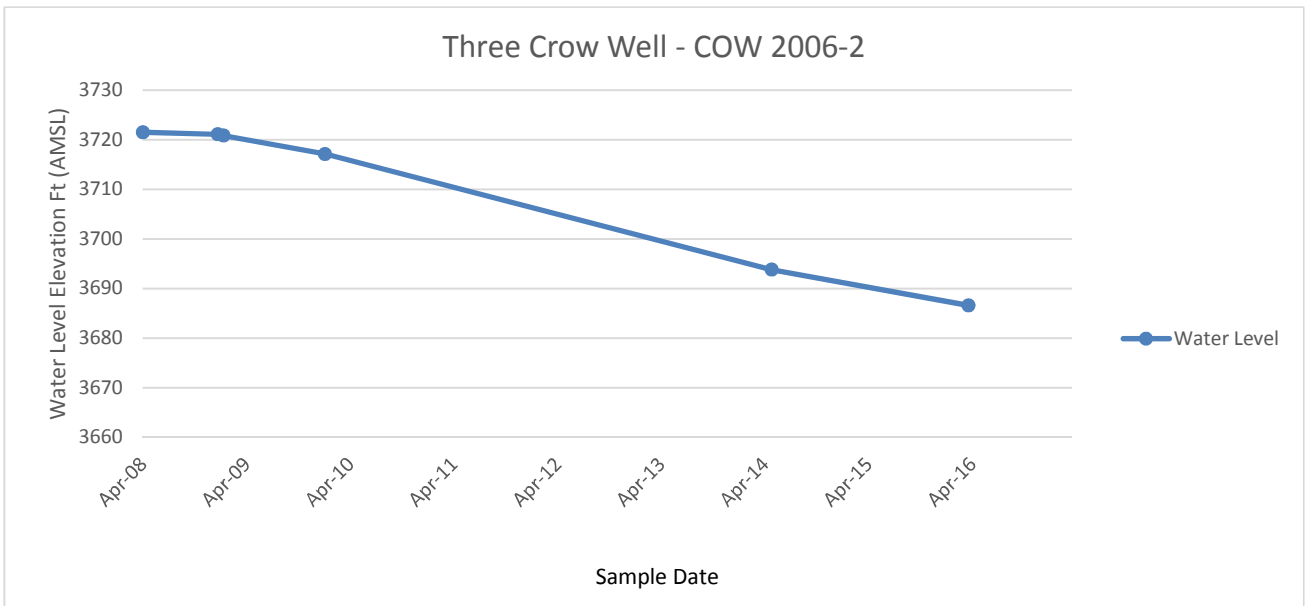
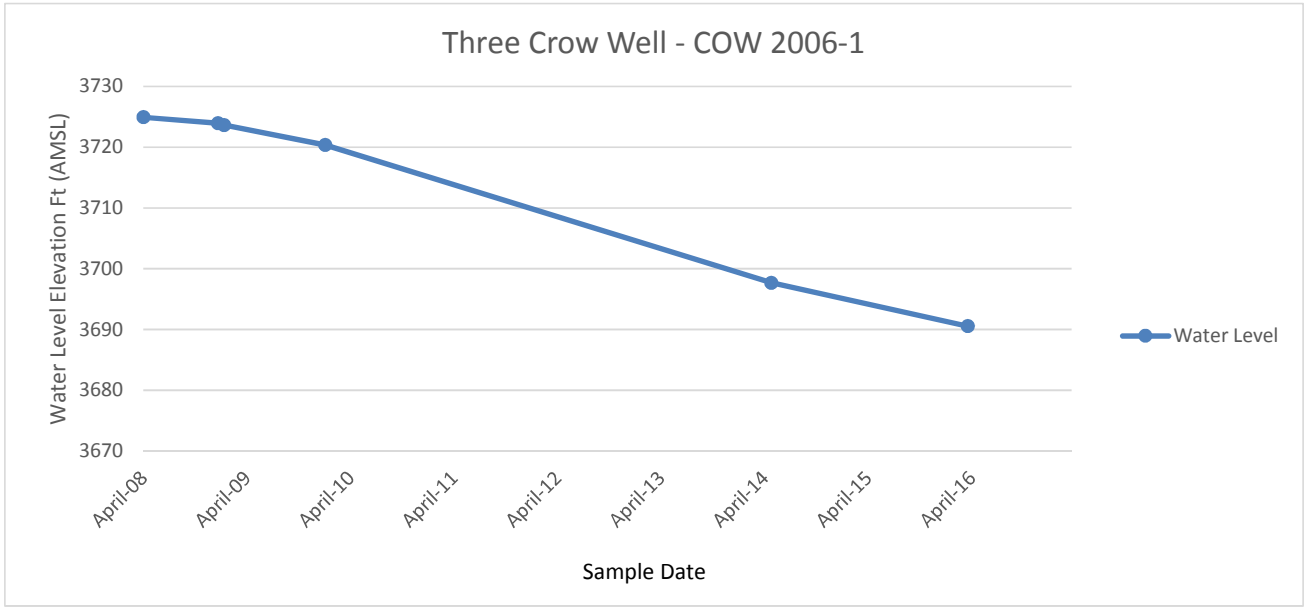
Marsland Well - Monitor 11

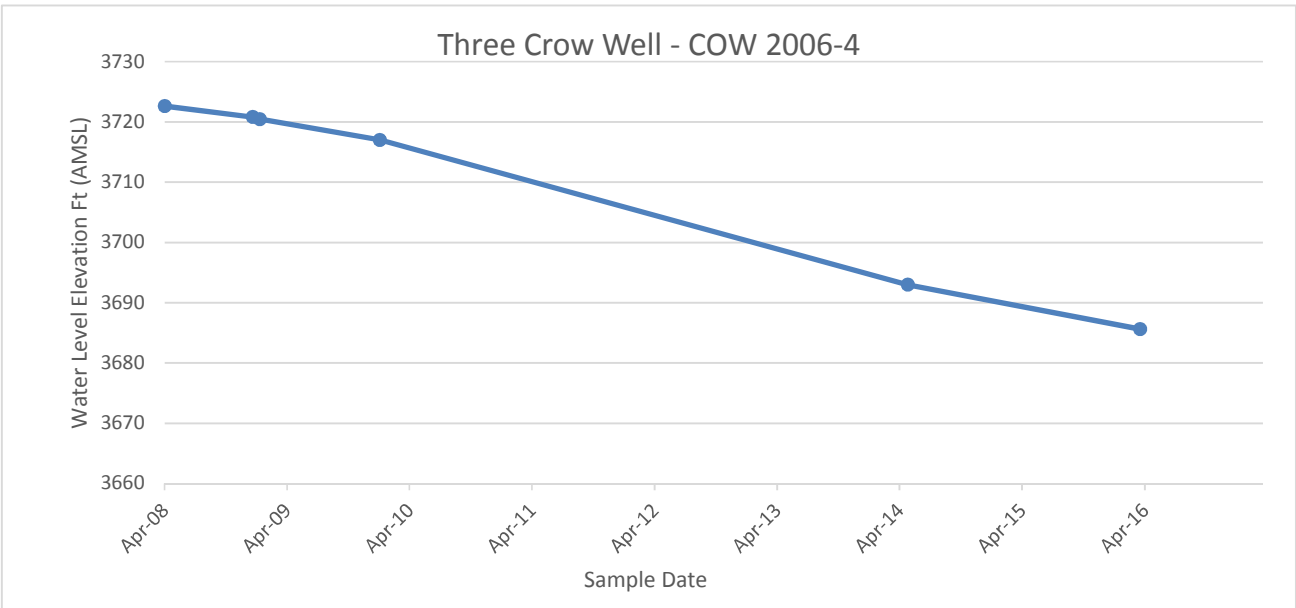
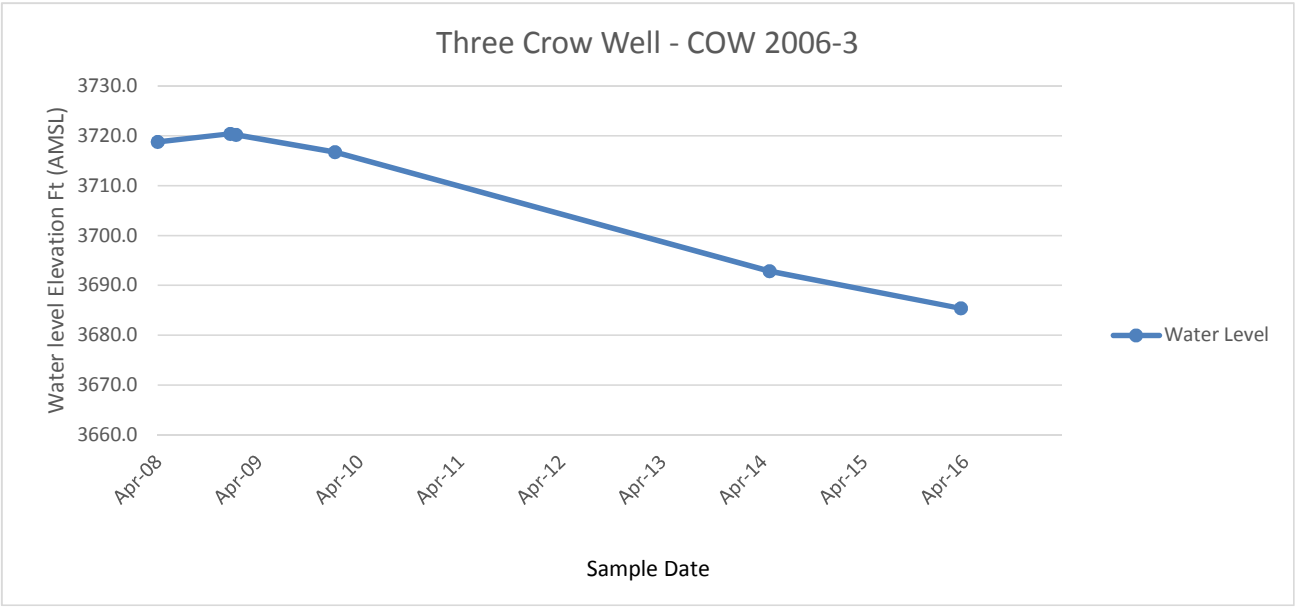


Marsland Well - CPW-2010-1

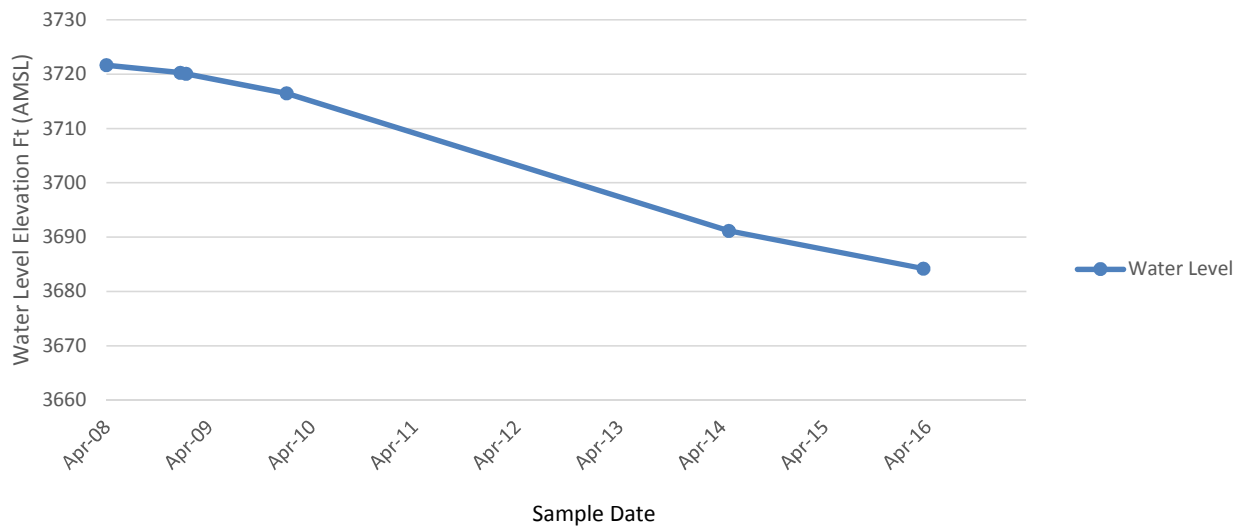




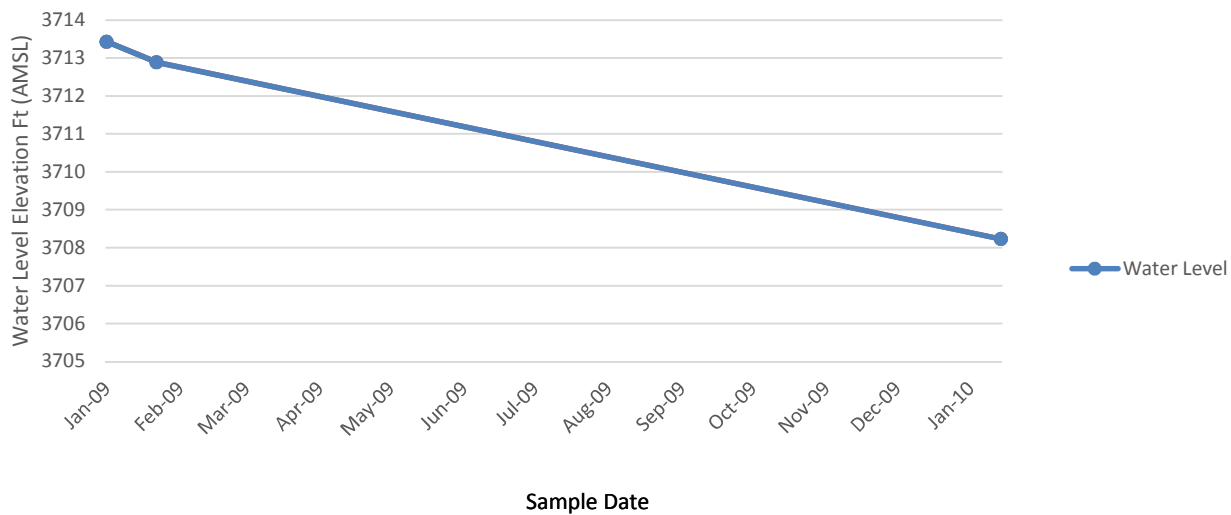




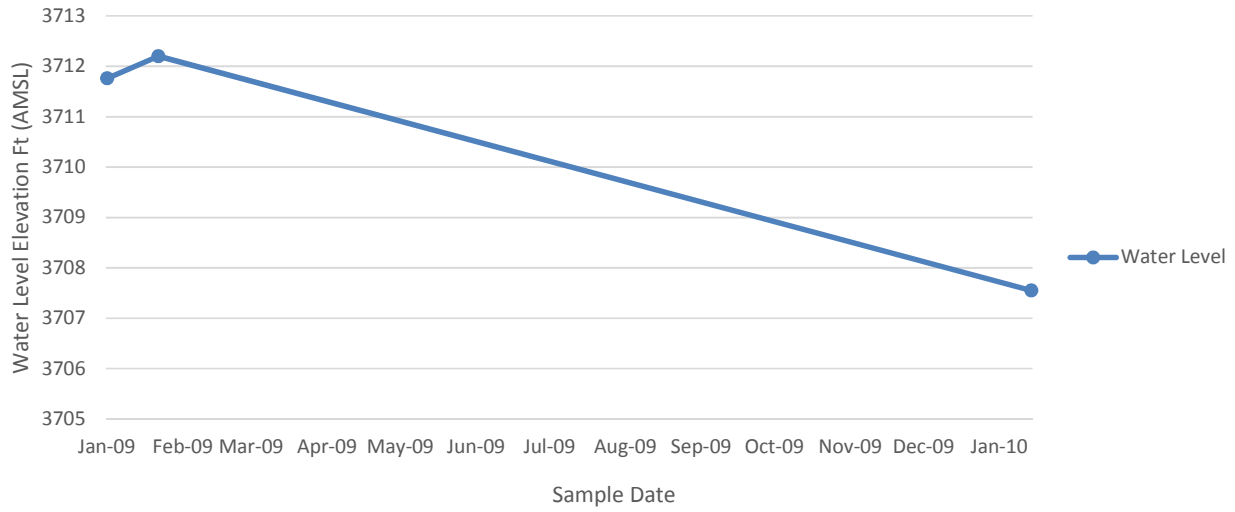
Three Crow Well - COW 2006-5



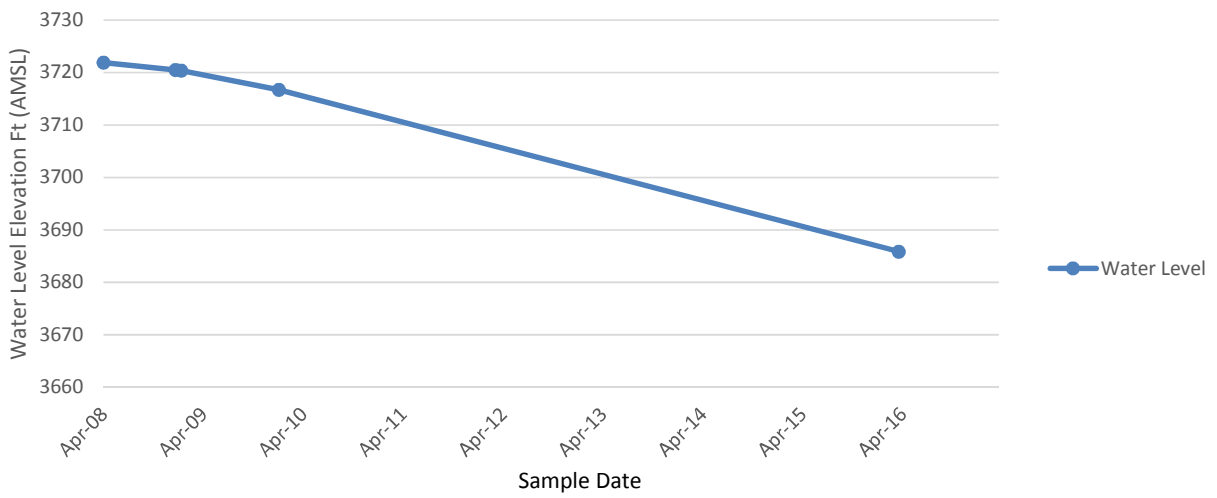
Three Crow - COW 2006-6

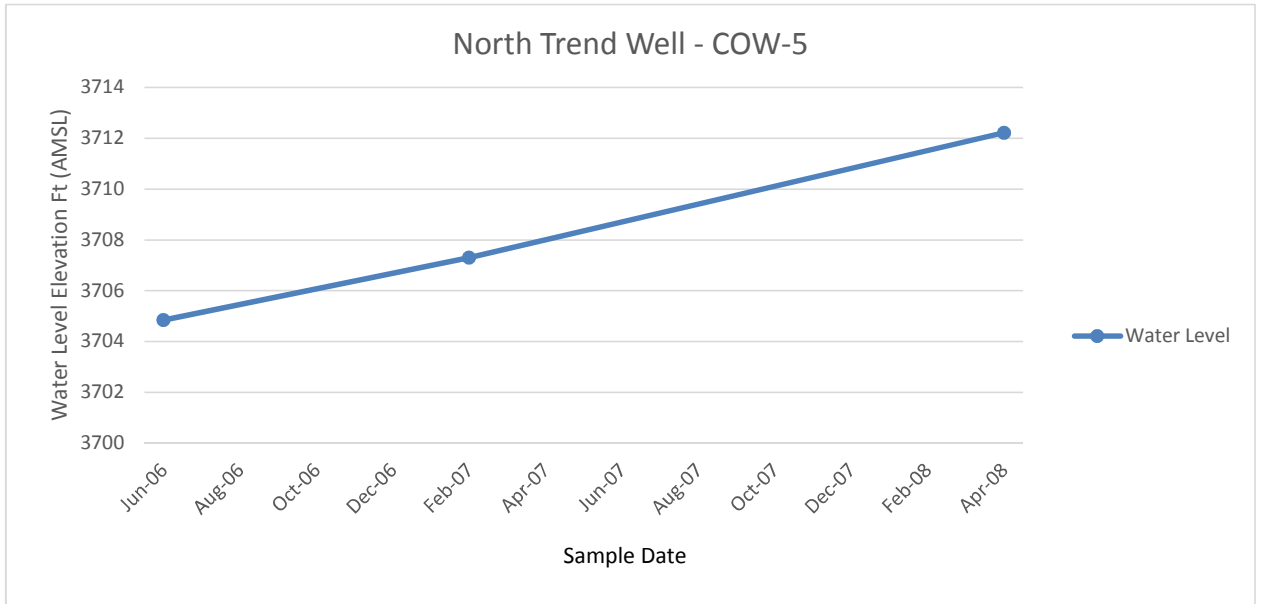
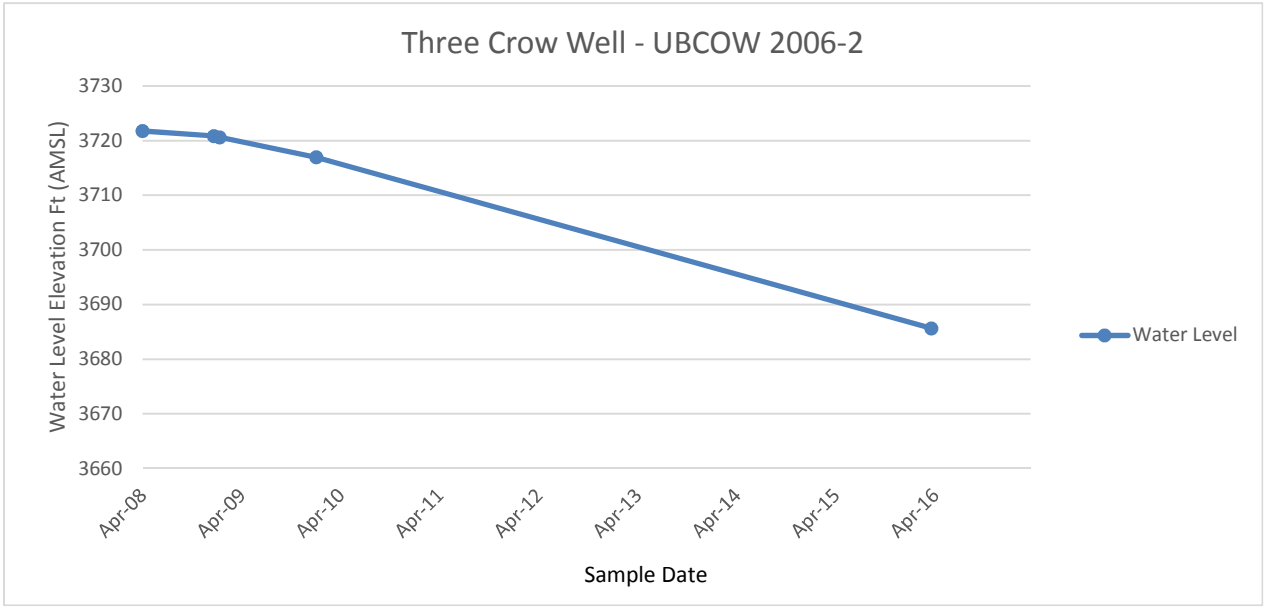


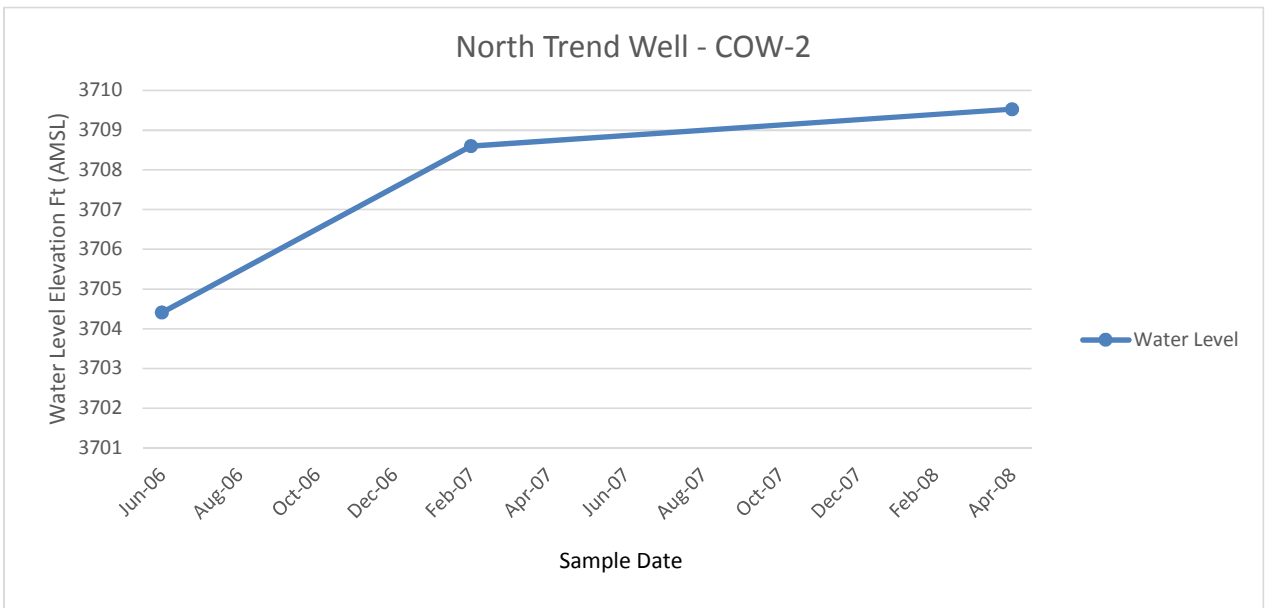
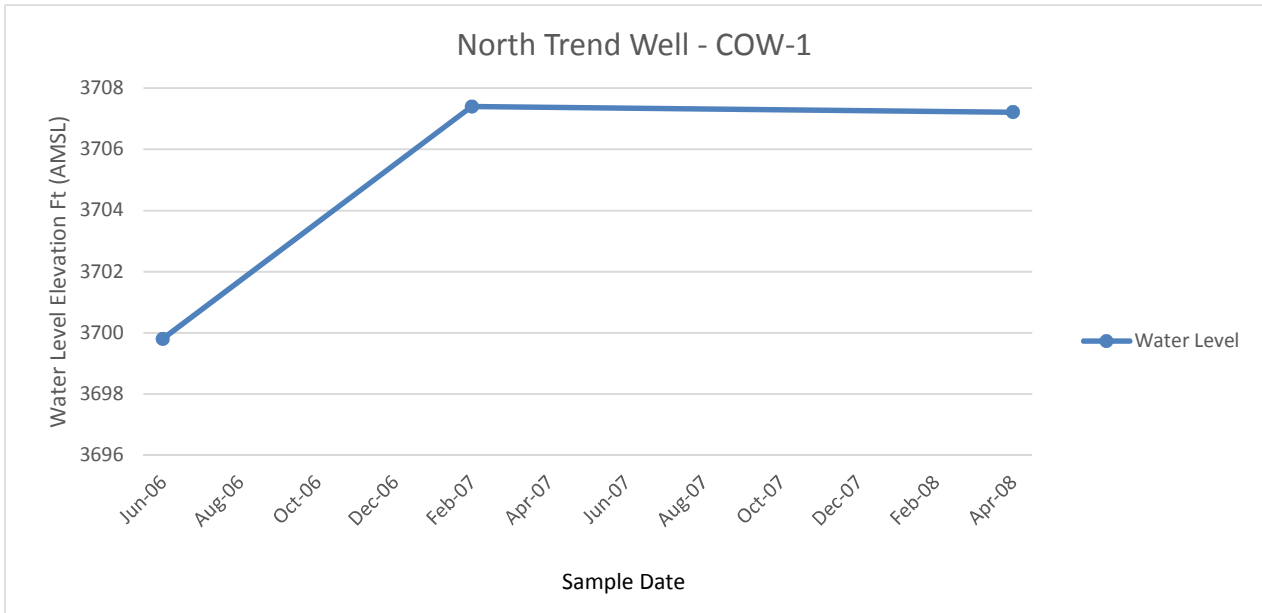
Three Crow - COW 2006-7

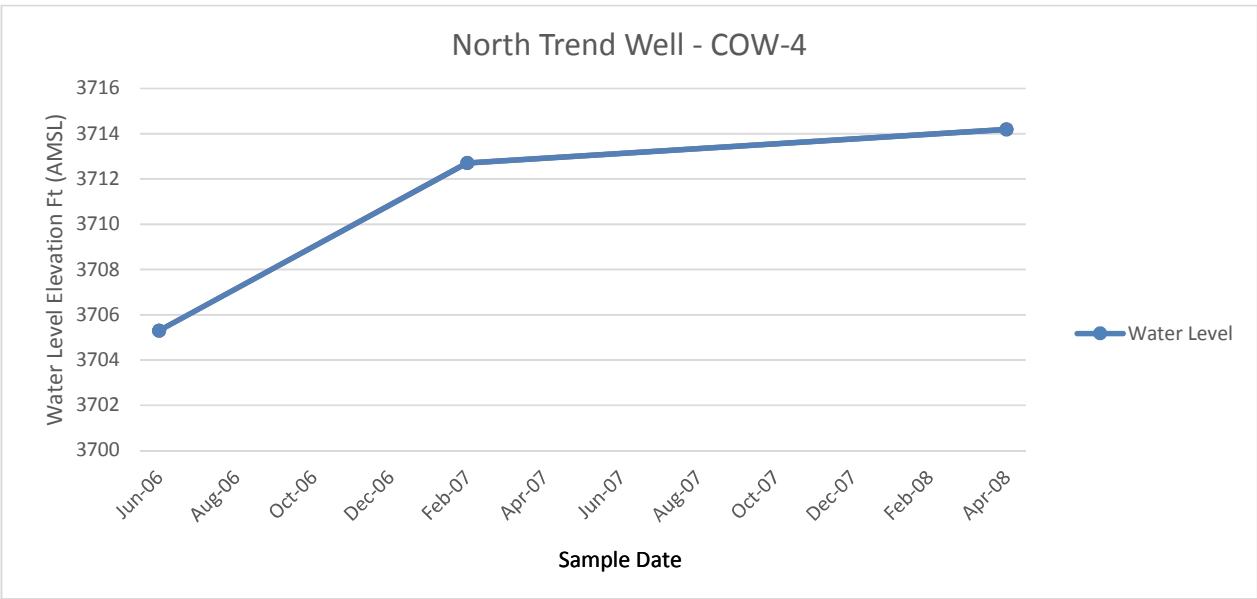
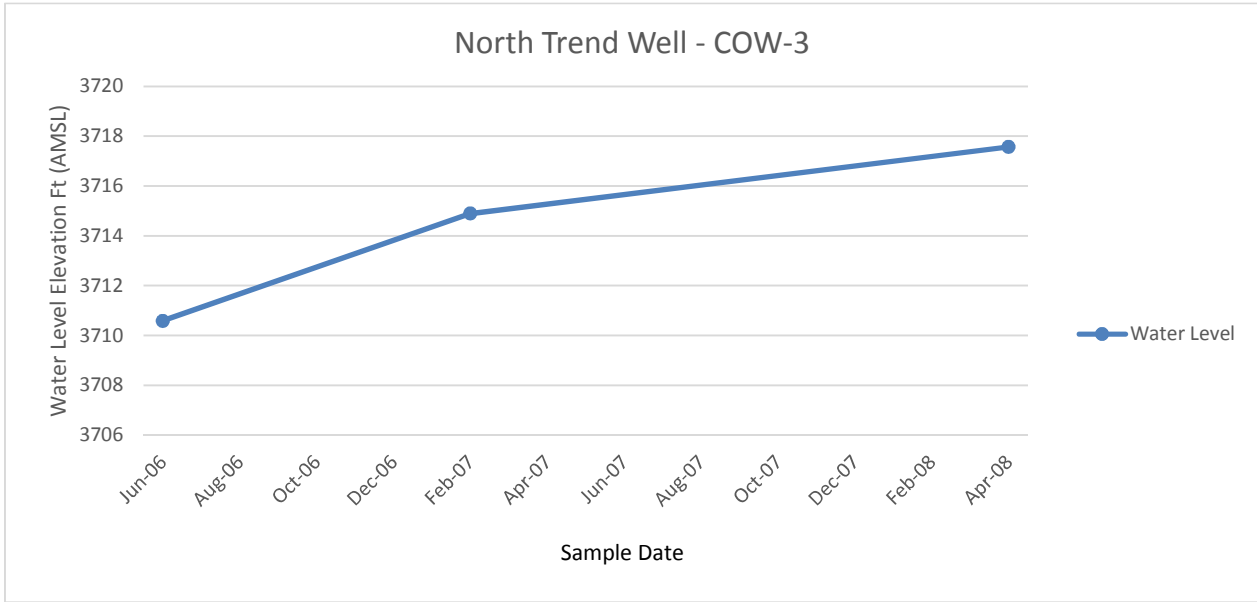


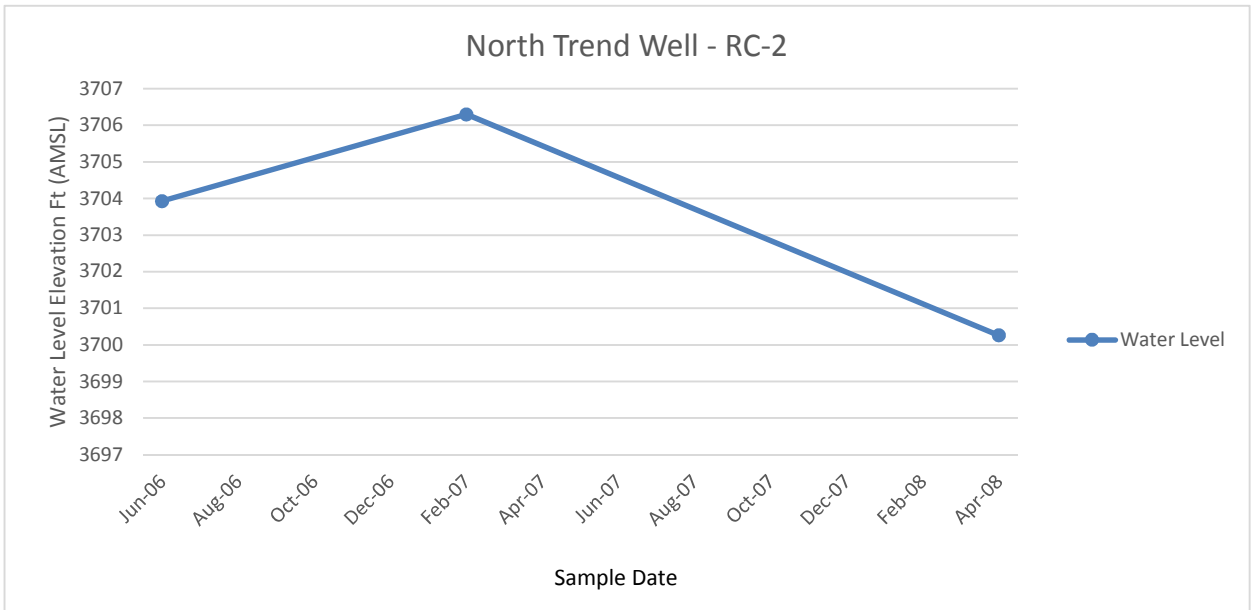
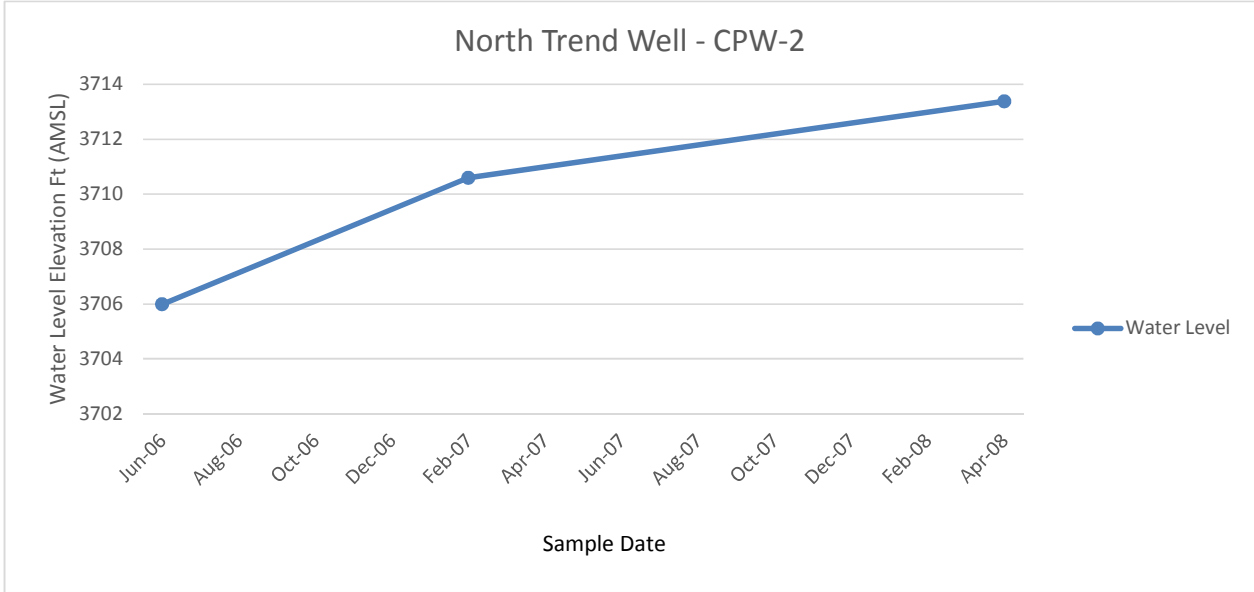
Three Crow Well - UBCOW 2006-1



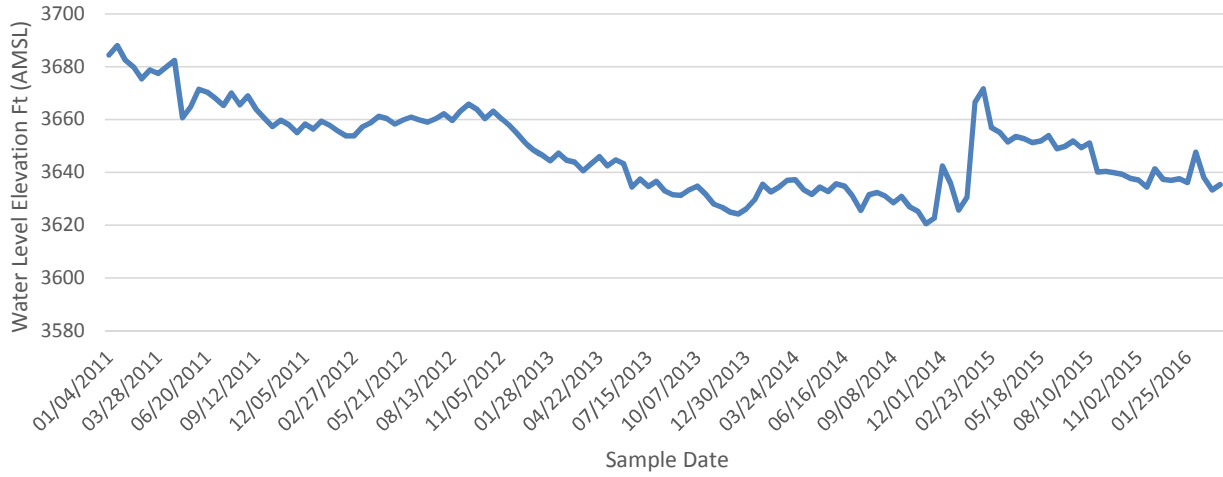




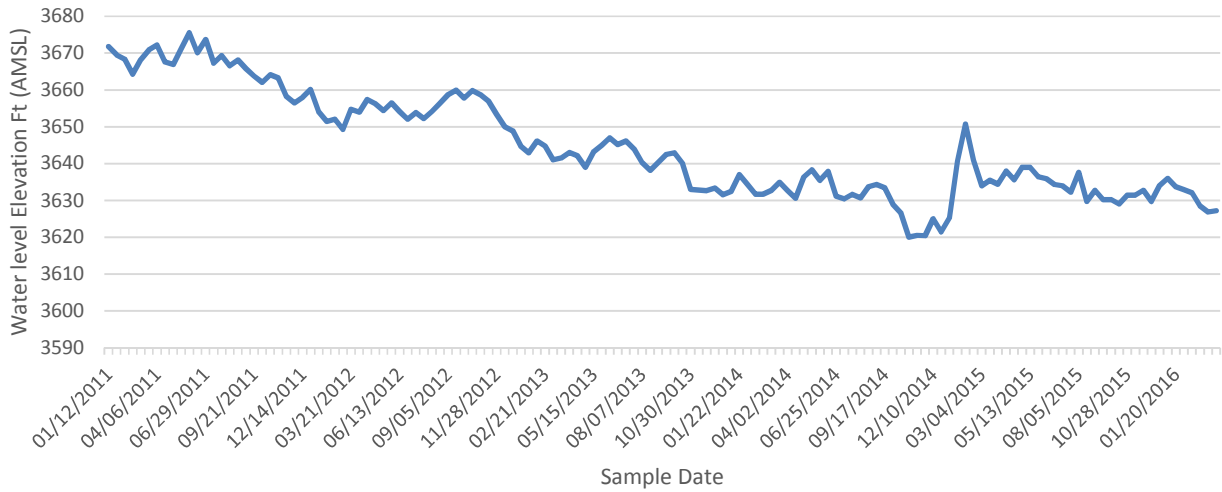




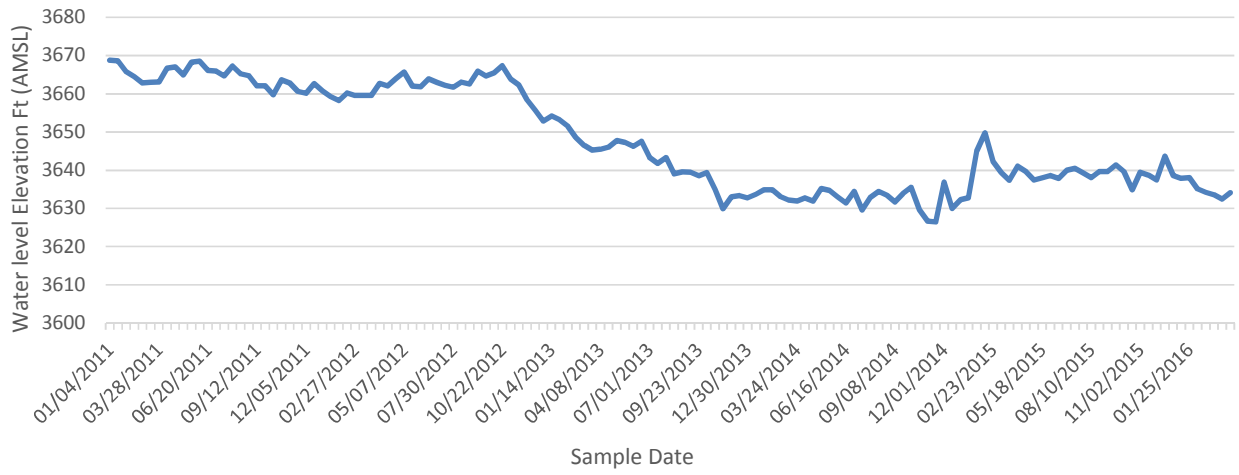
CM3-5 Water Level Elevation



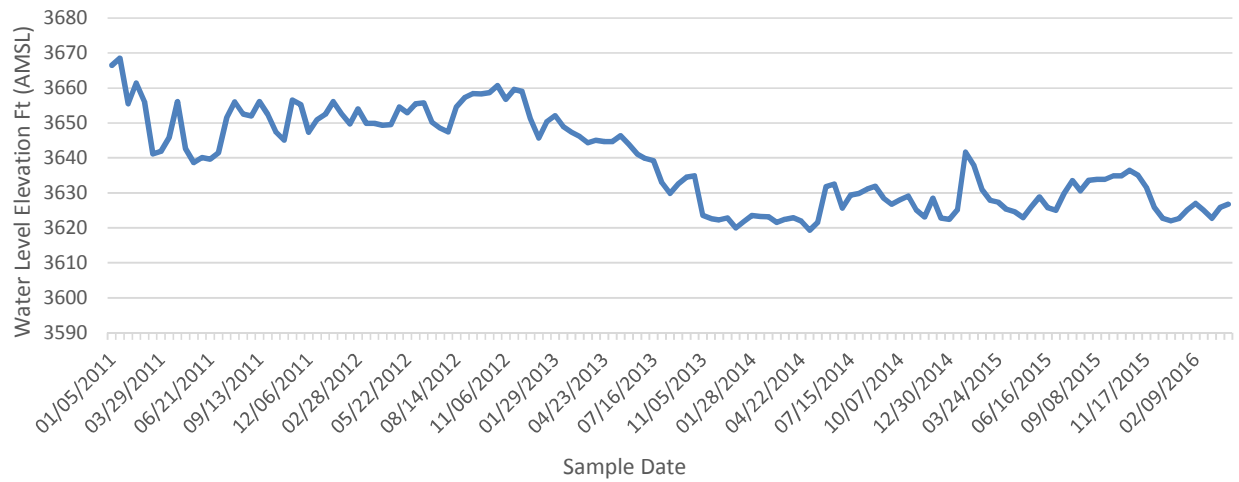
CM5-6 Water Level Elevation



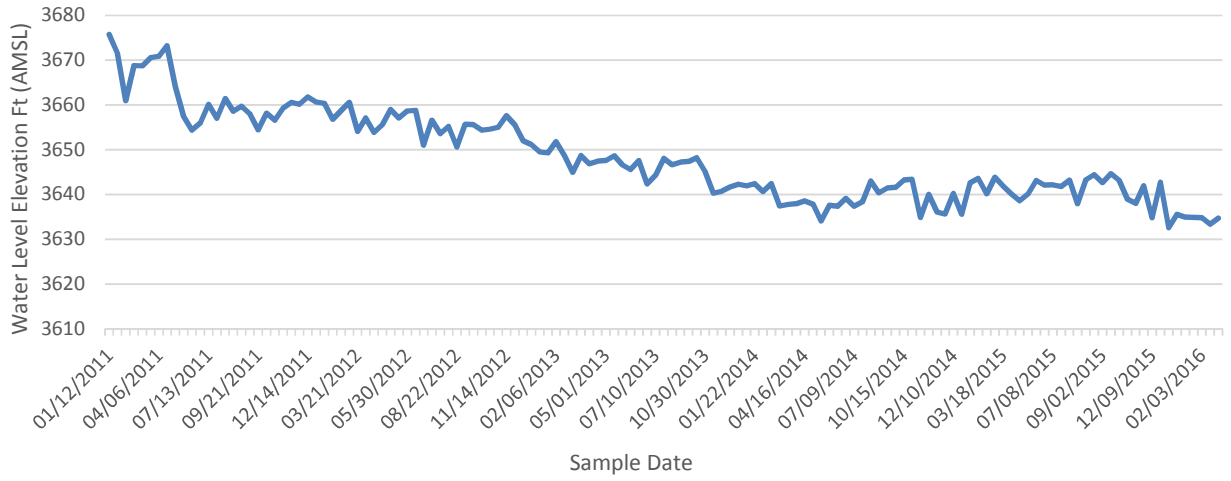
CM6-17 Water Level Elevation



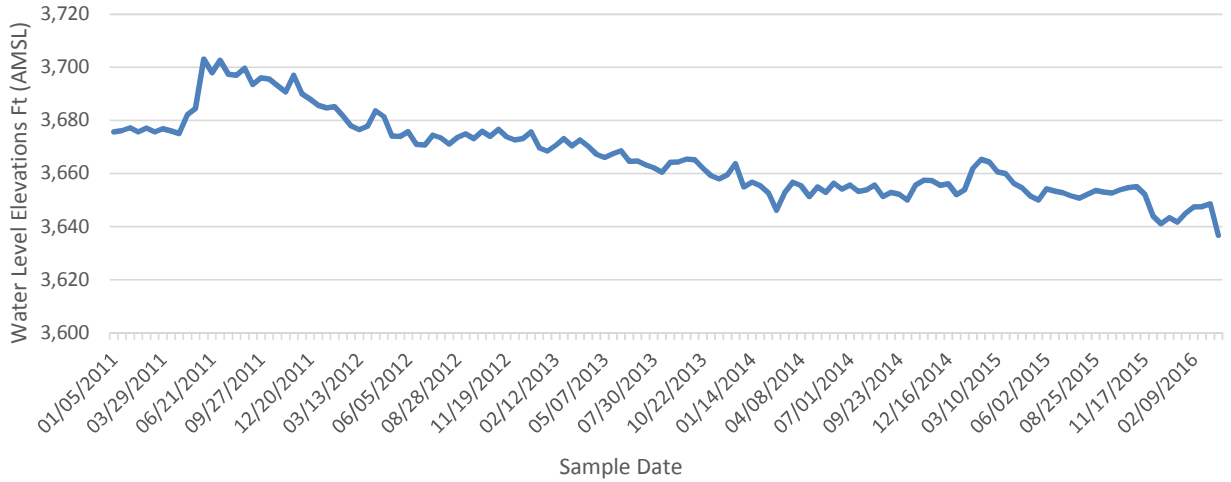
CM8-7 Water Level Elevation



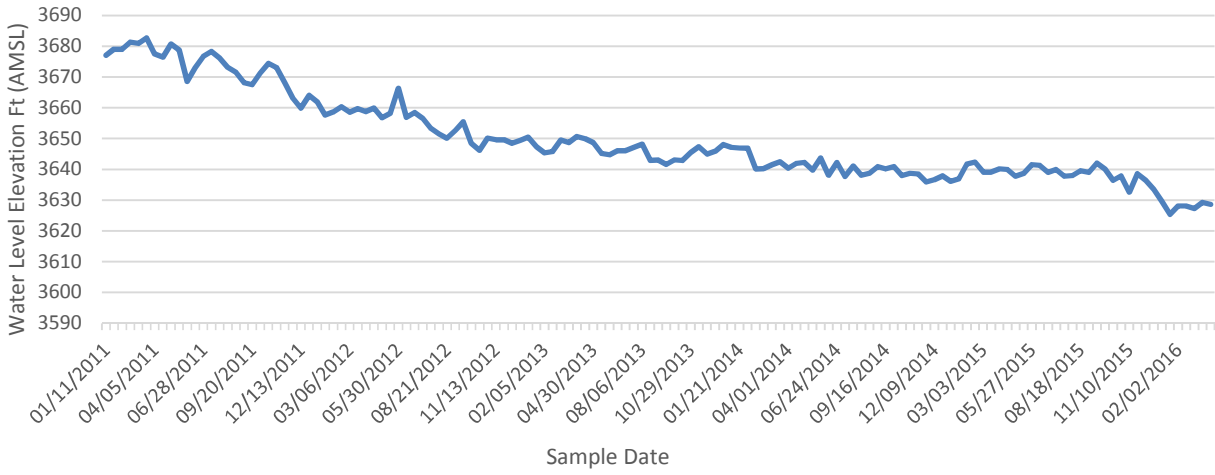
CM8-19 Water Level Elevation



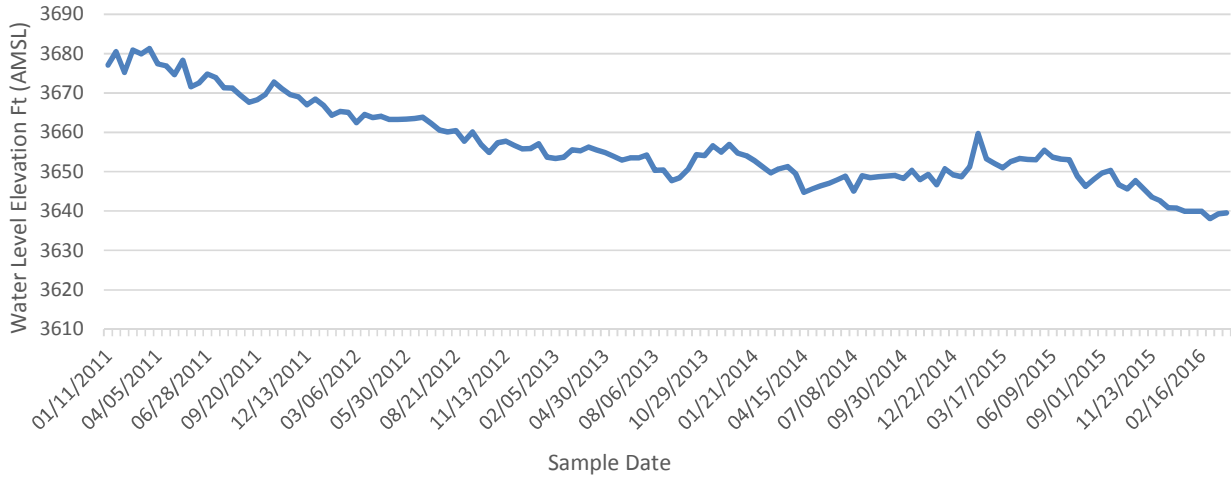
CM9-8 Water Level Elevation



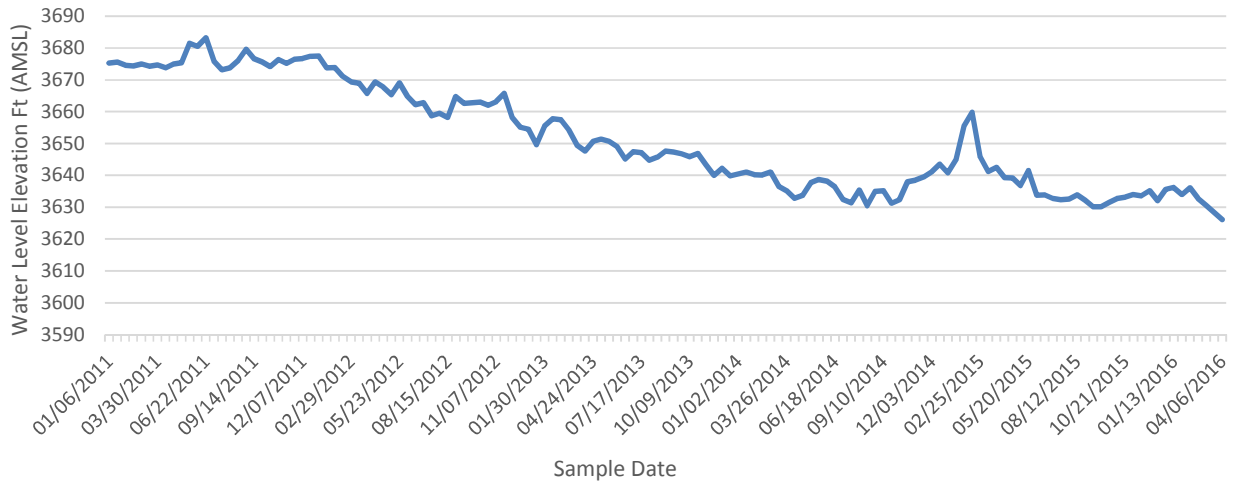
CM10-10 Water Level Elevation



CM10-17 Water Level Elevation



CM11-1 Water Level Elevation



CM11-15 Water Level Elevation

