

**Allen, Pam, NMENV**



**From:** Maestas, Ricardo, NMENV  
**Sent:** Tuesday, May 08, 2012 2:55 PM  
**To:** Allen, Pam, NMENV  
**Subject:** FW: Emailing: Corrected 03 Mar 2011.xls, ERRATA March 2011.xlsx  
**Attachments:** Corrected 03 Mar 2011.xls; ERRATA March 2011.xlsx

Email and attachment for WIPP File

-----Original Message-----

**From:** Ferguson, Daniel - DOE [mailto:[daniel.ferguson@wipp.ws](mailto:daniel.ferguson@wipp.ws)]  
**Sent:** Thursday, April 12, 2012 7:45 AM  
**To:** Maestas, Ricardo, NMENV  
**Cc:** Salness, Rick - RES  
**Subject:** FW: Emailing: Corrected 03 Mar 2011.xls, ERRATA March 2011.xlsx

<<Corrected 03 Mar 2011.xls>> Ri <<ERRATA March 2011.xlsx>> cardo,

Attached is the corrected water level data report for March. Please call me at (575) 234-8128 if you have questions.

Thanks,  
Dan

-----Original Message-----

**From:** Salness, Rick - RES  
**Sent:** Monday, April 09, 2012 1:58 PM  
**To:** Ferguson, Daniel - DOE  
**Cc:** Jimenez, Richard - RES; Watterson, Daniel - RES  
**Subject:** FW: Emailing: Corrected 03 Mar 2011.xls, ERRATA March 2011.xlsx

Dan - attached are the corrected March 2011 Water Level Data. We have corrected this in the 2011 ASER. We performed an extent of conditions and this was the only month that had this problem in the spreadsheet.

When we added the H-19 series for this month's quarterly round, the equations in the spreadsheet did not shift with the addition of the extra line, therefore not correctly calculating the freshwater head values. Please forward to Ricardo and if we need to formally submit an errata through cover letter, please let me know.

Thanks,

Rick Salness, P.G.  
Manager, Environmental Monitoring and Hydrology Washington TRU Solutions LLC - Regulatory Compliance Department Contractor to the Department of Energy  
4021 National Parks Hwy - MS 452-09  
Phone: (575) 234-8966  
Fax: (575) 234-6003



TABLE 1  
Groundwater level Measurements for March 2011(UPDATE)

Well Number	Zone	Top of Surveyed Casing Elevation (ft amsl)	Date	Time	Depth to Water from Measuring Point (feet)	Adjustment (feet)	Adjusted Depth to Water (feet)	Adjusted Depth to Water (m)	Water Level (ft amsl)	Water Level (m amsl)	Fresh-water Head (ft amsl)	Culebra Midpoint Elevation (ft amsl)	Specific Gravity	Column Height (feet)	Notes
AEC-7	CUL	3657.06	3/1/2011	08:52	612.56	0.00	612.56	186.71	3044.50	927.96	3064.77	2784.60	1.078	259.90	NA
C-2737 (PIP)	CUL	3400.76	3/3/2011	13:07	386.14	-0.60	386.74	117.88	3014.02	918.67	3022.24	2709.70	1.027	304.32	NA
ERDA-9	CUL	3410.17	3/2/2011	14:37	398.88	-0.03	398.91	121.59	3011.26	917.83	3034.17	2693.00	1.072	318.26	NA
H-02b2	CUL	3378.36	3/3/2011	11:47	335.38	0.00	335.38	102.22	3042.98	927.50	3046.88	2742.80	1.013	300.18	NA
H-03b2	CUL	3389.91	3/3/2011	12:48	387.70	0.00	387.70	118.17	3002.21	915.07	3015.11	2702.20	1.043	300.01	NA
H-04bR	CUL	3334.64	3/1/2011	13:23	330.40	0.00	330.40	100.71	3004.24	915.69	3007.43	2826.76	1.018	177.48	NA
H-05b	CUL	3506.78	3/1/2011	09:22	467.09	0.00	467.09	142.37	3039.69	926.50	3080.91	2596.50	1.093	443.19	NA
H-06bR	CUL	3349.22	3/2/2011	10:13	289.12	0.00	289.12	88.12	3060.10	932.72	3072.24	2731.90	1.037	328.20	NA
H-07b1	CUL	3163.72	3/2/2011	11:42	165.89	0.00	165.89	50.56	2997.83	913.74	2998.45	2893.80	1.006	104.03	NA
H-10c	CUL	3688.40	3/1/2011	10:56	719.89	0.00	719.89	219.42	2968.51	904.80	3027.86	2316.30	1.091	652.21	NA
H-11b4	CUL	3410.79	3/1/2011	14:59	422.98	0.00	422.98	128.92	2987.81	910.68	3003.78	2674.60	1.051	313.21	NA
H-12	CUL	3427.33	3/1/2011	10:13	456.60	0.00	456.60	139.17	2970.73	905.48	3011.59	2588.90	1.107	381.83	NA
H-15R	CUL	3482.02	3/2/2011	09:32	507.11	0.00	507.11	154.57	2974.91	906.75	3018.42	2609.30	1.119	365.61	NA
H-16	CUL	3410.06	3/3/2011	14:44	375.77	0.00	375.77	114.53	3034.29	924.85	3046.82	2695.63	1.037	338.66	NA
H-17	CUL	3385.24	3/1/2011	14:43	417.98	0.00	417.98	127.40	2967.26	904.42	3008.39	2664.80	1.136	302.46	NA
H-19b0	CUL	3418.33	3/2/2011	08:31	425.41	0.00	425.41	129.66	2992.92	912.24	3015.26	2664.40	1.068	328.52	NA
H-19b2	CUL	3418.93	3/1/2011	15:23	426.71	0.00	426.71	130.06	2992.22	912.03	3015.22	2662.90	1.070	329.32	NA
H-19b3	CUL	3419.02	3/2/2011	08:35	427.00	0.00	427.00	130.15	2992.02	911.97	3015.41	2664.40	1.071	327.62	NA
H-19b4	CUL	3418.98	3/2/2011	08:24	426.25	0.00	426.25	129.92	2992.73	912.18	3013.99	2664.40	1.065	328.33	NA
H-19b5	CUL	3418.58	3/1/2011	15:28	426.27	0.00	426.27	129.93	2992.31	912.06	3014.68	2664.40	1.068	327.91	NA
H-19b6	CUL	3419.02	3/2/2011	08:39	426.91	0.00	426.91	130.12	2992.11	912.00	3016.71	2664.40	1.075	327.71	NA
H-19b7	CUL	3418.94	3/1/2011	15:33	426.94	0.00	426.94	130.13	2992.00	911.96	3015.83	2664.40	1.073	327.60	NA
I-461	CUL	3283.61	3/3/2011	07:44	239.19	0.00	239.19	72.91	3044.42	927.94	3045.11	2907.10	1.005	137.32	NA
SNL-01	CUL	3512.84	3/3/2011	09:32	431.95	0.00	431.95	131.66	3080.89	939.06	3085.95	2900.00	1.028	180.89	NA
SNL-02	CUL	3323.06	3/3/2011	08:34	252.18	0.00	252.18	76.86	3070.88	936.00	3072.85	2852.30	1.009	218.58	NA
SNL-03	CUL	3490.35	3/3/2011	09:52	417.02	0.00	417.02	127.11	3073.33	936.75	3083.12	2723.80	1.028	349.53	NA
SNL-05	CUL	3379.98	3/3/2011	08:50	306.40	0.00	306.40	93.39	3073.58	936.83	3076.32	2731.00	1.008	342.58	NA
SNL-06	CUL	3646.11	3/1/2011	08:18	695.74	0.00	695.74	212.06	2950.37	899.27	3100.07	2307.90	1.233	642.47	1
SNL-08	CUL	3555.73	3/1/2011	09:40	543.62	0.00	543.62	165.70	3012.11	918.09	3052.16	2586.00	1.094	426.11	NA
SNL-09	CUL	3360.96	3/3/2011	07:32	310.56	0.00	310.56	94.66	3050.40	929.76	3055.02	2793.80	1.018	256.60	NA
SNL-10	CUL	3377.59	3/2/2011	10:52	325.58	0.00	325.58	99.24	3052.01	930.25	3054.60	2764.10	1.009	287.91	NA
SNL-12	CUL	3339.46	3/1/2011	11:51	337.90	0.00	337.90	102.99	3001.56	914.88	3002.72	2768.60	1.005	232.96	NA
SNL-13	CUL	3294.22	3/2/2011	11:10	280.30	0.00	280.30	85.44	3013.92	918.64	3016.70	2893.10	1.023	120.82	NA
SNL-14	CUL	3368.41	3/1/2011	14:24	376.82	0.00	376.82	114.85	2991.59	911.84	3005.05	2698.90	1.046	292.69	NA
SNL-15	CUL	3479.93	3/1/2011	09:53	575.82	0.00	575.82	175.51	2904.11	885.17	2983.23	2557.10	1.228	347.01	2
SNL-16	CUL	3133.00	3/2/2011	11:26	124.21	0.00	124.21	37.86	3008.79	917.08	3009.53	2926.70	1.009	82.09	NA
SNL-17	CUL	3238.06	3/1/2011	13:06	232.71	0.00	232.71	70.93	3005.35	916.03	3005.82	2888.50	1.004	116.85	NA
SNL-18	CUL	3375.44	3/3/2011	09:13	300.50	0.00	300.50	91.59	3074.94	937.24	3076.44	2824.20	1.006	250.74	NA
SNL-19	CUL	3222.65	3/3/2011	08:16	150.81	0.00	150.81	45.97	3071.84	936.30	3073.07	2867.60	1.006	204.24	NA
WIPP-11	CUL	3427.78	3/3/2011	10:07	362.04	0.00	362.04	110.35	3065.74	934.44	3084.08	2570.00	1.037	495.74	NA
WIPP-13	CUL	3405.67	3/2/2011	13:50	342.51	0.00	342.51	104.40	3063.16	933.65	3079.57	2690.30	1.044	372.86	NA
WIPP-19	CUL	3435.11	3/3/2011	13:43	389.45	0.00	389.45	118.70	3045.66	928.32	3065.07	2665.00	1.051	380.66	NA
WQSP-1	CUL	3419.25	3/2/2011	09:55	358.60	0.18	358.42	109.25	3060.83	932.94	3078.24	2705.60	1.049	355.23	NA
WQSP-2	CUL	3463.87	3/3/2011	14:20	398.22	0.20	398.02	121.32	3065.85	934.47	3085.92	2638.80	1.047	427.05	NA
WQSP-3	CUL	3480.14	3/3/2011	14:09	462.70	0.19	462.51	140.97	3017.63	919.77	3076.04	2620.30	1.147	397.33	NA
WQSP-4	CUL	3433.09	3/2/2011	08:48	442.90	0.18	442.72	134.94	2990.37	911.46	3016.75	2652.20	1.078	338.17	NA
WQSP-5	CUL	3384.38	3/3/2011	12:34	378.28	0.20	378.08	115.24	3006.30	916.32	3014.16	2725.70	1.028	280.60	NA
WQSP-6	CUL	3364.72	3/3/2011	12:07	343.42	0.19	343.23	104.62	3021.49	920.95	3025.55	2767.60	1.016	253.89	NA

TABLE 1  
Groundwater level Measurements for March 2011(UPDATE)

Well Number	Zone	Top of Surveyed Casing Elevation (ft amsl)	Date	Time	Depth to Water from Measuring Point (feet)	Adjustment (feet)	Adjusted Depth to Water (feet)	Adjusted Depth to Water (m)	Water Level (ft amsl)	Water Level (m amsl)	Fresh-water Head (ft amsl)	Culebra Midpoint Elevation (ft amsl)	Specific Gravity	Column Height (feet)	Notes
C-2737 (ANNULUS)	MAG	3400.76	3/3/2011	13:10	256.58	0.00	256.58	78.21	3144.18	958.35	NA	NA	NA	NA	NA
H-03b1	MAG	3390.72	3/3/2011	12:53	244.33	0.00	244.33	74.47	3146.39	959.02	NA	NA	NA	NA	NA
H-06c	MAG	3348.69	3/2/2011	10:18	278.00	0.00	278.00	84.73	3070.69	935.95	NA	NA	NA	NA	NA
H-08a	MAG	3433.28	3/1/2011	12:36	410.39	0.00	410.39	125.09	3022.89	921.38	NA	NA	NA	NA	NA
H-10a	MAG	3688.45	3/1/2011	10:48	575.95	0.00	575.95	175.55	3112.50	948.69	NA	NA	NA	NA	NA
H-11b2	MAG	3411.86	3/1/2011	15:04	272.18	0.00	272.18	82.96	3139.68	956.97	NA	NA	NA	NA	NA
H-14	MAG	3347.08	3/2/2011	13:35	211.99	0.00	211.99	64.61	3135.09	955.58	NA	NA	NA	NA	NA
H-15	MAG	3483.50	3/2/2011	09:25	343.03	0.00	343.03	104.56	3140.47	957.22	NA	NA	NA	NA	NA
H-18	MAG	3414.21	3/2/2011	10:34	260.71	0.00	260.71	79.46	3153.50	961.19	NA	NA	NA	NA	NA
WIPP-18	MAG	3457.57	3/3/2011	13:53	308.08	0.00	308.08	93.90	3149.49	959.96	NA	NA	NA	NA	3
WQSP-6a	DL	3364.05	3/3/2011	12:13	167.49	0.25	167.24	50.97	3196.81	974.39	NA	NA	NA	NA	NA
CB-1	B/C	3329.12	3/1/2011	14:08	315.07	0.00	315.07	96.03	3014.05	918.68	NA	NA	NA	NA	NA
DOE-2	B/C	3419.18	3/3/2011	10:21	352.35	0.00	352.35	107.40	3066.83	934.77	NA	NA	NA	NA	NA
C-2505	SR/D	3412.93	3/2/2011	15:27	45.30	0.00	45.30	13.81	3367.63	1026.45	NA	NA	NA	NA	NA
C-2506	SR/D	3412.84	3/2/2011	15:31	44.66	0.00	44.66	13.61	3368.18	1026.62	NA	NA	NA	NA	NA
C-2507	SR/D	3409.91	3/2/2011	15:21	45.18	0.00	45.18	13.77	3364.73	1025.57	NA	NA	NA	NA	NA
C-2811	SR/D	3398.84	3/3/2011	13:16	51.99	0.00	51.99	15.85	3346.85	1020.12	NA	NA	NA	NA	NA
PZ-01	SR/D	3413.28	3/2/2011	15:41	41.68	0.00	41.68	12.70	3371.60	1027.66	NA	NA	NA	NA	NA
PZ-02	SR/D	3413.36	3/2/2011	15:36	42.32	0.00	42.32	12.90	3371.04	1027.49	NA	NA	NA	NA	NA
PZ-03	SR/D	3416.12	3/3/2011	15:00	43.83	0.00	43.83	13.36	3372.29	1027.87	NA	NA	NA	NA	NA
PZ-04	SR/D	3412.01	3/2/2011	15:44	45.95	0.00	45.95	14.01	3366.06	1025.98	NA	NA	NA	NA	NA
PZ-05	SR/D	3415.24	3/3/2011	14:58	42.45	0.00	42.45	12.94	3372.79	1028.03	NA	NA	NA	NA	NA
PZ-06	SR/D	3413.33	3/3/2011	14:52	43.10	0.00	43.10	13.14	3370.23	1027.25	NA	NA	NA	NA	NA
PZ-07	SR/D	3413.84	3/2/2011	14:12	36.93	0.00	36.93	11.26	3376.91	1029.28	NA	NA	NA	NA	NA
PZ-08	SR/D	3418.19	3/3/2011	13:29	62.58	0.00	62.58	19.07	3355.61	1022.79	NA	NA	NA	NA	NA
PZ-09	SR/D	3421.09	3/3/2011	13:37	57.35	0.00	57.35	17.48	3363.74	1025.27	NA	NA	NA	NA	NA
PZ-10	SR/D	3405.73	3/2/2011	14:19	38.11	0.00	38.11	11.62	3367.62	1026.45	NA	NA	NA	NA	NA
PZ-11	SR/D	3418.78	3/2/2011	14:05	44.30	0.00	44.30	13.50	3374.48	1028.54	NA	NA	NA	NA	NA
PZ-12	SR/D	3408.92	3/2/2011	14:28	51.65	0.00	51.65	15.74	3357.27	1023.29	NA	NA	NA	NA	NA
PZ-13	SR/D	3422.24	3/2/2011	14:54	65.96	0.00	65.96	20.10	3356.28	1022.99	NA	NA	NA	NA	NA
PZ-14	SR/D	3420.58	3/2/2011	14:44	67.36	0.00	67.36	20.53	3353.22	1022.06	NA	NA	NA	NA	NA
PZ-15	SR/D	3430.86	3/2/2011	14:50	47.53	0.00	47.53	14.49	3383.33	1031.24	NA	NA	NA	NA	NA

**Notes**

1. Recovering from development 09/2005 and bailing 01/2007.
2. Recovering from pumping 04/2007.
3. Water level depressed from SNL testing ending on March 2010; recovering.

NA = Not applicable

## Supplemental Water Level Elevation Data

## Groundwater level Measurements for 1

Well Number	Zone	Top of Surveyed Casing Elevation (ft amsl)	Date	Time	Depth to Water from Measuring Point (feet)	Adjustment (feet)	Adjusted Depth to Water (feet)
H-19b2	CUL	3418.93	3/1/2011	15:23	426.71	0.00	426.71
H-19b3	CUL	3419.02	3/2/2011	08:35	427.00	0.00	427.00
H-19b4	CUL	3418.98	3/2/2011	08:24	426.25	0.00	426.25
H-19b5	CUL	3418.58	3/1/2011	15:28	426.27	0.00	426.27
H-19b6	CUL	3419.02	3/2/2011	08:39	426.91	0.00	426.91
H-19b7	CUL	3418.94	3/1/2011	15:33	426.94	0.00	426.94
I-461	CUL	3283.61	3/3/2011	07:44	239.19	0.00	239.19
SNL-01	CUL	3512.84	3/3/2011	09:32	431.95	0.00	431.95
SNL-02	CUL	3323.06	3/3/2011	08:34	252.18	0.00	252.18
SNL-03	CUL	3490.35	3/3/2011	09:52	417.02	0.00	417.02
SNL-05	CUL	3379.98	3/3/2011	08:50	306.40	0.00	306.40
SNL-06	CUL	3646.11	3/1/2011	08:18	695.74	0.00	695.74
SNL-08	CUL	3555.73	3/1/2011	09:40	543.62	0.00	543.62
SNL-09	CUL	3360.96	3/3/2011	07:32	310.56	0.00	310.56
SNL-10	CUL	3377.59	3/2/2011	10:52	325.58	0.00	325.58
SNL-12	CUL	3339.46	3/1/2011	11:51	337.90	0.00	337.90
SNL-13	CUL	3294.22	3/2/2011	11:10	280.30	0.00	280.30
SNL-14	CUL	3368.41	3/1/2011	14:24	376.82	0.00	376.82
SNL-15	CUL	3479.93	3/1/2011	09:53	575.82	0.00	575.82
SNL-16	CUL	3133.00	3/2/2011	11:26	124.21	0.00	124.21
SNL-17	CUL	3238.06	3/1/2011	13:06	232.71	0.00	232.71
SNL-18	CUL	3375.44	3/3/2011	09:13	300.50	0.00	300.50
SNL-19	CUL	3222.65	3/3/2011	08:16	150.81	0.00	150.81
WIPP-11	CUL	3427.78	3/3/2011	10:07	362.04	0.00	362.04
WIPP-13	CUL	3405.67	3/2/2011	13:50	342.51	0.00	342.51
WIPP-19	CUL	3435.11	3/3/2011	13:43	389.45	0.00	389.45

ata for 2011

March 2011

Adjusted Depth to Water (m)	Water Level (ft amsl)	Water Level (m amsl)	Fresh- water Head (ft amsl)	Culebra Midpoint Elevation (ft amsl)	Specific Gravity	Column Height (feet)
130.06	2992.22	912.03	3015.22	2662.90	1.070	329.32
130.15	2992.02	911.97	3015.41	2664.40	1.071	327.62
129.92	2992.73	912.18	3013.99	2664.40	1.065	328.33
129.93	2992.31	912.06	3014.68	2664.40	1.068	327.91
130.12	2992.11	912.00	3016.71	2664.40	1.075	327.71
130.13	2992.00	911.96	3015.83	2664.40	1.073	327.60
72.91	3044.42	927.94	3045.11	2907.10	1.005	137.32
131.66	3080.89	939.06	3085.95	2900.00	1.028	180.89
76.86	3070.88	936.00	3072.85	2852.30	1.009	218.58
127.11	3073.33	936.75	3083.12	2723.80	1.028	349.53
93.39	3073.58	936.83	3076.32	2731.00	1.008	342.58
212.06	2950.37	899.27	3100.07	2307.90	1.233	642.47
165.70	3012.11	918.09	3052.16	2586.00	1.094	426.11
94.66	3050.40	929.76	3055.02	2793.80	1.018	256.60
99.24	3052.01	930.25	3054.60	2764.10	1.009	287.91
102.99	3001.56	914.88	3002.72	2768.60	1.005	232.96
85.44	3013.92	918.64	3016.70	2893.10	1.023	120.82
114.85	2991.59	911.84	3005.05	2698.90	1.046	292.69
175.51	2904.11	885.17	2983.23	2557.10	1.228	347.01
37.86	3008.79	917.08	3009.53	2926.70	1.009	82.09
70.93	3005.35	916.03	3005.82	2888.50	1.004	116.85
91.59	3074.94	937.24	3076.44	2824.20	1.006	250.74
45.97	3071.84	936.30	3073.07	2867.60	1.006	204.24
110.35	3065.74	934.44	3084.08	2570.00	1.037	495.74
104.40	3063.16	933.65	3079.57	2690.30	1.044	372.86
118.70	3045.66	928.32	3065.07	2665.00	1.051	380.66