



September 20, 2018

Mr. James Dyer
NMED/SWB, Permitting Section
P.O. Box 26110
Santa Fe, New Mexico 87502-6110

james.dyer@state.nm.us

Re: First semi-annual groundwater monitoring event of the 2018 monitoring period for Las Cruces Foothills Landfill

Dear Mr. Dyer:

On behalf of Las Cruces Utilities (LCU), John Shomaker & Associates, Inc. (JSAI) has prepared this first semi-annual groundwater monitoring report for the 2018 monitoring period at Las Cruces Foothills Landfill. This report was prepared according to the requirements listed in 20.9.9.10.N NMAC, and includes the following items:

- Table 1 summarizing parameters detected above the AML in monitor wells sampled, presented below (20.9.9.10.N NMAC requirements (12), (20))
- Figure 1 groundwater elevation contour map, attached to this letter report (20.9.9.10.N NMAC requirements (6), (18))
- tables with summary of water-level elevation measurements (App. A)
- tables with baseline and background monitoring data for monitor wells sampled, attached to this letter report (20.9.9.10.N NMAC requirements (3), (12), (19)) (App. B)
- laboratory reports, attached to this letter report (20.9.9.10.N NMAC requirements (1), (2), (4), (5), (7) through (15), (17)) (App. C)
- Review of the groundwater monitoring results did not reveal any anomalies in the datasets (20.9.9.10.N NMAC requirement (16)).

LCU Staff performed the first semi-annual monitoring event of 2018 at Las Cruces Foothills Landfill on June 20 and 27, 2018. Monitor wells MW-1, MW-2, MW-4, and MW-7 were sampled in June 2018. The attempt was also made to sample up-gradient monitor well MW-3 in June 2018, but the well discharged an insufficient amount of water for sampling.

Due to low yield and slow rate of recovery, monitor well MW-1 was purged 1 week prior to sampling. Additional purging of wells was performed on the day of sampling to the extent possible based on drawdown. Review of the laboratory results for Las Cruces Foothills Landfill monitor wells MW-1, MW-2, MW-4, and MW-7 did not reveal any anomalies in the dataset.

Water levels were measured at MW-1, MW-2, MW-3, MW-4, and MW-7 on June 20 and 27, 2018, prior to purging. Water levels at MW-5, MW-6, MW-8, and MW-9 were measured on August 3, 2018. Based on the depth-to-water measurements collected in June and August 2018, the direction of groundwater flow beneath the landfill remains west-southwest (Fig. 1).

Table 1 presents monitor wells and parameters for which the Assessment Monitoring Level (AML) was exceeded in the first semi-annual monitoring event of 2018. Figures 2 through 5 present graphs of historical data for these parameters. The AML of 0.0025 milligrams per liter (mg/L) for tetrachloroethene (PCE) was exceeded by 0.0105 mg/L or less in monitor wells MW-1, MW-4, and MW-7. Historical PCE trends that show fluctuations and overall decreasing concentrations at MW-2, MW-6, and MW-7 suggest that PCE is naturally attenuating at these locations (Fig. 2).

Table 1. Summary of parameters that were detected above the AML in monitor wells at Las Cruces Foothills Landfill, New Mexico

monitor well	sampling event	parameter	units	GWPS	CAL	AML	result
MW-1	6/27/18	tetrachloroethene (PCE) ¹	mg/L	0.005	0.005	0.0025	0.011
MW-4	6/27/18	tetrachloroethene (PCE) ¹	mg/L	0.005	0.005	0.0025	0.0084
	6/27/18	trichloroethene (TCE) ¹	mg/L	0.005	0.005	0.0025	0.0027
	6/27/18	methylene chloride ¹	mg/L	0.005	0.005	0.0025	0.012
MW-7	6/20/18	tetrachloroethene (PCE) ¹	mg/L	0.005	0.005	0.0025	0.013
	6/20/18	trichloroethene (TCE) ¹	mg/L	0.005	0.005	0.0025	0.0037
	6/20/18	methylene chloride ¹	mg/L	0.005	0.005	0.0025	0.0028
	6/20/18	trichlorofluoromethane ¹	mg/L	na	na	0.00195 ^b	0.0025

¹ Identified as "hazardous" in 20.9.9.20 NMAC

^b 95-percent increase over practical quantitation limit (PQL)

bold text indicates concentrations that exceeded the AML

GWPS - groundwater protection standard

CAL - corrective action level, 75 percent of the GWPS

AML - assessment monitoring level

mg/L - milligrams per liter

na - no GWPS for this parameter

The AML of 0.0025 mg/L for trichloroethene (TCE) was exceeded by 0.0012 mg/L or less in MW-4 and MW-7, the AML of 0.0025 mg/L for methylene chloride was exceeded by 0.0095 mg/L or less in MW-4 and MW-7, and the AML of 0.00195 mg/L for trichlorofluoromethane was exceeded by 0.00055 mg/L in MW-7. These are the same constituents of concern observed in the same monitor wells as in previous monitoring events at Las Cruces Foothills Landfill (see Figs. 2 through 5). These constituents of concern have been below detection limits in MW-9, which is located down-gradient of the landfill.

The second semi-annual groundwater monitoring report for the 2018 monitoring period will include the results of this first semi-annual monitoring event and the second semi-annual event, as well as analysis and interpretation of 2018 results, historical trends, and a discussion of the nature and extent of groundwater contaminants and contaminant transport mechanisms, as have been included in the second semi-annual reports in 2013 through 2017.

Please let me know if you have any questions or comments.

Sincerely,

JOHN SHOMAKER & ASSOCIATES, INC.



Annie McCoy
Senior Hydrogeologist

AMM:am

Enc: Figures 1 through 5

Appendix A. Summary of water-level measurements

Appendix B. Baseline and background monitoring data

Appendix C. Copy of laboratory reports for the July 17 and 27, 2018 sampling event

cc + enc: Carl Clark, Las Cruces Utilities (two complete bound copies)

Josh Rosenblatt, Las Cruces Utilities (one complete bound copy)

ILLUSTRATIONS

- Figure 1. Aerial photograph showing locations of Las Cruces Foothills Landfill monitor wells, groundwater-elevation contours, and direction of groundwater flow in June 2018.
- Figure 2. Graph showing tetrachloroethene (PCE) concentrations versus time for monitor wells MW-1 through MW-9, Las Cruces Foothills Landfill, New Mexico.
- Figure 3. Graph showing trichloroethene (TCE) concentrations versus time for monitor wells MW-1 through MW-9, Las Cruces Foothills Landfill, New Mexico.
- Figure 4. Graph showing methylene chloride concentrations versus time for monitor wells MW-1 through MW-9, Las Cruces Foothills Landfill, New Mexico.
- Figure 5. Graph showing trichlorofluoromethane concentrations versus time for monitor wells MW-2, MW-4 and MW-7, Las Cruces Foothills Landfill, New Mexico.

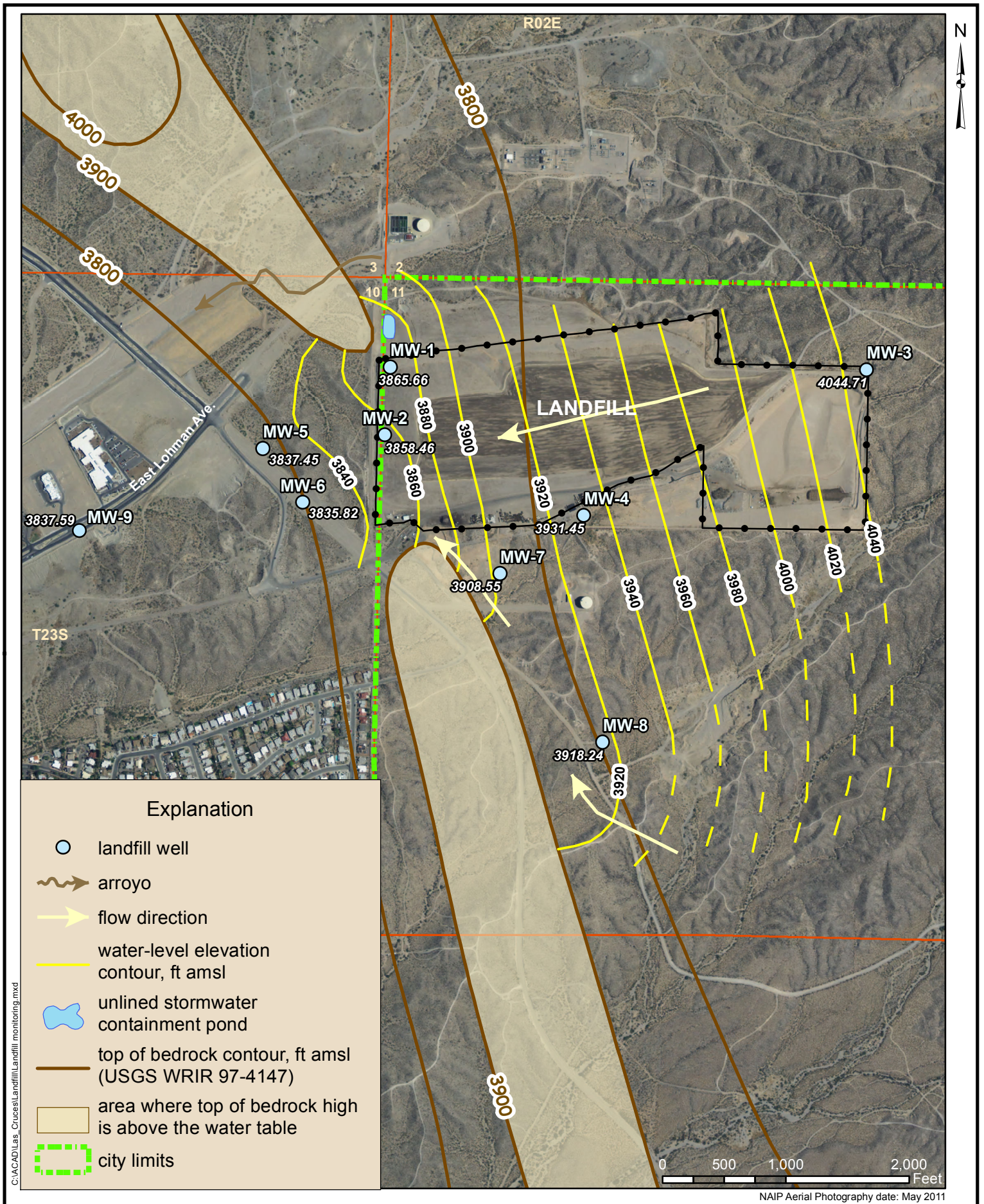


Figure 1. Aerial photograph showing locations of Las Cruces Foothills Landfill monitor wells, groundwater-elevation contours, and direction of groundwater flow in June 2018.

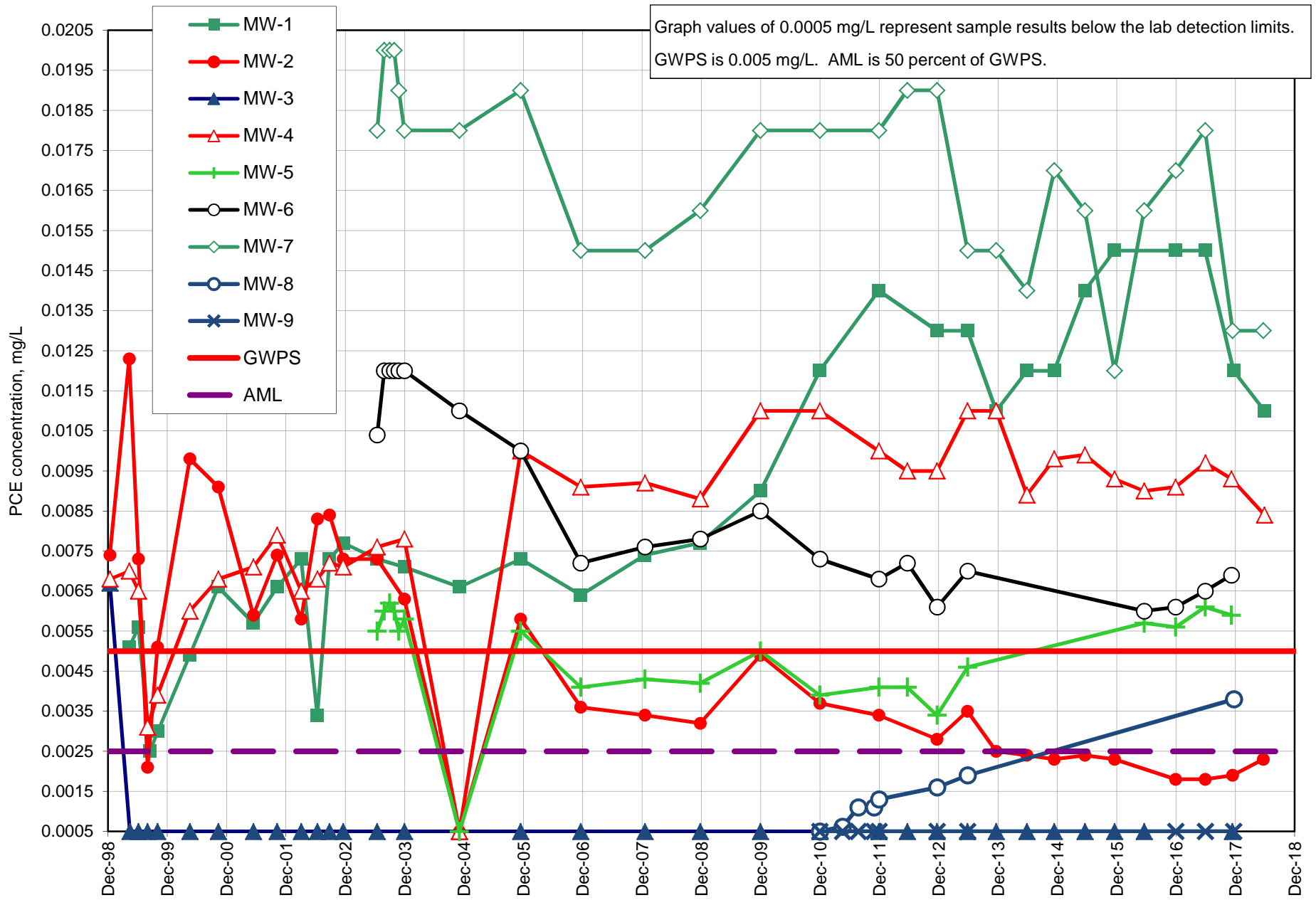


Figure 2. Graph showing tetrachloroethene (PCE) concentrations versus time for monitor wells MW-1 through MW-9, Las Cruces Foothills Landfill, New Mexico.

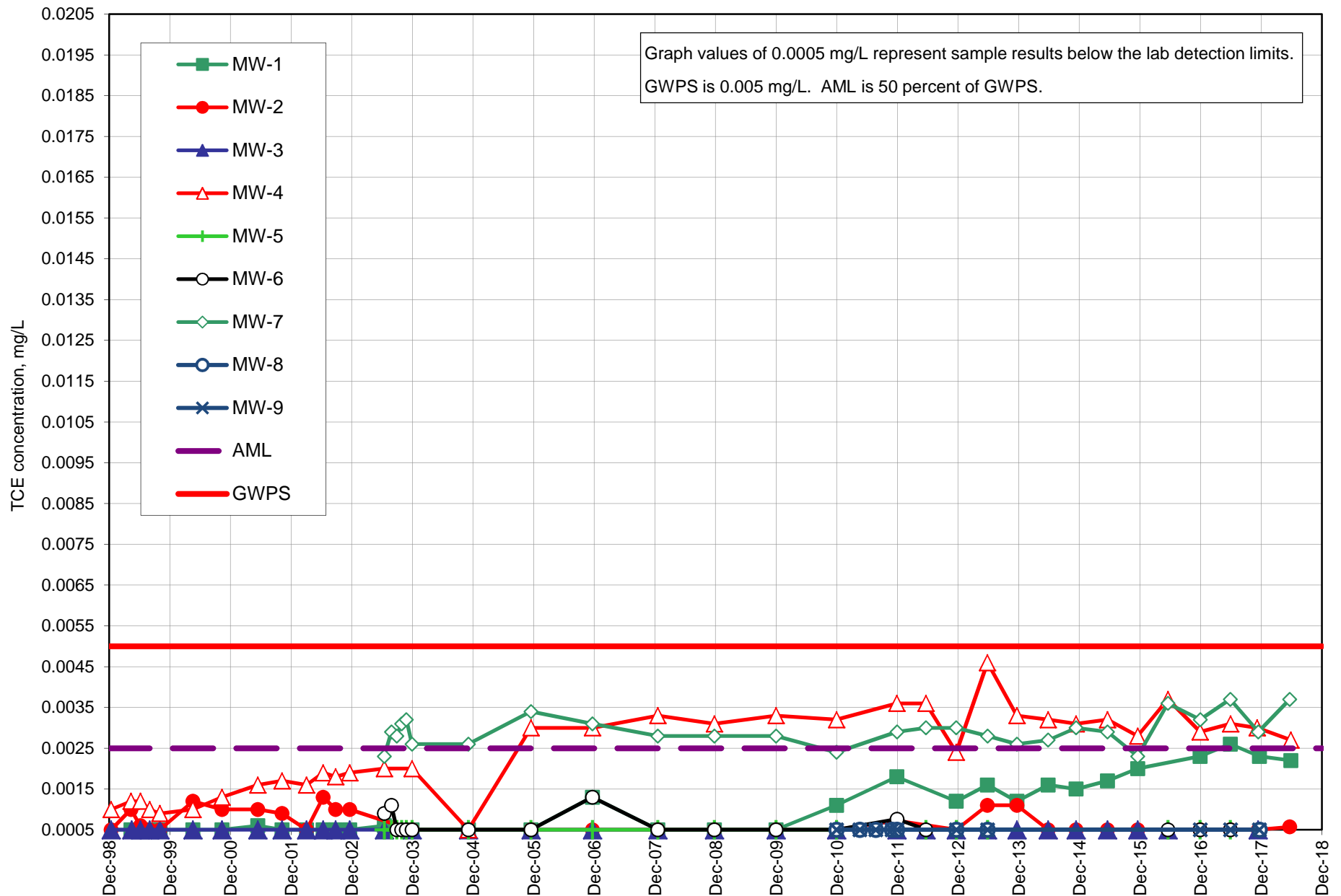


Figure 3. Graph showing trichloroethene (TCE) concentrations versus time for monitor wells MW-1 through MW-9, Las Cruces Foothills Landfill, New Mexico.

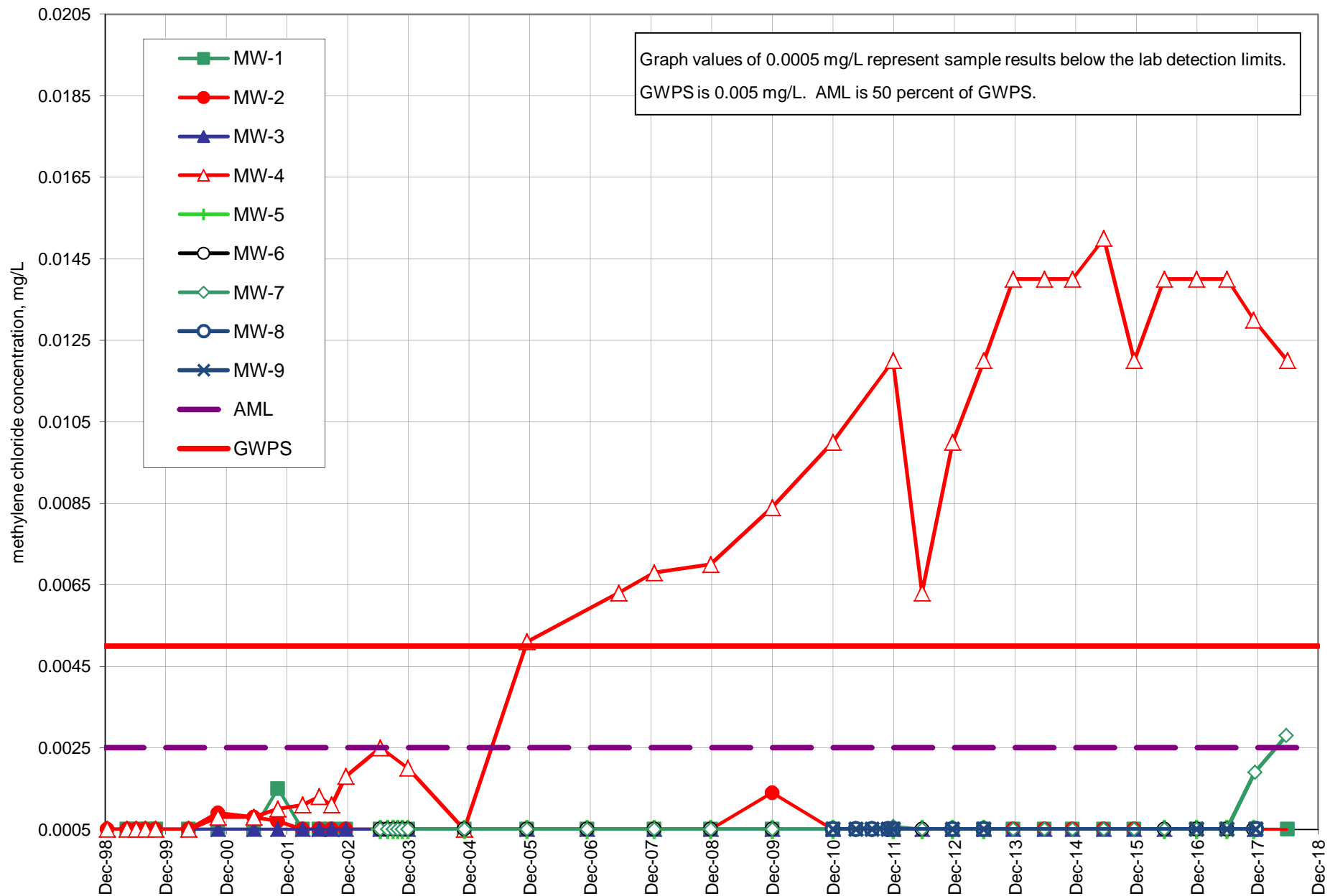


Figure 4. Graph showing methylene chloride concentrations versus time for monitor wells MW-1 through MW-9, Las Cruces Foothills Landfill, New Mexico.

Appendix A.

**Summary of water-level measurements from monitor wells MW-1 through MW-9,
Las Cruces Foothills Landfill**

**Summary of water-level measurements from monitor wells MW-1 through MW-9,
Las Cruces Foothills Landfill, Las Cruces, New Mexico**

well	date	top of casing elevation (ft amsl)	depth to water (ft bmp)	water-level elevation (ft amsl)
MW-1	01/11/99	4,262.17	394.00	3,868.17
MW-1	04/01/99	4,262.17	387.00	3,875.17
MW-1	05/06/99	4,262.17	389.40	3,872.77
MW-1	07/07/99	4,262.17	387.76	3,874.41
MW-1	09/15/99	4,262.17	388.46	3,873.71
MW-1	11/03/99	4,262.17	391.76	3,870.41
MW-1	05/18/00	4,262.17	389.63	3,872.54
MW-1	06/13/01	4,261.61	388.00	3,873.61
MW-1	10/29/01	4,261.61	392.60	3,869.01
MW-1	11/06/01	4,261.61	392.47	3,869.14
MW-1	03/25/02	4,261.61	389.60	3,872.01
MW-1	04/03/02	4,261.61	392.74	3,868.87
MW-1	07/12/02	4,261.61	392.48	3,869.13
MW-1	09/25/02	4,261.61	394.54	3,867.07
MW-1	12/18/02	4,261.61	394.75	3,866.86
MW-1	07/15/03	4,261.61	396.09	3,865.52
MW-1	12/29/03	4,261.61	396.68	3,864.93
MW-1	12/02/04	4,261.61	397.23	3,864.38
MW-1	12/14/05	4,261.61	396.44	3,865.17
MW-1	12/12/06	4,261.61	395.95	3,865.66
MW-1	01/11/08	4,261.61	393.1	3,868.51
MW-1	12/23/08	4,261.61	393.53	3,870.08
MW-1	12/29/09	4,261.61	391.43	3,870.18
MW-1	12/29/10	4,261.61	385.60	3,876.01
MW-1	12/27/11	4,261.61	387.54	3,874.07
MW-1	12/12/12	4,261.61	389.58	3,872.03
MW-1	06/18/13	4,261.61	394.20	3,867.41
MW-1	12/12/13	4,261.61	395.24	3,866.37
MW-1	06/19/14	4,261.61	392.50	3,869.11
MW-1	12/11/14	4,261.61	393.45	3,868.16
MW-1	06/18/15	4,261.61	395.45	3,866.16
MW-1	12/17/15	4,261.61	396.25	3,865.36
MW-1	06/09/16	4,261.61	395.50	3,866.11
MW-1	12/20/16	4,261.61	396.35	3,865.26
MW-1	06/21/17	4,261.61	394.54	3,867.07
MW-1	12/11/17	4,261.61	396.13	3,865.48
MW-1	06/21/18	4,261.61	395.95	3,865.66
MW-2	01/11/99	4,265.70	401.02	3,864.68
MW-2	04/01/99	4,265.70	403.00	3,862.70
MW-2	05/06/99	4,265.70	402.90	3,862.80

¹ measurement made from ground level
ft bmp - feet below measuring point

ft amsl - feet above mean sea level

**Summary of water-level measurements from monitor wells MW-1 through MW-9,
Las Cruces Foothills Landfill, Las Cruces, New Mexico (continued)**

well	date	top of casing elevation (ft amsl)	depth to water (ft bmp)	water-level elevation (ft amsl)
MW-2	07/07/99	4,265.70	413.00	3,852.70
MW-2	09/15/99	4,265.70	413.50	3,852.20
MW-2	11/03/99	4,263.70 ¹	401.01	3,862.69 ¹
MW-2	05/18/00	4,263.70 ¹	406.50	3,857.20 ¹
MW-2	11/09/00	4,263.70 ¹	403.90	3,859.80 ¹
MW-2	06/13/01	4,265.36	407.52	3,857.84
MW-2	10/29/01	4,265.36	410.80	3,854.56
MW-2	11/02/01	4,265.36	411.40	3,853.96
MW-2	11/06/01	4,265.36	411.66	3,853.70
MW-2	03/25/02	4,265.36	407.3	3,858.06
MW-2	04/03/02	4,265.36	409.16	3,856.20
MW-2	07/12/02	4,265.36	407.43	3,857.93
MW-2	09/25/02	4,265.36	408.82	3,856.54
MW-2	12/18/02	4,265.36	408.67	3,856.69
MW-2	07/15/03	4,265.36	407.03	3,858.33
MW-2	12/29/03	4,265.36	406.64	3,858.72
MW-2	12/02/04	4,265.36	406.60	3,858.76
MW-2	12/14/05	4,265.36	406.52	3,858.84
MW-2	12/12/06	4,265.36	407.25	3,858.11
MW-2	01/11/08	4,265.36	406.0	3,859.36
MW-2	12/23/08	4,265.36	403.65	3,861.71
MW-2	12/29/09	4,265.36	403.54	3,861.82
MW-2	12/29/10	4,265.36	398.53	3,866.83
MW-2	12/27/11	4,265.36	399.33	3,866.03
MW-2	12/12/12	4,265.36	400.84	3,864.52
MW-2	06/19/13	4,265.36	405.60	3,859.76
MW-2	12/12/13	4,265.36	406.50	3,858.86
MW-2	06/19/14	4,265.36	405.55	3,859.81
MW-2	12/11/14	4,265.36	403.25	3,862.11
MW-2	06/18/15	4,265.36	405.58	3,859.78
MW-2	12/17/15	4,265.36	407.70	3,857.66
MW-2	06/09/16	4,265.36	405.95	3,859.41
MW-2	12/20/16	4,265.36	407.28	3,858.08
MW-2	06/21/17	4,265.36	406.08	3,859.28
MW-2	12/12/17	4,265.36	407.58	3,857.78
MW-2	06/20/18	4,265.36	406.90	3,858.46
MW-3	01/11/99	4,356.52	308.50	4,048.02
MW-3	04/01/99	4,356.52	301.50	4,055.02
MW-3	05/06/99	4,356.52	306.60	4,049.92
MW-3	07/07/99	4,356.52	304.10	4,052.42
MW-3	09/15/99	4,356.52	306.80	4,049.72

ft bmp - feet below measuring point

ft amsl - feet above mean sea level

**Summary of water-level measurements from monitor wells MW-1 through MW-9,
Las Cruces Foothills Landfill, Las Cruces, New Mexico (continued)**

well	date	top of casing elevation (ft amsl)	depth to water (ft bmp)	water-level elevation (ft amsl)
MW-3	11/03/99	4,356.52	305.50	4,051.02
MW-3	05/18/00	4,356.52	300.65	4,055.87
MW-3	11/09/00	4,356.52	305.00	4,051.52
MW-3	06/13/01	4,356.06	306.90	4,049.16
MW-3	10/29/01	4,356.06	307.80	4,048.26
MW-3	11/02/01	4,356.06	307.70	4,048.36
MW-3	11/06/01	4,356.06	309.40	4,046.66
MW-3	03/25/02	4,356.06	306.30	4,049.76
MW-3	04/03/02	4,356.06	307.80	4,048.26
MW-3	07/12/02	4,356.06	307.53	4,048.53
MW-3	09/25/02	4,356.06	308.00	4,048.06
MW-3	12/18/02	4,356.06	307.87	4,048.19
MW-3	07/15/03	4,356.06	307.98	4,048.08
MW-3	12/29/03	4,356.06	307.92	4,048.14
MW-3	12/02/04	4,356.06	307.99	4,048.07
MW-3	12/14/05	4,356.06	308.17	4,047.89
MW-3	12/12/06	4,356.06	311.29	4,044.77
MW-3	01/11/08	4,356.06	309.0	4,047.06
MW-3	12/23/08	4,356.06	309.20	4,046.86
MW-3	12/29/09	4,356.06	308.60	4,047.46
MW-3	12/29/10	4,356.06	310.54	4,045.52
MW-3	05/12/11	4,356.06	308.06	4,048.00
MW-3	12/20/11	4,356.06	308.73	4,047.33
MW-3	06/12/12	4,356.06	307.21	4,048.85
MW-3	12/12/12	4,356.06	307.75	4,048.31
MW-3	06/18/13	4,356.06	308.65	4,047.41
MW-3	12/12/13	4,356.06	306.00	4,050.06
MW-3	06/19/14	4,356.06	306.40	4,049.66
MW-3	12/04/14	4,356.06	308.81	4,047.25
MW-3	06/18/15	4,356.06	309.00	4,047.06
MW-3	12/17/15	4,356.06	309.30	4,046.76
MW-3	06/09/16	4,356.06	309.80	4,046.26
MW-3	12/20/16	4,356.06	310.72	4,045.34
MW-3	08/02/17	4,356.06	312.93	4,043.13
MW-3	12/07/17	4,356.06	312.91	4,043.15
MW-3	06/27/18	4,356.06	311.35	4,044.71
MW-4	01/11/99	4,313.54	363.45	3,950.09
MW-4	04/01/99	4,313.54	366.00	3,947.54
MW-4	05/06/99	4,313.54	368.05	3,945.49
MW-4	07/07/99	4,313.54	366.18	3,947.36

ft bmp - feet below measuring point

ft amsl - feet above mean sea level

**Summary of water-level measurements from monitor wells MW-1 through MW-9,
Las Cruces Foothills Landfill, Las Cruces, New Mexico (continued)**

well	date	top of casing elevation (ft amsl)	depth to water (ft bmp)	water-level elevation (ft amsl)
MW-4	09/15/99	4,313.54	365.76	3,947.78
MW-4	11/03/99	4,313.54	365.59	3,947.95
MW-4	05/18/00	4,313.54	368.02	3,945.52
MW-4	11/09/00	4,313.54	388.56	3,924.98
MW-4	06/13/01	4,313.20	368.41	3,944.79
MW-4	10/29/01	4,313.20	369.90	3,943.30
MW-4	11/06/01	4,313.20	370.00	3,943.20
MW-4	03/25/02	4,313.20	369.00	3,944.20
MW-4	04/03/02	4,313.20	370.68	3,942.52
MW-4	07/12/02	4,313.20	371.19	3,942.01
MW-4	09/25/02	4,313.20	371.95	3,941.25
MW-4	12/18/02	4,313.20	372.40	3,940.80
MW-4	07/15/03	4,313.20	373.57	3,939.63
MW-4	12/29/03	4,313.20	374.20	3,939.00
MW-4	12/02/04	4,313.20	376.03	3,937.17
MW-4	12/14/05	4,313.20	376.86	3,936.34
MW-4	12/12/06	4,313.20	377.7	3,935.50
MW-4	01/11/08	4,313.20	378.2	3,935.00
MW-4	12/23/08	4,313.20	376.95	3,936.25
MW-4	12/29/09	4,313.20	378.35	3,934.85
MW-4	12/29/10	4,313.20	374.86	3,938.34
MW-4	12/27/11	4,313.20	374.88	3,938.32
MW-4	06/12/12	4,313.20	375.83	3,937.37
MW-4	12/12/12	4,313.20	376.08	3,937.12
MW-4	06/19/13	4,313.20	380.30	3,932.90
MW-4	12/12/13	4,313.20	381.00	3,922.20
MW-4	06/19/14	4,313.20	381.30	3,931.90
MW-4	12/04/14	4,313.20	381.27	3,931.93
MW-4	06/18/15	4,313.20	381.30	3,931.90
MW-4	12/17/15	4,313.20	381.50	3,931.70
MW-4	06/09/16	4,313.20	381.30	3,931.90
MW-4	12/20/16	4,313.20	381.34	3,931.86
MW-4	06/22/17	4,313.20	381.46	3,931.74
MW-4	12/06/17	4,313.20	381.66	3,931.54
MW-4	06/27/18	4,313.20	381.75	3,931.45
MW-5	07/15/03	4,235.55	404.98	3,830.57
MW-5	08/27/03	4,235.55	405.26	3,830.29
MW-5	09/29/03	4,235.55	404.98	3,830.57
MW-5	10/27/03	4,235.55	404.86	3,830.69
MW-5	11/25/03	4,235.55	404.71	3,830.84
MW-5	12/29/03	4,235.55	404.54	3,831.01

ft bmp - feet below measuring point

ft amsl - feet above mean sea level

**Summary of water-level measurements from monitor wells MW-1 through MW-9,
Las Cruces Foothills Landfill, Las Cruces, New Mexico (continued)**

well	date	top of casing elevation (ft amsl)	depth to water (ft bmp)	water-level elevation (ft amsl)
MW-5	12/02/04	4,235.55	404.26	3,831.29
MW-5	12/14/05	4,235.55	403.59	3,831.96
MW-5	12/12/06	4,235.55	403.06	3,832.49
MW-5	01/11/08	4,235.55	400.6	3,835.0
MW-5	12/23/08	4,235.55	397.93	3,837.62
MW-5	12/29/09	4,235.55	397.17	3,838.38
MW-5	12/29/10	4,235.55	391.47	3,844.08
MW-5	12/28/11	4,235.55	391.83	3,843.72
MW-5	06/12/12	4,235.55	392.08	3,843.47
MW-5	12/13/12	4,235.55	394.44	3,841.11
MW-5	06/19/13	4,235.55	394.40	3,841.15
MW-5	08/06/14	4,235.55	394.45	3,841.10
MW-5	12/11/14	4,235.55	398.18	3,837.37
MW-5	07/23/15	4,235.55	397.59	3,837.96
MW-5	02/12/16	4,235.55	398.46	3,837.09
MW-5	06/09/16	4,235.55	397.70	3,837.85
MW-5	12/20/16	4,235.55	398.83	3,836.72
MW-5	06/21/17	4,235.55	398.10	3,837.45
MW-5	12/06/17	4,235.55	399.35	3,836.20
MW-5	08/03/18	4,235.55	398.10	3,837.45
MW-6	07/15/03	4,258.32	426.29	3,832.03
MW-6	08/27/03	4,258.32	426.85	3,831.47
MW-6	09/29/03	4,258.32	426.85	3,831.47
MW-6	10/27/03	4,258.32	426.60	3,831.72
MW-6	11/25/03	4,258.32	426.36	3,831.96
MW-6	12/29/03	4,258.32	426.23	3,832.09
MW-6	12/02/04	4,258.32	425.80	3,832.52
MW-6	12/14/05	4,258.32	425.34	3,832.98
MW-6	12/12/06	4,258.32	424.86	3,833.46
MW-6	01/11/08	4,258.32	422.40	3,835.90
MW-6	12/23/08	4,258.32	419.65	3,838.67
MW-6	12/29/09	4,258.32	411.25	3,847.07
MW-6	12/29/10	4,258.32	413.95	3,844.37
MW-6	12/28/11	4,258.32	413.79	3,844.53
MW-6	06/12/12	4,258.32	413.25	3,845.07
MW-6	12/13/12	4,258.32	415.69	3,842.63
MW-6	06/18/13	4,258.32	420.10	3,838.22
MW-6	08/06/14	4,258.32	421.47	3,836.85
MW-6	12/11/14	4,258.32	420.80	3,837.52
MW-6	07/23/15	4,258.32	420.55	3,837.77
MW-6	02/12/16	4,258.32	421.24	3,837.08

ft bmp - feet below measuring point

ft amsl - feet above mean sea level

**Summary of water-level measurements from monitor wells MW-1 through MW-9,
Las Cruces Foothills Landfill, Las Cruces, New Mexico (continued)**

well	date	top of casing elevation (ft amsl)	depth to water (ft bmp)	water-level elevation (ft amsl)
MW-6	06/09/16	4,258.32	421.20	3,837.12
MW-6	12/21/16	4,258.32	421.72	3,836.60
MW-6	06/21/17	4,258.32	421.29	3,837.03
MW-6	12/06/17	4,258.32	421.72	3,836.60
MW-6	08/03/18	4,258.32	422.50	3,835.82
MW-7	07/15/03	4,292.86	378.29	3,914.57
MW-7	08/27/03	4,292.86	378.72	3,914.14
MW-7	09/29/03	4,292.86	378.76	3,914.10
MW-7	10/27/03	4,292.86	378.73	3,914.13
MW-7	11/25/03	4,292.86	378.70	3,914.16
MW-7	12/29/03	4,292.86	379.03	3,913.83
MW-7	12/02/04	4,292.86	380.25	3,912.61
MW-7	12/14/05	4,292.86	381.31	3,911.55
MW-7	12/12/06	4,292.86	382.04	3,910.82
MW-7	01/11/08	4,292.86	382.2	3,910.7
MW-7	12/23/08	4,292.86	380.58	3,912.28
MW-7	12/29/09	4,292.86	380.95	3,911.91
MW-7	12/29/10	4,292.86	378.28	3,914.58
MW-7	12/28/11	4,292.86	377.67	3,915.19
MW-7	06/12/12	4,292.86	378.79	3,914.07
MW-7	12/13/12	4,292.86	379.04	3,913.82
MW-7	06/19/13	4,292.86	383.40	3,909.46
MW-7	12/12/13	4,292.86	384.70	3,908.16
MW-7	06/19/14	4,292.86	384.10	3,908.76
MW-7	12/11/14	4,292.86	384.15	3,908.71
MW-7	06/18/15	4,292.86	384.10	3,908.76
MW-7	12/11/15	4,292.86	384.05	3,908.81
MW-7	06/09/16	4,292.86	384.10	3,908.76
MW-7	12/21/16	4,292.86	384.18	3,908.68
MW-7	06/21/17	4,292.86	384.17	3,908.69
MW-7	12/13/17	4,292.86	384.40	3,908.46
MW-7	06/20/18	4,292.86	384.31	3,908.55
MW-8	12/29/10	4,286.00	360.07	3,925.93
MW-8	05/18/11	4,286.00	360.32	3,925.68
MW-8	08/23/11	4,286.00	360.85	3,925.15
MW-8	11/28/11	4,286.00	361.29	3,924.71
MW-8	12/29/11	4,286.00	360.67	3,925.33
MW-8	12/13/12	4,286.00	362.95	3,923.05
MW-8	06/18/13	4,286.00	361.33	3,924.67
MW-8	08/06/14	4,286.00	359.76	3,926.24

ft bmp - feet below measuring point

ft amsl - feet above mean sea level

**Summary of water-level measurements from monitor wells MW-1 through MW-9,
Las Cruces Foothills Landfill, Las Cruces, New Mexico (concluded)**

well	date	top of casing elevation (ft amsl)	depth to water (ft bmp)	water-level elevation (ft amsl)
MW-8	12/11/14	4,286.00	367.85	3,918.15
MW-8	07/23/15	4,286.00	367.53	3,918.47
MW-8	02/12/16	4,286.00	367.71	3,918.29
MW-8	06/09/16	4,286.00	367.50	3,918.50
MW-8	12/21/16	4,286.00	367.39	3,918.61
MW-8	08/02/17	4,286.00	367.03	3,918.97
MW-8	12/21/17	4,286.00	367.16	3,918.84
MW-8	08/03/18	4,286.00	367.76	3,918.24
MW-9	12/29/10	4,212.58	367.72	3,844.86
MW-9	05/18/11	4,212.58	367.65	3,844.93
MW-9	08/23/11	4,212.58	367.97	3,844.61
MW-9	11/28/11	4,212.58	368.38	3,844.20
MW-9	12/29/11	4,212.58	367.33	3,845.25
MW-9	12/20/12	4,212.58	369.73	3,842.85
MW-9	06/26/13	4,212.58	373.70	3,838.88
MW-9	08/06/14	4,212.58	374.03	3,838.55
MW-9	12/11/14	4,212.58	378.85	3,833.73
MW-9	07/23/15	4,212.58	369.75	3,842.83
MW-9	02/12/16	4,212.58	367.76	3,844.82
MW-9	06/09/16	4,212.58	374.70	3,837.88
MW-9	12/21/16	4,212.58	374.85	3,837.73
MW-9	06/22/17	4,212.58	374.68	3,837.90
MW-9	12/07/17	4,212.58	375.34	3,837.24
MW-9	08/03/18	4,212.58	374.99	3,837.59

ft bmp - feet below measuring point

ft amsl - feet above mean sea level

Appendix B.

**Baseline and background monitoring data for monitor wells MW-1 through MW-9
Las Cruces Foothills Landfill, Las Cruces, New Mexico**

MW-1

APPENDIX B

Las Cruces Foothills Landfill MW-1

Las Cruces Foothills Landfill monitoring well MW-1

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-1											
				3/1/90	5/19/92	7/20/92	12/7/93	6/7/96	5/11/99	7/7/99	9/15/99	11/3/99	5/18/00	11/9/00	6/13/01
n-Nitrosodiethylamine ¹	55-18-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodimethylamine ¹	62-75-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodi-n-butylamine ¹	924-16-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodipropylamine ¹	621-64-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodiphenylamine ¹	86-30-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosomethylethylamine ¹	10595-95-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosopiperidine ¹	100-75-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosopyrrolidine ¹	930-55-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
o-Toluidine ¹	95-53-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
p-(Dimethylamino) azobenzene ¹	60-11-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pentachlorobenzene ¹	608-93-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pentachloronitrobenzene ¹	82-68-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Phenacetin ¹	62-44-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Phenanthrene ¹	85-01-8	mg/L	-	x	x	<0.01	<0.01	x	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
p-Phenylenediamine ¹	106-50-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pronamide ¹	23950-58-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pyrene ¹	129-00-0	mg/L	-	x	x	<0.01	<0.01	x	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Pyridine	110-86-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
RDX ¹	121-82-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Safrole ¹	94-59-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
sym-Trinitrobenzene ¹ (1,3,5-trinitrobenzene, 1,3,5-TNB)	99-35-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Semi Volatile Organic Compounds - Phenolics							x								
2,3,4,6-Tetrachlorophenol ¹	58-90-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4,5-Trichlorophenol ¹	95-95-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4,6-Trichlorophenol ¹	88-06-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4-Dichlorophenol ¹	120-83-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4-Dimethylphenol ¹	105-67-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4-Dinitrophenol ¹	51-28-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,6-Dichlorophenol ¹	87-65-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Chlorophenol ¹	95-57-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Methylphenol (o-Cresol) ¹	95-48-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Nitrophenol (o-Nitrophenol) ¹	88-75-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
3-Methylphenol/4-Methylphenol (m&p-Cresol) ¹	108-39-4/106-44-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) ¹	534-52-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
p-Chloro-m-cresol (4-Chloro-3-methylphenol) ¹	59-50-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4-Nitrophenol (p-Nitrophenol) ¹	100-02-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
5-Nitro-o-toluidine ¹	99-55-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pentachlorophenol ¹	87-86-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Phenol ¹ (a)	108-95-2	mg/L	0.005	x	x	x	x	x	x	x	x	x	x	x	x
Radium 226 and 228	-	pCi/L	5			6.16	2.7	0.33	16.9	3.52	1.02	1.53	2.08	0.7	0.38
Ra-226, total	13982-63-3	pCi/L	-	x	x	3.76	1.2	0.33	7.1	0.92	0.26	0.45	1.04	0.27	0.16
Ra-228 ¹ , total	15262-20-1	pCi/L	-	x	x	2.4	1.5	0.00	9.8	2.6	0.76	1.08	1.04	0.43	0.22
Chlorinated Pesticides															
4,4'-DDD (p,p'-DDD) ¹	72-54-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4,4'-DDE (p,p'-DDE) ¹	72-55-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4,4'-DDT (p,p'-DDT) ¹	50-29-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
aldrin ¹	309-00-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
alpha-BHC ¹	319-84-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
alpha-Chlordane ¹	5103-71-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
beta-BHC ¹	319-85-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Chlordane ¹	57-74-9	mg/L	0.002	x	x	x	x	x	x	x	x	x	x	x	x
delta-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dieldrin ¹	60-57-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
gamma-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Heptachlor ¹	76-44-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Isodrin ¹	465-73-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Kepone ¹	143-50-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Methoxychlor ¹	72-43-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Toxaphene ¹	8001-35-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Polychlorinated Biphenyls (PCBs)¹				mg/L	0.001										
Arochlor-1016	12674-11-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Arochlor-1221	11104-28-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Arochlor-1232	11141-16-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Arochlor-1242	53469-21-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Arochlor-1248	12672-29-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Arochlor-1254	11097-69-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Arochlor-1260	11096-82-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Other Pesticides and Herbicides¹															
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Famphur ¹	52-58-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Phorate ¹	298-02-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Silvex ¹	93-72-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x

¹ hazardous

x parameter not analyzed

(*) See section entitled 'Semi volatile organic compounds - phenolics' for break-out of phenolics concentrations.

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(*) This concentration attributed to laboratory contamination of method blank and not the presence of antimony in the ground water sampled.

(#) Scanned for and not detected, breaks down almost immediately in water.

APPENDIX B

Las Cruces Foothills Landfill MW-1

Las Cruces Foothills Landfill monitoring well MW-1

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-1										
				11/6/01	4/3/02	7/12/02	9/25/02	12/18/02	7/15/03	12/29/03	12/2/04	12/14/05	12/12/06	1/18/08
Field Parameters														
water level elevation	-	ft amsl	-	3869.14	3868.87	3869.13	3867.07	3866.86	3,865.52	3,864.93	3,864.38	3,865.17	3,865.66	3,868.51
conductivity	-	µS/cm	-	349	360	358	387	394	380	360	306	325	300	310
pH	-	pH units	6-9	7.57	7.19	7.28	7.20	7.35	8.05	8.10	7.93	8.10	8.20	8.21
temperature	-	deg F	-	87.8	99.1	110.0	106.8	105.5	109.2	102.2	96.8	90.7	95.2	99.0
Major Ions														
calcium	7440-70-2	mg/L	-	35.3	x	31	30	30	26.1	27	23	25	21	22
chloride	16887-00-6	mg/L	250	15.1	x	17	17	19	16	16	15	15	16	17
fluoride ¹	16984-48-8	mg/L	1.6	0.64	x	0.58	0.72	0.66	0.5	0.6	x	x	x	x
magnesium	7439-95-4	mg/L	-	7.6	x	5.9	5.7	5.7	5.54	5.4	5.5	6	5.6	5.8
potassium	7440-09-7	mg/L	-	3.1	x	2.3	2.2	2.2	2.4	2	2.2	2.8	1.7	2.4
sodium	82115-62-6	mg/L	-	23	x	31	31	33	30.8	30	30	35	32	32
sulfate	18785-72-3	mg/L	600	41	x	50	33	66	43	42	40	38	40	39
alkalinity	-	mg/L	-	113.0	x	97	92	110	97	100	84	86	80	77
bicarbonate alkalinity	71-52-3	mg/L	-	137.9	x	97	92	110	96	100	84	86	80	77
carbonate alkalinity	3812-32-6	mg/L	-	0.0	x	<1.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
total dissolved solids	-	mg/L	1,000	218	x	220	250	230	200	190	190	230	200	190
Nitrogen Species														
ammonia as N	1331-21-6	mg/L	-	<0.01	x	x	0.061	<0.05	0.7	<0.5	0.56	0.7	0.7	0.56
Kjeldahl nitrogen	7727-37-9	mg/L	-	0.2	x	0.09	0.52	0.52	2	<1.0	x	x	1.1	x
nitrate as N	14797-55-8	mg/L	10	<0.05	x	2.3	0.74	1.2	1.1	<1.0	0.4	<1.0	<1.0	1.4
nitrite	14797-65-0	mg/L	-	<0.05	x	<0.10	2	<0.10	<0.1	<1.0	x	x	x	x
total nitrogen	-	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Metals														
aluminum	7429-90-5	mg/L	5.0	0.18	x	<0.10	<0.03	<0.03	<0.03	<3.0	<3.0	x	x	x
antimony ¹	7440-36-0	mg/L	0.006	<0.0004	<0.05	<0.050	0.006 ("	<0.004	<0.0004	<0.003	x	x	x	x
arsenic ¹	7440-38-2	mg/L	0.01	0.0028	<0.005	<0.0050	<0.0050	<0.004	0.0013	<0.01	x	x	x	x
barium ¹	7440-39-3	mg/L	1.0	0.0233	0.091	0.078	0.069	0.07	0.0928	0.07	x	x	x	x
beryllium ¹	7440-41-7	mg/L	0.004	<0.0002	<0.003	<0.0030	<0.001	<0.001	<0.0002	<0.002	x	x	x	x
boron	7440-42-8	mg/L	0.75	<0.01	x	<0.010	0.027	0.028	<0.1	<0.5	x	x	x	x
cadmium ¹	7440-43-9	mg/L	0.005	0.0005	<0.005	<0.0010	<0.001	<0.001	<0.0001	<0.002	x	x	x	x
chromium ¹	7440-47-3	mg/L	0.05	0.0107	<0.005	<0.0050	<0.002	<0.002	0.0027	<0.01	x	x	x	x
cobalt ¹	7440-48-4	mg/L	0.05	<0.01	<0.01	<0.010	<0.001	<0.001	0.00008	<0.03	x	x	x	x
copper ¹	7440-50-8	mg/L	1.0	0.0523	<0.01	<0.010	0.001	<0.001	0.002	<0.06	x	x	x	x
iron	7439-89-6	mg/L	1.0	0.39	x	0.55	0.3	0.26	0.42	0.24	0.16	0.13	0.24	0.14
lead ¹	7439-92-1	mg/L	0.05	0.015	<0.005	<0.0050	<0.002	<0.002	0.0005	<0.01	x	x	x	x
manganese	7439-96-5	mg/L	0.2	<0.005	x	0.028	0.02	0.017	0.02	<0.03	<0.03	<0.03	<0.03	<0.03
mercury ¹	7439-97-6	mg/L	0.002	0.0006	<0.0002	<0.00020	<0.07	<0.20	<0.0002	<0.001	x	x	x	x
molybdenum	7439-98-7	mg/L	1.0	0.0045	x	<0.010	0.002	0.0030	<0.010	<0.75	x	x	x	x
nickel ¹	7440-02-0	mg/L	0.2	0.04482	<0.005	<0.0050	<0.002	0.007	0.00104	<0.05	x	x	x	x
selenium ¹	7782-49-2	mg/L	0.05	0.0013	<0.01	<0.010	0.003	<0.003	0.002	<0.005	x	x	x	x
silver ¹	7440-22-4	mg/L	0.05	<0.02	<0.005	<0.0050	<0.002	<0.002	<0.010	<0.01	x	x	x	x
thallium ¹	7440-28-0	mg/L	0.002	0.00049	<0.01	<0.010	<0.003	<0.003	0.00004	<0.001	x	x	x	x
tin ¹	7440-31-5	mg/L	-	x	<0.01	x	x	x	x	x	x	x	x	x
uranium ¹	7440-61-1	mg/L	0.03	0.00327	x	<0.02	0.00056	0.000561	<0.002	<2.5	x	x	x	x
vanadium ¹	7440-62-2	mg/L	-	<0.05	<0.01	<0.010	0.0020	0.0010	<0.050	<0.08	x	x	x	x
zinc ¹	7440-66-6	mg/L	10.0	1.81	<0.02	<0.020	<0.008	<0.008	<0.020	<0.05	x	x	x	x
total organic carbon	-	mg/L	-	2.8	x	2.4	2.1	1.3	1	0.56	0.7	0.8	<1.0	<1.0
phosphate	14265-44-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
sulfide ¹	18496-25-8	mg/L	-	x	<1.0	x	x	x	x	x	x	x	x	x
cyanide ¹	57-12-5	mg/L	0.2	<0.02	0.0094	<0.0050	<0.0050	<0.005	<0.01	<0.1	x	x	x	x
perchlorate ¹	14797-73-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
total phenolics ¹	-	mg/L	0.005	0.035	(*)	<0.0030	0.012	0.0034	<0.005	<0.003	<0.003	<0.003	<0.003	<0.0025
Polychlorinated Biphenyls (PCBs) ¹	1336-36-3	mg/L	0.0005	<0.0005	(**)	(**)	(**)	(**)	(**)	(**)	(**)	x	x	x
Volatile Organic Compounds														
1,1,1,2-Tetrachloroethane ¹	630-20-6	mg/L	-	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,1-Trichloroethane ¹	71-56-6	mg/L	0.06	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2,2-Tetrachloroethane ¹	79-34-5	mg/L	0.01	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane ¹	79-00-5	mg/L	0.005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane ¹	75-34-3	mg/L	0.025	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethylene (1,1-Dichloroethene; 1,1-DCE) ¹	75-35-4	mg/L	0.005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
1,1-Dichloropropene ¹	563-58-6	mg/L	-	x	<0.001	<0.001	<0.001	x	<0.0005	x	x	x	x	x
1,2-Dibromo-3-chloropropane (DBCP) ¹	96-12-8	mg/L	0.0002	<0.0005	<0.00001	<0.001	<0.00001	<0.00001	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
1,2,3-Trichlorobenzene	87-61-6	mg/L	-	<0.0005	x	<0.001	x	<0.001	<0.0005	x	x	x	x	x
1,2,3-Trichloropropane ¹	96-18-4	mg/L	-	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-Trichlorobenzene ¹	120-82-1	mg/L	-	<0.0005	<0.02	<0.001	x	<0.001	<0.0005	x	x	x	x	x
1,2-Dichlorobenzene (o-Dichlorobenzene) ¹	95-50-1	mg/L	0.6	x	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-Dichloroethane (EDC) ¹	107-06-2	mg/L	0.005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloropropane ¹	78-87-5	mg/L	0.005	<0.0005	<0.0002	<0.001	<0.0002	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1,3-Dichlorobenzene (m-Dichlorobenzene) ¹	541-73-1	mg/L	-	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	x	x	x	x	x
1,3-Dichloropropane ¹	142-28-9	mg/L	-	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	x	x	x	x	x
1,4-Dichlorobenzene (p-Dichlorobenzene) ¹	106-46-7	mg/L	0.075	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.015	<0.015	<0.015	<0.015	<0.015
2,2-Dichloropropane ¹	78-87-5	mg/L	-	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	x	x	x	x	x
2-Butanone (Methyl Ethyl Ketone) (MEK) ¹	78-93-3	mg/L	-	<0.002	<0.01	<0.01	<0.01	<0.01	<0.025	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chlorotoluene ¹	95-49-8	mg/L	-	<0.0005	x	<0.001	x	<0.001	<0.0005	x	x	x	x	x
2-Hexanone (Butyl Ketone) ¹	78-93-3	mg/L	-	<0.002	<0.01	<0.01	<0.01	<0.01	<0.025	<0.05	<0.05	<0.05	<0.05	<0.05
4-Chlorotoluene ¹	106-43-4	mg/L	-	<0.0005	x	<0.001	x	<0.001	<0.0005	x	x	x	x	x
4-Methyl-2-pentanone ¹	108-10-1	mg/L	-	<0.002	<0.01	<0.01	<0.01	<0.01	<0.025	<0.015	<0.015	<0.015	<0.015	<0.015
Acetone														

APPENDIX B

Las Cruces Foothills Landfill MW-1

Las Cruces Foothills Landfill monitoring well MW-1

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-1										
				11/6/01	4/3/02	7/12/02	9/25/02	12/18/02	7/15/03	12/29/03	12/2/04	12/14/05	12/12/06	1/18/08
n-Nitrosodiethylamine ¹	55-18-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodimethylamine ¹	62-75-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodi-n-butylamine ¹	924-16-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodipropylamine ¹	621-64-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodiphenylamine ¹	86-30-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosomethylethylamine ¹	10595-95-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosopiperidine ¹	100-75-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosopyrrolidine ¹	930-55-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
o-Toluidine ¹	95-53-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
p-(Dimethylamino) azobenzene ¹	60-11-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Pentachlorobenzene ¹	608-93-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Pentachloronitrobenzene ¹	82-68-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Phenacetin ¹	62-44-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Phenanthrene ¹	85-01-8	mg/L	-	<0.0001	<0.02	<0.0001	<0.0001	<0.0001	<0.005	x	x	x	x	x
p-Phenylenediamine ¹	106-50-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Pronamide ¹	23950-58-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Pyrene ¹	129-00-0	mg/L	-	<0.00025	<0.02	<0.0001	<0.0001	<0.0001	<0.005	x	x	x	x	x
Pyridine	110-86-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
RDX ¹	121-82-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Safrole ¹	94-59-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
sym-Trinitrobenzene ¹ (1,3,5-trinitrobenzene, 1,3,5-TNB)	99-35-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Semi Volatile Organic Compounds - Phenolics														
2,3,4,6-Tetrachlorophenol ¹	58-90-2	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
2,4,5-Trichlorophenol ¹	95-95-4	mg/L	-	x	<0.1	x	x	x	x	x	x	x	x	x
2,4,6-Trichlorophenol ¹	88-06-2	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
2,4-Dichlorophenol ¹	120-83-2	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
2,4-Dimethylphenol ¹	105-67-9	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
2,4-Dinitrophenol ¹	51-28-5	mg/L	-	x	<0.1	x	x	x	x	x	x	x	x	x
2,6-Dichlorophenol ¹	87-65-0	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
2-Chlorophenol ¹	95-57-8	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
2-Methylphenol (o-Cresol) ¹	95-48-7	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
2-Nitrophenol (o-Nitrophenol) ¹	88-75-5	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
3-Methylphenol/4-Methylphenol (m&p-Cresol) ¹	108-39-4/106-44-5	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) ¹	534-52-1	mg/L	-	x	<0.1	x	x	x	x	x	x	x	x	x
p-Chloro-m-cresol (4-Chloro-3-methylphenol) ¹	59-50-7	mg/L	-	x	<0.02	x	x	x	x	x	x	x	x	x
4-Nitrophenol (p-Nitrophenol) ¹	100-02-7	mg/L	-	x	<0.1	x	x	x	x	x	x	x	x	x
5-Nitro-o-toluidine ¹	99-55-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Pentachlorophenol ¹	87-86-5	mg/L	-	x	<0.1	x	x	x	x	x	x	x	x	x
Phenol ¹ (a)	108-95-2	mg/L	0.005	x	<0.00078	x	x	x	x	x	x	x	x	x
Radium 226 and 228	-	pCi/L	5	0.69		1.33	0.247	0.564	0.8	<2.5				
Ra-226, total	13982-63-3	pCi/L	-	0.15	x	-0.17	0.0	0.564	0.6	<2.5	x	x	x	x
Ra-228 ¹ , total	15262-20-1	pCi/L	-	0.54	x	1.5	0.247	0.0	0.2	<2.5	x	x	x	x
Chlorinated Pesticides														
4,4'-DDD (p,p'-DDD) ¹	72-54-8	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
4,4'-DDE (p,p'-DDE) ¹	72-55-9	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
4,4'-DDT (p,p'-DDT) ¹	50-29-3	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
aldrin ¹	309-00-2	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
alpha-BHC ¹	319-84-6	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
alpha-Chlordane ¹	5103-71-9	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
beta-BHC ¹	319-85-7	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Chlordane ¹	57-74-9	mg/L	0.002	x	x	x	x	x	x	x	x	x	x	x
delta-BHC ¹	319-86-8	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Dieldrin ¹	60-57-1	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Endrin ketone	53494-70-5	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
gamma-BHC ¹	319-86-8	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Heptachlor ¹	76-44-8	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Isodrin ¹	465-73-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Kepon ¹	143-50-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x
Methoxychlor ¹	72-43-5	mg/L	-	x	<0.00005	<0.000050	x	x	x	x	x	x	x	x
Toxaphene ¹	8001-35-2	mg/L	-	x	<0.003	<0.000050	x	x	x	x	x	x	x	x
Polychlorinated Biphenyls (PCBs)¹														
Arochlor-1016	12674-11-2	mg/L	-	x	<0.0005	<0.00050	<0.0005	<0.0005	<0.0025	<0.0005	x	x	x	x
Arochlor-1221	11104-28-2	mg/L	-	x	<0.0005	<0.00050	<0.0005	<0.0005	<0.0025	<0.0005	x	x	x	x
Arochlor-1232	11141-16-5	mg/L	-	x	<0.0005	<0.00050	<0.0005	<0.0005	<0.0025	<0.0005	x	x	x	x
Arochlor-1242	53469-21-9	mg/L	-	x	<0.0005	<0.00050	<0.0005	<0.0005	<0.0025	<0.0005	x	x	x	x
Arochlor-1248	12672-29-6	mg/L	-	x	<0.0005	<0.00050	<0.0005	<0.0005	<0.0025	<0.0005	x	x	x	x
Arochlor-1254	11097-69-1	mg/L	-	x	<0.0005	<0.00050	<0.0005	<0.0005	<0.0025	<0.0005	x	x	x	x
Arochlor-1260	11096-82-5	mg/L	-	x	<0.0005	<0.00050	<0.0005	<0.0005	<0.0025	<0.0005	x	x	x	x
Other Pesticides and Herbicides¹														
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
Famphur ¹	52-58-7	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	<0.003	x	x	x	x	x	x	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
Phorate ¹	298-02-2	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
Silvex ¹	93-72-1	mg/L	-	x	<0.002	x	x	x	x	x	x	x	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x

¹ hazardous

x parameter not analyzed

(*) See section entitled 'Semi volatile organic compounds - phenolics' for break-out of phenolics concn

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(*) This concentration attributed to laboratory contamination of method blank and not the presence of an

(#) Scanned for and not detected, breaks down almost immediately in water.

APPENDIX B

Las Cruces Foothills Landfill MW-1

Las Cruces Foothills Landfill monitoring well MW-1

Table with columns: constituent, CAS Number, unit, GWPS, 12/23/08, 12/29/09, 12/29/10, 12/27/11, 12/19/12, 6/25/13, 12/19/13, 6/26/14, 12/11/14, 6/18/15. Rows include Field Parameters, Major Ions, Nitrogen Species, Metals, and Volatile Organic Compounds.

APPENDIX B

Las Cruces Foothills Landfill MW-1

Las Cruces Foothills Landfill monitoring well MW-1

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-1									
				12/23/08	12/29/09	12/29/10	12/27/11	12/19/12	6/25/13	12/19/13	6/26/14	12/11/14	6/18/15
n-Nitrosodiethylamine ¹	55-18-5	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
n-Nitrosodimethylamine ¹	62-75-9	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
n-Nitrosodi-n-butylamine ¹	924-16-3	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
n-Nitrosodipropylamine ¹	621-64-7	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
n-Nitrosodiphenylamine ¹	86-30-6	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
n-Nitrosomethylethylamine ¹	10595-95-6	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
n-Nitrosopiperidine ¹	100-75-4	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
n-Nitrosopyrrolidine ¹	930-55-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
o-Toluidine ¹	95-53-4	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
p-(Dimethylamino) azobenzene ¹	60-11-7	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Pentachlorobenzene ¹	608-93-5	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Pentachloronitrobenzene ¹	82-68-8	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Phenacetin ¹	62-44-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Phenanthrene ¹	85-01-8	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
p-Phenylenediamine ¹	106-50-3	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Pronamide ¹	23950-58-5	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Pyrene ¹	129-00-0	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Pyridine	110-86-1	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
RDX ¹	121-82-4	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x
Safrole ¹	94-59-7	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
sym-Trinitrobenzene ¹ (1,3,5-trinitrobenzene, 1,3,5-TNB)	99-35-4	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x
Semi Volatile Organic Compounds - Phenolics													
2,3,4,6-Tetrachlorophenol ¹	58-90-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
2,4,5-Trichlorophenol ¹	95-95-4	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
2,4,6-Trichlorophenol ¹	88-06-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
2,4-Dichlorophenol ¹	120-83-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
2,4-Dimethylphenol ¹	105-67-9	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
2,4-Dinitrophenol ¹	51-28-5	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
2,6-Dichlorophenol ¹	87-65-0	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
2-Chlorophenol ¹	95-57-8	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
2-Methylphenol (o-Cresol) ¹	95-48-7	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
2-Nitrophenol (o-Nitrophenol) ¹	88-75-5	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
3-Methylphenol/4-Methylphenol (m&p-Cresol) ¹	108-39-4/106-44-5	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) ¹	534-52-1	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
p-Chloro-m-cresol (4-Chloro-3-methylphenol) ¹	59-50-7	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
4-Nitrophenol (p-Nitrophenol) ¹	100-02-7	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
5-Nitro-o-toluidine ¹	99-55-8	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Pentachlorophenol ¹	87-86-5	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Phenol ¹ (a)	108-95-2	mg/L	0.005	<0.001	x	x	x	x	x	x	x	x	x
Radium 226 and 228	-	pCi/L	5	-0.47								0.600	
Ra-226, total	13982-63-3	pCi/L	-	-0.07	x	x	x	x	x	x	x	0.532	x
Ra-228 ¹ , total	15262-20-1	pCi/L	-	-0.4	x	x	x	x	x	x	x	0.0681	x
Chlorinated Pesticides													
4,4'-DDD (p,p'-DDD) ¹	72-54-8	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
4,4'-DDE (p,p'-DDE) ¹	72-55-9	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
4,4'-DDT (p,p'-DDT) ¹	50-29-3	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
aldrin ¹	309-00-2	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
alpha-BHC ¹	319-84-6	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
alpha-Chlordane ¹	5103-71-9	mg/L	-	x	x	x	x	x	x	x	x	x	x
beta-BHC ¹	319-85-7	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Chlordane ¹	57-74-9	mg/L	0.002	<0.0002	x	x	x	x	x	x	x	x	x
delta-BHC ¹	319-86-8	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Dieldrin ¹	60-57-1	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
gamma-BHC ¹	319-86-8	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	x	x	x	x	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Heptachlor ¹	76-44-8	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Isodrin ¹	465-73-6	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Kepone ¹	143-50-0	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Methoxychlor ¹	72-43-5	mg/L	-	<0.00004	x	x	x	x	x	x	x	x	x
Toxaphene ¹	8001-35-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Polychlorinated Biphenyls (PCBs)¹													
Arochlor-1016	12674-11-2	mg/L	-	<0.00025	x	x	x	x	x	x	x	<0.00025	x
Arochlor-1221	11104-28-2	mg/L	-	<0.00025	x	x	x	x	x	x	x	<0.00025	x
Arochlor-1232	11141-16-5	mg/L	-	<0.00025	x	x	x	x	x	x	x	<0.00025	x
Arochlor-1242	53469-21-9	mg/L	-	<0.00025	x	x	x	x	x	x	x	<0.00025	x
Arochlor-1248	12672-29-6	mg/L	-	<0.00025	x	x	x	x	x	x	x	<0.00025	x
Arochlor-1254	11097-69-1	mg/L	-	<0.00025	x	x	x	x	x	x	x	<0.00025	x
Arochlor-1260	11096-82-5	mg/L	-	<0.00025	x	x	x	x	x	x	x	<0.00025	x
Other Pesticides and Herbicides¹													
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	<0.000768	x	x	x	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	<0.00005	x	x	x	x	x	x	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	<0.00005	x	x	x	x	x	x	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	<0.00005	x	x	x	x	x	x	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Famphur ¹	52-58-7	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Phorate ¹	298-02-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x
Silvex ¹	93-72-1	mg/L	-	<0.00005	x	x	x	x	x	x	x	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x

¹ hazardous

x parameter not analyzed

(*) See section entitled 'Semi volatile organic compounds - phenolics' for break-out of phenolics concern

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(*) This concentration attributed to laboratory contamination of method blank and not the presence of an

(#) Scanned for and not detected, breaks down almost immediately in water.

APPENDIX B

Las Cruces Foothills Landfill MW-1

Las Cruces Foothills Landfill monitoring well MW-1									baseline	standard
constituent	CAS Number	unit	GWPS	12/17/15	12/27/16	6/27/17	12/19/17	6/27/18	average	deviation
									5/11/99 to	5/11/99 to
date									5/18/00	5/18/00
Methacrylonitrile ¹	126-98-7	mg/L	-	x	x	x	x	x	x	x
Methyl iodide (Iodomethane) ¹	74-88-4	mg/L	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	x
Methyl methacrylate ¹	80-62-6	mg/L	-	x	x	x	x	x	x	x
Methylene Chloride ¹	75-09-2	mg/L	0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0005	x
n-Butylbenzene ¹	104-51-8	mg/L	-	x	x	x	x	x	<0.0005	x
Propionitrile ¹	107-12-0	mg/L	-	x	x	x	x	x	x	x
Propylbenzene ¹	103-65-1	mg/L	-	x	x	x	x	x	<0.0005	x
sec-Butylbenzene ¹	113-98-8	mg/L	-	x	x	x	x	x	<0.0005	x
Styrene ¹	100-42-5	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	x
tert-Butyl methyl ether (MTBE) (a) ¹	1634-04-4	mg/L	0.1	x	x	x	x	x	<0.002	x
tert-Butylbenzene ¹	98-06-6	mg/L	-	x	x	x	x	x	<0.0005	x
Tetrachloroethene (PCE) ¹	127-18-4	mg/L	0.005	0.015	0.015	0.015	0.012	0.011	0.0042	0.0014
Tetrahydrofuran (THF) ¹	109-99-9	mg/L	-	x	x	x	x	x	<0.002	x
Toluene ¹	108-88-3	mg/L	0.75	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	x
Total Xylenes (m&p and o) ¹	-	mg/L	0.62	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0005	x
trans-1,2-Dichloroethene ¹	156-60-5	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	x
trans-1,3-Dichloropropene ¹	10061-02-6	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	x
trans-1,4-Dichloro-2-butene ¹	110-57-6	mg/L	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	x
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.0020	0.0023	0.0026	0.0023	0.0022	<0.0005	x
Trichlorofluoromethane ¹	75-69-4	mg/L	-	<0.001	0.0012	0.0011	0.0011	0.0011	<0.001	x
Vinyl acetate ¹	108-05-4	mg/L	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	x
Vinyl Chloride ¹	75-01-4	mg/L	0.001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0005	x
Trihalomethanes (THM)										
Bromodichloromethane ¹	75-27-4	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	x
Bromoform ¹	75-25-2	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	x
Chloroform ¹	67-66-3	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	x
Dibromochloromethane ¹	124-48-1	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	x
Semi Volatile Organic Compounds										
1,2,4,5-Tetrachlorobenzene ¹	95-94-3	mg/L	-	x	x	x	x	x	x	x
1,2-Diphenylhydrazine	122-66-7	mg/L	-	x	x	x	x	x	x	x
1,4-Naphthoquinone ¹	130-15-4	mg/L	-	x	x	x	x	x	x	x
1-Chloronaphthalene	-	mg/L	-	x	x	x	x	x	x	x
1-Methylnaphthalene	86-52-2	mg/L	-	x	x	x	x	x	x	x
1-Naphthylamine ¹	134-32-7	mg/L	-	x	x	x	x	x	x	x
2,4,6-Trinitrotoluene (TNT)	118-96-7	mg/L	-	x	x	x	x	x	x	x
2,4-Dinitrotoluene (2,4-DNT)	121-14-2	mg/L	-	x	x	x	x	x	x	x
2,6-Dinitrotoluene ¹ (2,6-DNT)	606-20-2	mg/L	-	x	x	x	x	x	x	x
2-Chloronaphthalene ¹	91-58-7	mg/L	-	x	x	x	x	x	x	x
2-Methylnaphthalene ¹	91-57-6	mg/L	-	x	x	x	x	x	x	x
2-Naphthylamine ¹	91-59-8	mg/L	-	x	x	x	x	x	x	x
2-Nitroaniline (o-Nitroaniline) ¹	88-74-4	mg/L	-	x	x	x	x	x	x	x
2-Picoline	109-06-8	mg/L	-	x	x	x	x	x	x	x
3,3'-Dichlorobenzidine ¹	91-94-1	mg/L	-	x	x	x	x	x	x	x
3,3'-Dimethylbenzidine	119-93-7	mg/L	-	x	x	x	x	x	x	x
3-Methylcholanthrene ¹	56-49-5	mg/L	-	x	x	x	x	x	x	x
3-Nitroaniline (m-Nitroaniline) ¹	99-09-2	mg/L	-	x	x	x	x	x	x	x
4-Aminobiphenyl ¹	92-67-1	mg/L	-	x	x	x	x	x	x	x
4-Bromophenylphenyl ether	101-55-3	mg/L	-	x	x	x	x	x	x	x
4-Chloroaniline (p-Chloroaniline) ¹	106-47-8	mg/L	-	x	x	x	x	x	x	x
4-Chlorophenylphenyl ether ¹	7005-72-3	mg/L	-	x	x	x	x	x	x	x
4-Nitroaniline (p-Nitroaniline) ¹	100-01-6	mg/L	-	x	x	x	x	x	x	x
7,12-Dimethylbenz (a) anthracene ¹	57-97-6	mg/L	-	x	x	x	x	x	x	x
Acenaphthene ¹	83-32-9	mg/L	-	x	x	x	x	x	x	x
Acenaphthylene ¹	208-96-8	mg/L	-	x	x	x	x	x	x	x
Acetophenone ¹	98-86-2	mg/L	-	x	x	x	x	x	x	x
alpha, alpha-Dimethylphenethylamine	122-09-8	mg/L	-	x	x	x	x	x	x	x
Aniline ¹	62-53-3	mg/L	-	x	x	x	x	x	x	x
Anthracene ¹	120-12-7	mg/L	-	x	x	x	x	x	x	x
Benzidine ¹	92-87-5	mg/L	-	x	x	x	x	x	x	x
Benzo (a) anthracene ¹	56-55-3	mg/L	-	x	x	x	x	x	x	x
Benzo (b) fluoranthene ¹	205-99-2	mg/L	-	x	x	x	x	x	x	x
Benzo (g,h,i) perylene ¹	191-24-2	mg/L	-	x	x	x	x	x	x	x
Benzo (k) fluoranthene ¹	207-08-9	mg/L	-	x	x	x	x	x	x	x
Benzo[a]pyrene ¹	50-32-8	mg/L	0.0002	x	x	x	x	x	<0.0001	x
Benzoic acid ¹	65-85-0	mg/L	-	x	x	x	x	x	x	x
Benzyl alcohol ¹	100-51-6	mg/L	-	x	x	x	x	x	x	x
bis (2-Chloroethoxy) methane ¹	111-91-1	mg/L	-	x	x	x	x	x	x	x
bis (2-Chloroethyl) ether ¹	111-44-4	mg/L	-	x	x	x	x	x	x	x
bis (2-Chloroisopropyl) ether										
(bis (2-chloro-1-methylethyl) ether) ¹	108-60-1	mg/L	-	x	x	x	x	x	x	x
bis (2-Ethylhexyl) phthalate	117-81-7	mg/L	-	x	x	x	x	x	x	x
Butylbenzylphthalate ¹	85-68-7	mg/L	-	x	x	x	x	x	x	x
Carbazole	86-74-8	mg/L	-	x	x	x	x	x	x	x
Chlorobenzilate ¹	510-15-6	mg/L	-	x	x	x	x	x	x	x
Chrysene ¹	218-01-9	mg/L	-	x	x	x	x	x	x	x
Diallate ¹	2303-16-4	mg/L	-	x	x	x	x	x	x	x
Dibenz (a,i) acridine	224-42-0	mg/L	-	x	x	x	x	x	x	x
Dibenzo (a,h) anthracene ¹	226-36-8	mg/L	-	x	x	x	x	x	x	x
Dibenzofuran ¹	132-64-9	mg/L	-	x	x	x	x	x	x	x
Diethylene Glycol Monobutyl Ether	112-34-5	mg/L	-	x	x	x	x	x	x	x
Diethylphthalate ¹	84-66-2	mg/L	-	x	x	x	x	x	x	x
Dimethylphthalate ¹	131-11-3	mg/L	-	x	x	x	x	x	x	x
Di-n-butylphthalate ¹	84-74-2	mg/L	-	x	x	x	x	x	x	x
Di-n-octylphthalate ¹	117-84-0	mg/L	-	x	x	x	x	x	x	x
Diphenylamine ¹	122-39-4	mg/L	-	x	x	x	x	x	x	x
Ethyl methanesulfonate ¹	62-50-0	mg/L	-	x	x	x	x	x	x	x
Fluoranthene ¹	206-44-0	mg/L	-	x	x	x	x	x	x	x
Fluorene ¹	86-73-7	mg/L	-	x	x	x	x	x	x	x
Hexachlorobenzene ¹	118-74-1	mg/L	-	x	x	x	x	x	x	x
Hexachlorocyclopentadiene ¹	77-47-4	mg/L	-	x	x	x	x	x	x	x
Hexachloroethane ¹	67-72-1	mg/L	-	x	x	x	x	x	x	x
Hexachloropropene ¹	1888-71-7	mg/L	-	x	x	x	x	x	x	x
HMX ¹	2691-41-0	mg/L	-	x	x	x	x	x	x	x
Indeno (1,2,3-cd) pyrene ¹	193-39-5	mg/L	-	x	x	x	x	x	x	x
Isophorone ¹	78-59-1	mg/L	-	x	x	x	x	x	x	x
Isosafrole ¹	120-58-1	mg/L	-	x	x	x	x	x	x	x
m-Dinitrobenzene (1,3-DNB)	99-65-0	mg/L	-	x	x	x	x	x	x	x
Methapyrene ¹	91-80-5	mg/L	-	x	x	x	x	x	x	x
Methyl methanesulfonate ¹	66-27-3	mg/L	-	x	x	x	x	x	x	x
Naphthalene ¹	91-20-3	mg/L	0.03	x	x	x	x	x	<0.0005	x
Nitrobenzene ¹	98-95-3	mg/L	-	x	x	x	x	x	x	x

APPENDIX B

Las Cruces Foothills Landfill MW-1

Las Cruces Foothills Landfill monitoring well MW-1									baseline	standard
constituent	CAS Number	unit	GWPS	12/17/15	12/27/16	6/27/17	12/19/17	6/27/18	average	deviation
date									5/11/99 to	5/11/99 to
									5/18/00	5/18/00
n-Nitrosodiethylamine ¹	55-18-5	mg/L	-	x	x	x	x	x	x	x
n-Nitrosodimethylamine ¹	62-75-9	mg/L	-	x	x	x	x	x	x	x
n-Nitrosodi-n-butylamine ¹	924-16-3	mg/L	-	x	x	x	x	x	x	x
n-Nitrosodipropylamine ¹	621-64-7	mg/L	-	x	x	x	x	x	x	x
n-Nitrosodiphenylamine ¹	86-30-6	mg/L	-	x	x	x	x	x	x	x
n-Nitrosomethylethylamine ¹	10595-95-6	mg/L	-	x	x	x	x	x	x	x
n-Nitrosopiperidine ¹	100-75-4	mg/L	-	x	x	x	x	x	x	x
n-Nitrosopyrrolidine ¹	930-55-2	mg/L	-	x	x	x	x	x	x	x
o-Toluidine ¹	95-53-4	mg/L	-	x	x	x	x	x	x	x
p-(Dimethylamino) azobenzene ¹	60-11-7	mg/L	-	x	x	x	x	x	x	x
Pentachlorobenzene ¹	608-93-5	mg/L	-	x	x	x	x	x	x	x
Pentachloronitrobenzene ¹	82-68-8	mg/L	-	x	x	x	x	x	x	x
Phenacetin ¹	62-44-2	mg/L	-	x	x	x	x	x	x	x
Phenanthrene ¹	85-01-8	mg/L	-	x	x	x	x	x	<0.0001	x
p-Phenylenediamine ¹	106-50-3	mg/L	-	x	x	x	x	x	x	x
Pronamide ¹	23950-58-5	mg/L	-	x	x	x	x	x	x	x
Pyrene ¹	129-00-0	mg/L	-	x	x	x	x	x	<0.00025	x
Pyridine	110-86-1	mg/L	-	x	x	x	x	x	x	x
RDX ¹	121-82-4	mg/L	-	x	x	x	x	x	x	x
Safrole ¹	94-59-7	mg/L	-	x	x	x	x	x	x	x
sym-Trinitrobenzene ¹ (1,3,5-trinitrobenzene, 1,3,5-TNB)	99-35-4	mg/L	-	x	x	x	x	x	x	x
Semi Volatile Organic Compounds - Phenolics										
2,3,4,6-Tetrachlorophenol ¹	58-90-2	mg/L	-	x	x	x	x	x	x	x
2,4,5-Trichlorophenol ¹	95-95-4	mg/L	-	x	x	x	x	x	x	x
2,4,6-Trichlorophenol ¹	88-06-2	mg/L	-	x	x	x	x	x	x	x
2,4-Dichlorophenol ¹	120-83-2	mg/L	-	x	x	x	x	x	x	x
2,4-Dimethylphenol ¹	105-67-9	mg/L	-	x	x	x	x	x	x	x
2,4-Dinitrophenol ¹	51-28-5	mg/L	-	x	x	x	x	x	x	x
2,6-Dichlorophenol ¹	87-65-0	mg/L	-	x	x	x	x	x	x	x
2-Chlorophenol ¹	95-57-8	mg/L	-	x	x	x	x	x	x	x
2-Methylphenol (o-Cresol) ¹	95-48-7	mg/L	-	x	x	x	x	x	x	x
2-Nitrophenol (o-Nitrophenol) ¹	88-75-5	mg/L	-	x	x	x	x	x	x	x
3-Methylphenol/4-Methylphenol (m&p-Cresol) ¹	108-39-4/106-44-5	mg/L	-	x	x	x	x	x	x	x
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) ¹	534-52-1	mg/L	-	x	x	x	x	x	x	x
p-Chloro-m-cresol (4-Chloro-3-methylphenol) ¹	59-50-7	mg/L	-	x	x	x	x	x	x	x
4-Nitrophenol (p-Nitrophenol) ¹	100-02-7	mg/L	-	x	x	x	x	x	x	x
5-Nitro-o-toluidine ¹	99-55-8	mg/L	-	x	x	x	x	x	x	x
Pentachlorophenol ¹	87-86-5	mg/L	-	x	x	x	x	x	x	x
Phenol ¹ (a)	108-95-2	mg/L	0.005	x	x	x	x	x	x	x
Radium 226 and 228	-	pCi/L	5						5.01	6.71
Ra-226, total	13982-63-3	pCi/L	-	x	x	x	x	x	1.95	2.89
Ra-228 ¹ , total	15262-20-1	pCi/L	-	x	x	x	x	x	3.06	3.84
Chlorinated Pesticides										
4,4'-DDD (p,p'-DDD) ¹	72-54-8	mg/L	-	x	x	x	x	x	x	x
4,4'-DDE (p,p'-DDE) ¹	72-55-9	mg/L	-	x	x	x	x	x	x	x
4,4-DDT (p,p'-DDT) ¹	50-29-3	mg/L	-	x	x	x	x	x	x	x
aldrin ¹	309-00-2	mg/L	-	x	x	x	x	x	x	x
alpha-BHC ¹	319-84-6	mg/L	-	x	x	x	x	x	x	x
alpha-Chlordane ¹	5103-71-9	mg/L	-	x	x	x	x	x	x	x
beta-BHC ¹	319-85-7	mg/L	-	x	x	x	x	x	x	x
Chlordane ¹	57-74-9	mg/L	0.002	x	x	x	x	x	x	x
delta-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	x	x
Dieldrin ¹	60-57-1	mg/L	-	x	x	x	x	x	x	x
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	x	x	x	x	x	x	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	x	x	x	x	x	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	x	x	x	x	x	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	x	x	x	x	x	x	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	x	x	x	x	x	x	x
gamma-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	x	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	x	x	x	x	x	x	x
Heptachlor ¹	76-44-8	mg/L	-	x	x	x	x	x	x	x
Isodrin ¹	465-73-6	mg/L	-	x	x	x	x	x	x	x
Kepone ¹	143-50-0	mg/L	-	x	x	x	x	x	x	x
Methoxychlor ¹	72-43-5	mg/L	-	x	x	x	x	x	x	x
Toxaphene ¹	8001-35-2	mg/L	-	x	x	x	x	x	x	x
Polychlorinated Biphenyls (PCBs)¹										
Arochlor-1016	12674-11-2	mg/L	-	x	x	x	x	x	x	x
Arochlor-1221	11104-28-2	mg/L	-	x	x	x	x	x	x	x
Arochlor-1232	11141-16-5	mg/L	-	x	x	x	x	x	x	x
Arochlor-1242	53469-21-9	mg/L	-	x	x	x	x	x	x	x
Arochlor-1248	12672-29-6	mg/L	-	x	x	x	x	x	x	x
Arochlor-1254	11097-69-1	mg/L	-	x	x	x	x	x	x	x
Arochlor-1260	11096-82-5	mg/L	-	x	x	x	x	x	x	x
Other Pesticides and Herbicides¹										
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	x	x	x	x	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	x	x	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	x	x	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	x	x	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	x	x	x	x	x
Famphur ¹	52-58-7	mg/L	-	x	x	x	x	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	x	x	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	x	x	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	x	x	x	x	x
Phorate ¹	298-02-2	mg/L	-	x	x	x	x	x	x	x
Silvex ¹	93-72-1	mg/L	-	x	x	x	x	x	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	x	x	x	x	x

¹ hazardous

x parameter not analyzed

(*) See section entitled 'Semi volatile organic compounds - phenolics' for break-out of phenolics concen

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) This concentration attributed to laboratory contamination of method blank and not the presence of an

(#) Scanned for and not detected , breaks down almost immediately in water.

MW-2

APPENDIX B

Las Cruces Foothills Landfill MW-2

Las Cruces Foothills Landfill monitoring well MW-2

Table with columns: Constituent, CAS Number, unit, GWPS, and RESULTS FOR MW-2 (dates: 1/12/99, 5/11/99, 7/7/99, 9/1/99, 11/1/99, 5/18/00, 11/9/00, 6/13/01, 11/6/01, 4/3/02, 7/12/02). Rows include various chemicals like Isobutyl alcohol, Styrene, and many others.

MW-3

APPENDIX B

Las Cruces Foothills Landfill MW-3

Las Cruces Foothills Landfill monitoring well MW-3

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-3												
				1/12/99	5/15/99	7/7/99	9/1/99	11/1/99	5/18/00	11/9/00	6/13/01	11/6/01	4/3/02	7/12/02	9/25/02	
date																
2,4,5-T ¹	93-76-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
Famphur ¹	52-58-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.003	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
Phorate ¹	298-02-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
Silvex ¹	93-72-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.002	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x

¹ hazardous

x parameter not analyzed

(^*) See section entitled 'Semi volatile organic compounds - phenolics' for break-out of phenolics concentrations.

(^^) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(*) This concentration attributed to laboratory contamination of method blank and not the presence of antimony in the ground water sampled.

(#) Scanned for and not detected , breaks down almost immediately in water.

APPENDIX B
Las Cruces Foothills Landfill MW-3

Las Cruces Foothills Landfill monitoring well MW-3

Constituent	CAS Number	unit	GWPS	RESULTS FOR MW-3													
				12/18/02	7/15/03	12/29/03	12/2/04	12/14/05	12/12/06	1/18/08	12/23/08	12/29/09	12/29/10	5/18/11	12/27/11		
Dibromomethane (methylene bromide) ¹	74-95-3	mg/L	-	<0.001	<0.0005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.001	<0.001	x	<0.001		
Dichlorodifluoromethane ¹	75-71-8	mg/L	-	<0.001	<0.0005	<0.005	x	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	x	<0.001		
Ethyl methacrylate ¹	97-63-2	mg/L	-	x	x	x	x	x	x	x	x	<0.01	x	x	x		
Ethylbenzene ¹	100-41-4	mg/L	0.7	<0.001	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	x	<0.001		
Ethylene Dibromide (1,2-Dibromoethane) (EDB) ¹	106-93-4	mg/L	5E-05	<0.00001	<0.0005	<0.000025	<0.000025	<0.000025	<0.000025	<0.000025	<0.000025	<0.00001	<0.00001	<0.00001	x	<0.00001	
Hexachlorobutadiene ¹	87-68-3	mg/L	-	<0.001	<0.0005	x	x	x	x	x	x	<0.001	x	x	x	x	
Isobutyl alcohol ¹	78-83-1	mg/L	-	x	x	x	x	x	x	x	x	<0.05	x	x	x	x	
Isopropylbenzene ¹	98-82-8	mg/L	-	<0.001	<0.0005	x	x	x	x	x	x	x	x	x	x	x	
Methacrylonitrile ¹	126-98-7	mg/L	-	x	x	x	x	x	x	x	x	<0.005	x	x	x	x	
Methyl iodide (Iodomethane) ¹	74-88-4	mg/L	-	<0.005	<0.005	<0.001	<0.04	<0.04	<0.04	<0.04	<0.04	<0.001	<0.01	<0.01	x	<0.01	
Methyl methacrylate ¹	80-62-6	mg/L	-	x	x	x	x	x	x	x	x	<0.03	x	x	x	x	
Methylene Chloride ¹	75-09-2	mg/L	0.005	<0.001	<0.0005	<0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.015	<0.001	<0.001	x	<0.001	
n-Butylbenzene ¹	104-51-8	mg/L	-	<0.001	<0.0005	x	x	x	x	x	x	x	x	x	x	x	
Propionitrile ¹	107-12-0	mg/L	-	x	x	x	x	x	x	x	x	<0.06	x	x	x	x	
Propylbenzene ¹	103-65-1	mg/L	-	<0.001	<0.0005	x	x	x	x	x	x	x	x	x	x	x	
sec-Butylbenzene ¹	113-98-8	mg/L	-	<0.001	<0.0005	x	x	x	x	x	x	x	x	x	x	x	
Styrene ¹	100-42-5	mg/L	0.1	<0.001	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	x	<0.001	
tert-Butyl methyl ether (MTBE) (a) ¹	1634-04-4	mg/L	0.1	<0.001	<0.005	x	x	x	x	x	x	<0.001	x	x	x	x	
tert-Butylbenzene ¹	98-06-6	mg/L	-	<0.001	<0.0005	x	x	x	x	x	x	x	x	x	x	x	
Tetrachloroethene (PCE) ¹	127-18-4	mg/L	0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	<0.0005	
Tetrahydrofuran (THF) ¹	109-99-9	mg/L	-	x	<0.010	x	x	x	x	x	x	x	x	x	x	x	
Toluene ¹	108-88-3	mg/L	0.75	<0.001	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	x	<0.001	
Total Xylenes (m&p and o) ¹	NA	mg/L	0.62	<0.002	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.002	x	<0.002
trans-1,2-Dichloroethene ¹	156-60-5	mg/L	0.1	<0.001	<0.0005	<0.005						<0.002	<0.001	<0.001	x	<0.001	
trans-1,3-Dichloropropene ¹	10061-02-6	mg/L	-	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	x	<0.001
trans-1,4-Dichloro-2-butene ¹	110-57-6	mg/L	-	<0.001	<0.010	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.001	<0.001	<0.001	x	<0.001
Trichloroethene (TCE)	79-01-6	mg/L	0.005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	<0.001
Trichlorofluoromethane ¹	75-69-4	mg/L	-	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	x	<0.001
Vinyl acetate ¹	108-05-4	mg/L	-	<0.001	<0.025	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	x	<0.01	
Vinyl Chloride ¹	75-01-4	mg/L	0.001	<0.0004	<0.0005	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	x	<0.0004
Trihalomethanes (THM)																	
Bromodichloromethane ¹	75-27-4	mg/L	-	<0.001	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	x	<0.001	
Bromoform ¹	75-25-2	mg/L	-	<0.001	<0.001	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.001	<0.001	x	<0.001	
Chloroform ¹	67-66-3	mg/L	0.1	<0.001	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	x	<0.001	
Dibromochloromethane ¹	124-48-1	mg/L	-	<0.001	<0.0005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	x	<0.001	
Semi Volatile Organic Compounds																	
1,2,4,5-Tetrachlorobenzene ¹	95-94-3	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
1,2-Diphenylhydrazine	122-66-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
1,4-Naphthoquinone ¹	130-15-4	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
1-Chloronaphthalene	NA	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x	
1-Methylnaphthalene	86-52-2	mg/L	-	<0.0001	<0.005	<0.01	x	x	x	x	x	<0.001	x	x	x	x	
1-Naphthylamine ¹	134-32-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
2,4,6-Trinitrotoluene (TNT)	118-96-7	mg/L	-	x	x	x	x	x	x	x	x	<0.0002	x	x	<0.0002	x	
2,4-Dinitrotoluene (2,4-DNT)	121-14-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	<0.0001	x	
2,6-Dinitrotoluene ¹ (2,6-DNT)	606-20-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	<0.0002	x	
2-Chloronaphthalene ¹	91-58-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
2-Methylnaphthalene ¹	91-57-6	mg/L	-	<0.0001	<0.010	<0.01	x	x	x	x	x	<0.001	x	x	x	x	
2-Naphthylamine ¹	91-59-8	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
2-Nitroaniline (o-Nitroaniline) ¹	88-74-4	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
2-Picoline	109-06-8	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
3,3'-Dichlorobenzidine ¹	91-94-1	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
3,3'-Dimethylbenzidine	119-93-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
3-Methylcholanthrene ¹	56-49-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
3-Nitroaniline (m-Nitroaniline) ¹	99-09-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
4-Aminobiphenyl ¹	92-67-1	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
4-Bromophenylphenyl ether	101-55-3	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
4-Chloroaniline (p-Chloroaniline) ¹	106-47-8	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
4-Chlorophenylphenyl ether ¹	7005-72-3	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
4-Nitroaniline (p-Nitroaniline) ¹	100-01-6	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
7,12-Dimethylbenz (a) anthracene ¹	57-97-6	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
Acenaphthene ¹	83-32-9	mg/L	-	<0.0001	<0.005	<0.0001	x	x	x	x	x	<0.00005	x	x	x	x	
Acenaphthylene ¹	208-96-8	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.001	x	x	x	x	
Acetophenone ¹	98-86-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
alpha,alpha-Dimethylphenethylamine	122-09-8	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
Aniline ¹	62-53-3	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
Anthracene ¹	120-12-7	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.001	x	x	x	x	
Benzidine ¹	92-87-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
Benzo (a) anthracene ¹	56-55-3	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.001	x	x	x	x	
Benzo (b) fluoranthene ¹	205-99-2	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.00005	x	x	x	x	
Benzo (g,h,l) perylene ¹	191-24-2	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.00005	x	x	x	x	
Benzo (k) fluoranthene ¹	207-08-9	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.00005	x	x	x	x	
Benzo[a]pyrene ¹	50-32-8	mg/L	0.0002	<0.0001	<0.005	x	x	x	x	x	x	<0.001	x	x	x	x	
Benzoic acid ¹	65-85-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x	
Benzyl alcohol ¹	100-51-6	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x	
bis (2-Chloroethoxy) methane ¹																	

APPENDIX B
Las Cruces Foothills Landfill MW-3

Las Cruces Foothills Landfill monitoring well MW-3

Constituent	CAS Number	unit	GWPS	RESULTS FOR MW-3												
				12/18/02	7/15/03	12/29/03	12/2/04	12/14/05	12/12/06	1/18/08	12/23/08	12/29/09	12/29/10	5/18/11	12/27/11	
Ethyl methanesulfonate ¹	62-50-0	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Fluoranthene ¹	206-44-0	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.001	x	x	x	x
Fluorene ¹	86-73-7	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.001	x	x	x	x
Hexachlorobenzene ¹	118-74-1	mg/L	-	x	x	x	x	x	x	x	x	<0.0001	x	x	x	x
Hexachlorocyclopentadiene ¹	77-47-4	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Hexachloroethane ¹	67-72-1	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Hexachloropropene ¹	1888-71-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
HMX ¹	2691-41-0	mg/L	-	x	x	x	x	x	x	x	x	<0.0001	x	x	<0.0001	x
Indeno (1,2,3-cd) pyrene ¹	193-39-5	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.00005	x	x	x	x
Isophorone ¹	78-59-1	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Isosafrole ¹	120-58-1	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
m-Dinitrobenzene (1,3-DNB)	99-65-0	mg/L	-	x	x	x	x	x	x	x	x	<0.0001	x	x	<0.0001	x
Methapyrilene ¹	91-80-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Methyl methanesulfonate ¹	66-27-3	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Naphthalene ¹	91-20-3	mg/L	0.03	<0.0001	<0.0005	<0.01	x	x	x	x	x	<0.001	x	x	x	x
Nitrobenzene ¹	98-95-3	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	<0.0001	x
n-Nitrosodiethylamine ¹	55-18-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
n-Nitrosodimethylamine ¹	62-75-9	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
n-Nitrosodi-n-butylamine ¹	924-16-3	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
n-Nitrosodipropylamine ¹	621-64-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
n-Nitrosodiphenylamine ¹	86-30-6	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
n-Nitrosomethylethylamine ¹	10595-95-6	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
n-Nitrosopiperidine ¹	100-75-4	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
n-Nitrosopyrrolidine ¹	930-55-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
o-Toluidine ¹	95-53-4	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
p-(Dimethylamino) azobenzene ¹	60-11-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Pentachlorobenzene ¹	608-93-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Pentachloronitrobenzene ¹	82-68-8	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Phenacetin ¹	62-44-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Phenanthrene ¹	85-01-8	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.001	x	x	x	x
p-Phenylenediamine ¹	106-50-3	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Pronamide ¹	23950-58-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Pyrene ¹	129-00-0	mg/L	-	<0.0001	<0.005	x	x	x	x	x	x	<0.001	x	x	x	x
Pyridine	110-86-1	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
RDX ¹	121-82-4	mg/L	-	x	x	x	x	x	x	x	x	<0.0001	x	x	<0.0001	x
Safrole ¹	94-59-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
sym-Trinitrobenzene ¹ (1,3,5-trinitrobenzene, 1,3,5-TNB)	99-35-4	mg/L	-	x	x	x	x	x	x	x	x	<0.0001	x	x	<0.0001	x
Semi Volatile Organic Compounds - Phenolics																
2,3,4,6-Tetrachlorophenol ¹	58-90-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
2,4,5-Trichlorophenol ¹	95-95-4	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
2,4,6-Trichlorophenol ¹	88-06-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
2,4-Dichlorophenol ¹	120-83-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
2,4-Dimethylphenol ¹	105-67-9	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
2,4-Dinitrophenol ¹	51-28-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
2,6-Dichlorophenol ¹	87-65-0	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
2-Chlorophenol ¹	95-57-8	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
2-Methylphenol (o-Cresol) ¹	95-48-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
2-Nitrophenol (o-Nitrophenol) ¹	88-75-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
3-Methylphenol/4-Methylphenol (m&p-Cresol) ¹	98-39-4/106-44	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) ¹	534-52-1	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
p-Chloro-m-cresol (4-Chloro-3-methylphenol) ¹	59-50-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
4-Nitrophenol (p-Nitrophenol) ¹	100-02-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
5-Nitro-o-toluidine ¹	99-55-8	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Pentachlorophenol ¹	87-86-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Phenol ¹ (a)	108-95-2	mg/L	0.005	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Radium 226 and 228	NA	pCi/L	5	0.0	0.6	<2.5						0.35				
Ra-226, total	NA	pCi/L	-	0.0	0.5	<2.5	x	x	x	x	x	0.03	x	x	x	x
Ra-228 ¹ , total	NA	pCi/L	-	0.0	0.1	<2.5	x	x	x	x	x	0.32	x	x	x	x
Chlorinated Pesticides																
4,4'-DDD (p,p'-DDD) ¹	72-54-8	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
4,4'-DDE (p,p'-DDE) ¹	72-55-9	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
4,4'-DDT (p,p'-DDT) ¹	50-29-3	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
aldrin ¹	309-00-2	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
alpha-BHC ¹	319-84-6	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
alpha-Chlordane ¹	5103-71-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x
beta-BHC ¹	319-85-7	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Chlordane ¹	57-74-9	mg/L	0.002	x	x	x	x	x	x	x	x	<0.0002	x	x	x	x
delta-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Dieldrin ¹	60-57-1	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
gamma-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Heptachlor ¹	76-44-8	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Isodrin ¹	465-73-6	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Kepone ¹	143-50-0	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Methoxychlor ¹	72-43-5	mg/L	-	x	x	x	x	x	x	x	x	<0.00004	x	x	x	x
Toxaphene ¹	8001-35-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x	x
Polychlorinated Biphenyls (PCBs)¹																
Arochlor-1016	12674-11-2	mg/L	-	<0.0005	<0.0005	<0.0005	x	x	x	x	x	<0.00025	x	x	x	x
Arochlor-1221	11104-28-2	mg/L	-	<0.0005	<0.0005	<0.0005	x	x	x	x	x	<0.00025	x	x	x	x
Arochlor-1232	11141-16-5	mg/L	-	<0.0005	<0.0005	<0.0005	x	x	x	x	x	<0.00025	x	x	x	

APPENDIX B

Las Cruces Foothills Landfill MW-3

Las Cruces Foothills Landfill monitoring well MW-3

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-3											
				12/18/02	7/15/03	12/29/03	12/2/04	12/14/05	12/12/06	1/18/08	12/23/08	12/29/09	12/29/10	5/18/11	12/27/11
date															
2,4,5-T ¹	93-76-5	mg/L	-	x	x	x	x	x	x	x	x	<0.00005	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	x	x	x	x	x	x	<0.00005	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	x	x	x	x	x	x	<0.00005	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x
Famphur ¹	52-58-7	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x
Phorate ¹	298-02-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x
Silvex ¹	93-72-1	mg/L	-	x	x	x	x	x	x	x	x	<0.00005	x	x	x
o,o-Diethyl o-pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	x	x	x	x	x	x	<0.001	x	x	x

¹ hazardous

x parameter not analyzed

(^*) See section entitled 'Semi volatile organic compounds - phenolics' for break-out of phenolics con

(^^) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(*) This concentration attributed to laboratory contamination of method blank and not the presence of

(#) Scanned for and not detected , breaks down almost immediately in water.

APPENDIX B
Las Cruces Foothills Landfill MW-3

Las Cruces Foothills Landfill monitoring well MW-3

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-3										baseline	standard	
														average	deviation	
				6/19/12	12/19/12	6/25/13	12/19/13	6/26/14	12/11/14	6/18/15	12/17/15	6/16/16	12/11/17	1/12/99 to 5/18/00	1/12/99 to 5/18/00	
Field Parameters																
water level elevation		ft amsl	-	4048.85	4048.31	4047.41	4050.06	4049.66	4047.25	4047.06	4046.76	4046.26	4043.15	4051.16	2.73	
conductivity		µS/cm	-	267	300	310	311	293	280	263	283	267	305.2	505.00	263.53	
pH		pH units	6-9	8.02	7.42	8.02	7.12	7.95	8.18	7.81	8.59	8.35	8.18	7.56	0.59	
temperature		deg F	-	71.2	64.9	77.5	68.9	79.9	70.2	73.4	68.0	72.1	68.7	77.75	3.10	
Major Ions																
calcium	7440-70-2	mg/L	-	20	25	25	26	25	20	23	22	23	23	36.05	3.42	
chloride	16887-00-6	mg/L	250	6.0	6.0	6.0	6.1	6.0	6.2	6.6	6.6	6.1	6.8	25.23	34.19	
fluoride ¹	16984-48-8	mg/L	1.6	x	x	x	x	x	0.76	x	x	x	x	0.99	0.09	
magnesium	7439-95-4	mg/L	-	3.8	4.1	3.9	4.0	4.1	3.6	4.3	4.1	4.3	4.2	4.38	0.53	
potassium	7440-09-7	mg/L	-	1.6	1.6	1.8	1.9	1.8	1.7	1.6	1.6	1.7	2.0	2.25	1.00	
sodium	82115-62-6	mg/L	-	31	31	29	29	29	26	29	29	31	31	65.92	55.90	
sulfate	18785-72-3	mg/L	600	34	34	35	35	35	34	36	34	33	35	76.50	68.99	
alkalinity	NA	mg/L	-	88	99	100	100	100	93	87.52	91.32	89.32	103.9	136.97	7.74	
bicarbonate alkalinity	71-52-3	mg/L	-	86	99	99	100	96	90	87.52	89.96	87.40	103.9	159.95	15.08	
carbonate alkalinity	3812-32-6	mg/L	-	<2.0	<2.0	2.0	<2.0	5.5	2.6	<2.0	<2.0	<2.0	<2.0	3.00	x	
total dissolved solids	NA	mg/L	1,000	181	192	192	201	185	176	183	197	168	195	329.00	186.38	
Nitrogen Species																
ammonia as N	1331-21-6	mg/L	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.12	0.20	
Kjeldahl nitrogen	7727-37-9	mg/L	-	x	x	x	x	x	<1.0	x	x	x	x	0.42	0.45	
nitrate as N	14797-55-8	mg/L	10	0.95	0.91	1.0	<1.0	1.0	1.0	1.1	1.1	1.0	<0.10	0.57	0.33	
nitrite	14797-65-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	0.33	x	
total nitrogen	-	mg/L	-	x	x	x	x	x	1.0	x	x	x	x	x	x	
Metals																
aluminum	7429-90-5	mg/L	5.0	x	x	x	x	x	<0.02	x	x	x	x	1.93	1.286	
antimony ¹	7440-36-0	mg/L	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0039	0.00	0.001	
arsenic ¹	7440-38-2	mg/L	0.01	0.0014	0.0012	0.0014	0.0012	0.0012	0.0012	0.0012	0.0012	0.0014	0.0024	0.00	0.001	
barium ¹	7440-39-3	mg/L	1.0	0.016	0.017	0.018	0.018	<0.02	0.016	<0.02	0.018	0.018	0.019	0.07	0.045	
beryllium ¹	7440-41-7	mg/L	0.004	<0.002	<0.002	<0.002	<0.002	<0.003	<0.002	<0.003	<0.002	<0.002	<0.002	0.000	x	
boron	7440-42-8	mg/L	0.75	x	x	x	x	x	<0.04	x	x	x	x	0.130	0.095	
cadmium ¹	7440-43-9	mg/L	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0002	0.000	
chromium ¹	7440-47-3	mg/L	0.05	<0.006	0.0047	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.007	0.007	
cobalt ¹	7440-48-4	mg/L	0.05	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.010	x	
copper ¹	7440-50-8	mg/L	1.0	0.0089	0.02	0.015	0.018	0.017	0.018	0.009	0.01	<0.006	0.39	0.025	0.030	
iron	7439-89-6	mg/L	1.0	<0.02	<0.02	0.021	<0.02	<0.05	<0.02	<0.05	<0.02	<0.02	0.23	2.228	1.810	
lead ¹	7439-92-1	mg/L	0.05	<0.005	0.0037	0.0031	0.0028	<0.005	0.0035	<0.005	0.0019	0.0025	0.039	0.006	0.006	
manganese	7439-96-5	mg/L	0.2	<0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.035	0.193	0.222	
mercury ¹	7439-97-6	mg/L	0.002	x	x	x	x	x	<0.0002	x	x	x	x	0.0004	0.000	
molybdenum	7439-98-7	mg/L	1.0	x	x	x	x	x	<0.008	x	x	x	x	<0.05	x	
nickel ¹	7440-02-0	mg/L	0.2	<0.01	0.0039	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.048	0.029	0.030	
selenium ¹	7782-49-2	mg/L	0.05	<0.001	<0.001	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	
silver ¹	7440-22-4	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.02	x	
thallium ¹	7440-28-0	mg/L	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	0.00006	0.00005	
tin ¹	7440-31-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	
uranium ¹	7440-61-1	mg/L	0.03	x	x	x	x	x	0.002	x	x	x	x	0.011	0.007	
vanadium ¹	7440-62-2	mg/L	-	<0.05	0.004	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.080	x	
zinc	7440-66-6	mg/L	10.0	0.033	0.092	0.097	0.061	0.029	0.062	0.074	0.027	0.026	1.9	0.155	0.105	
total organic carbon	-	mg/L	-	<1.0	0.25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.3	1.668	1.372	
phosphate	14265-44-2	mg/L	-	x	x	x	x	x	<0.50	x	x	x	x	x	x	
sulfide ¹	18496-25-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	
cyanide ¹	57-12-5	mg/L	0.2	x	x	x	x	x	<0.01	x	x	x	x	<0.02	x	
perchlorate ¹	14797-73-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	0.0004	x	
total phenolics ¹	-	mg/L	0.005	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.006	0.04	x	
Polychlorinated Biphenyls (PCBs) ¹	1336-36-3	mg/L	0.0005	x	x	x	x	x	(*)	x	x	x	x	<0.0005	x	
Volatile Organic Compounds																
1,1,1,2-Tetrachloroethane ¹	67-64-1	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	x
1,1,1-Trichloroethane ¹	630-20-6	mg/L	0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
1,1,2,2-Tetrachloroethane ¹	71-56-6	mg/L	0.06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
1,1,2-Trichloroethane ¹	79-34-5	mg/L	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
1,1-Dichloroethane ¹	79-00-5	mg/L	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
1,1-Dichloroethylene (1,1-Dichloroethene; 1,1-DCE) ¹	75-34-3	mg/L	0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
1,1-Dichloropropene ¹	75-35-4	mg/L	0.005	x	x	x	x	x	x	x	x	x	x	<0.001	x	
1,2-Dibromo-3-chloropropane (DBCP) ¹	563-58-6	mg/L	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00002	<0.00002	<0.00002	<0.000019	x	x	
1,2,3-Trichlorobenzene	96-12-8	mg/L	0.0002	x	x	x	x	x	x	x	x	x	x	<0.01	x	
1,2,3-Trichloropropane ¹	87-61-6	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
1,2,4-Trichlorobenzene ¹	96-18-4	mg/L	0.01	x	x	x	x	x	x	x	x	x	x	<0.001	x	
1,2-Dichlorobenzene (o-Dichlorobenzene) ¹	120-82-1	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
1,2-Dichloroethane (EDC) ¹	95-50-1	mg/L	0.6	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x	
1,2-Dichloropropane ¹	107-06-2	mg/L	0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	x
1,3-Dichlorobenzene (m-Dichlorobenzene) ¹	78-87-5	mg/L	0.005	x	x	x	x	x	x	x	x	x	x	<0.001	x	
1,3-Dichloropropane ¹	541-73-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.001	x	
1,4-Dichlorobenzene (p-Dichlorobenzene) ¹	142-28-9	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
2,2-Dichloropropane ¹	106-46-7	mg/L	0.075	x	x	x	x	x	x	x	x	x	x	<0.001	x	
2-Butanone (Methyl Ethyl Ketone) (MEK) ¹																

APPENDIX B
Las Cruces Foothills Landfill MW-3

Las Cruces Foothills Landfill monitoring well MW-3

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-3										baseline	standard
														average	deviation
				6/19/12	12/19/12	6/25/13	12/19/13	6/26/14	12/11/14	6/18/15	12/17/15	6/16/16	12/11/17	1/12/99 to 5/18/00	1/12/99 to 5/18/00
Dibromomethane (methylene bromide) ¹	74-95-3	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
Dichlorodifluoromethane ¹	75-71-8	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0021	x
Ethyl methacrylate ¹	97-63-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Ethylbenzene ¹	100-41-4	mg/L	0.7	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
Ethylene Dibromide (1,2-Dibromoethane) (EDB) ¹	106-93-4	mg/L	5E-05	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.0000095	<0.001	x
Hexachlorobutadiene ¹	87-68-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.001	x
Isobutyl alcohol ¹	78-83-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Isopropylbenzene ¹	98-82-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.001	x
Methacrylonitrile ¹	126-98-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Methyl Iodide (Iodomethane) ¹	74-88-4	mg/L	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	x
Methyl methacrylate ¹	80-62-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Methylene Chloride ¹	75-09-2	mg/L	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.002	x
n-Butylbenzene ¹	104-51-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.001	x
Propionitrile ¹	107-12-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Propylbenzene ¹	103-65-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.001	x
sec-Butylbenzene ¹	113-98-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.001	x
Styrene ¹	100-42-5	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
tert-Butyl methyl ether (MTBE) (a) ¹	1634-04-4	mg/L	0.1	x	x	x	x	x	x	x	x	x	x	<0.01	x
tert-Butylbenzene ¹	98-06-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.001	x
Tetrachloroethene (PCE) ¹	127-18-4	mg/L	0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0067	x
Tetrahydrofuran (THF) ¹	109-99-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	<0.001	x
Toluene ¹	108-88-3	mg/L	0.75	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
Total Xylenes (m&p and o) ¹	NA	mg/L	0.62	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	x
trans-1,2-Dichloroethene ¹	156-60-5	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
trans-1,3-Dichloropropene ¹	10061-02-6	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
trans-1,4-Dichloro-2-butene ¹	110-57-6	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	x
Trichloroethene (TCE)	79-01-6	mg/L	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
Trichlorofluoromethane ¹	75-69-4	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
Vinyl acetate ¹	108-05-4	mg/L	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	x
Vinyl Chloride ¹	75-01-4	mg/L	0.001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0005	<0.0005	<0.0004	<0.0004	<0.0004	<0.0004	<0.001	x
Trihalomethanes (THM)															
Bromodichloromethane ¹	75-27-4	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
Bromoform ¹	75-25-2	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
Chloroform ¹	67-66-3	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
Dibromochloromethane ¹	124-48-1	mg/L	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x
Semi Volatile Organic Compounds															
1,2,4,5-Tetrachlorobenzene ¹	95-94-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
1,2-Diphenylhydrazine	122-66-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
1,4-Naphthoquinone ¹	130-15-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
1-Chloronaphthalene	NA	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
1-Methylnaphthalene	86-52-2	mg/L	-	x	x	x	x	x	<0.002	x	x	x	x	x	x
1-Naphthylamine ¹	134-32-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4,6-Trinitrotoluene (TNT)	118-96-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4-Dinitrotoluene (2,4-DNT)	121-14-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,6-Dinitrotoluene ¹ (2,6-DNT)	606-20-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Chloronaphthalene ¹	91-58-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Methylnaphthalene ¹	91-57-6	mg/L	-	x	x	x	x	x	<0.002	x	x	x	x	x	x
2-Naphthylamine ¹	91-59-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Nitroaniline (o-Nitroaniline) ¹	88-74-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Picoline	109-06-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
3,3'-Dichlorobenzidine ¹	91-94-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
3,3'-Dimethylbenzidine	119-93-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
3-Methylcholanthrene ¹	56-49-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
3-Nitroaniline (m-Nitroaniline) ¹	99-09-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4-Aminobiphenyl ¹	92-67-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4-Bromophenylphenyl ether	101-55-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4-Chloroaniline (p-Chloroaniline) ¹	106-47-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4-Chlorophenylphenyl ether ¹	7005-72-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4-Nitroaniline (p-Nitroaniline) ¹	100-01-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
7,12-Dimethylbenz (a) anthracene ¹	57-97-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Acenaphthene ¹	83-32-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Acenaphthylene ¹	208-96-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Acetophenone ¹	98-86-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
alpha,alpha-Dimethylphenethylamine	122-09-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Aniline ¹	62-53-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Anthracene ¹	120-12-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Benzidine ¹	92-87-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Benzo (a) anthracene ¹	56-55-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Benzo (b) fluoranthene ¹	205-99-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Benzo (g,h,i) perylene ¹	191-24-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Benzo (k) fluoranthene ¹	207-08-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Benzo[a]pyrene ¹	50-32-8	mg/L	0.0002	x	x	x	x	x	<0.00007	x	x	x	x	0.0001	x
Benzoic acid ¹	65-85-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Benzyl alcohol ¹	100-51-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
bis (2-Chloroethoxy) methane ¹	111-91-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
bis (2-Chloroethyl) ether ¹	111-44-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
bis (2-Chloroisopropyl) ether (bis (2-chloro-1-methylethyl) ether) ¹	108-60-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
bis (2-Ethylhexyl) phthalate	117-81-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Butylbenzylphthalate ¹	85-68-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Carbazole	86-74-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Chlorobenzilate ¹	510-15-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Chrysene ¹	218-01-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Diallate ¹	2303-16-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dibenz(a,j)acridine	224-42-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dibenzo (a,h) anthracene ¹	226-36-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dibenzofuran ¹	132-64-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Diethylene Glycol Monobutyl Ether	112-34-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Diethylphthalate ¹	84-66-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dimethylphthalate ¹	131-11-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Di-n-butylphthalate ¹	84-74-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Di-n-octylphthalate ¹	117-84-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Diphenylamine ¹	122-39-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x

APPENDIX B
Las Cruces Foothills Landfill MW-3

Las Cruces Foothills Landfill monitoring well MW-3

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-3										baseline	standard
														average	deviation
				6/19/12	12/19/12	6/25/13	12/19/13	6/26/14	12/11/14	6/18/15	12/17/15	6/16/16	12/11/17	1/12/99 to 5/18/00	1/12/99 to 5/18/00
Ethyl methanesulfonate ¹	62-50-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Fluoranthene ¹	206-44-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Fluorene ¹	86-73-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Hexachlorobenzene ¹	118-74-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Hexachlorocyclopentadiene ¹	77-47-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Hexachloroethane ¹	67-72-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Hexachloropropene ¹	1888-71-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
HMX ¹	2691-41-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Indeno (1,2,3-cd) pyrene ¹	193-39-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Isophorone ¹	78-59-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Isosafrole ¹	120-58-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
m-Dinitrobenzene (1,3-DNB)	99-65-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Methapyrilene ¹	91-80-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Methyl methanesulfonate ¹	66-27-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Naphthalene ¹	91-20-3	mg/L	0.03	x	x	x	x	x	<0.002	x	x	x	x	0.001	x
Nitrobenzene ¹	98-95-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodiethylamine ¹	55-18-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodimethylamine ¹	62-75-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodi-n-butylamine ¹	924-16-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodipropylamine ¹	621-64-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosodiphenylamine ¹	86-30-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosomethylethylamine ¹	10595-95-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosopiperidine ¹	100-75-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
n-Nitrosopyrrolidine ¹	930-55-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
o-Toluidine ¹	95-53-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
p-(Dimethylamino) azobenzene ¹	60-11-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pentachlorobenzene ¹	608-93-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pentachloronitrobenzene ¹	82-68-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Phenacetin ¹	62-44-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Phenanthrene ¹	85-01-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	0.0001	x
p-Phenylenediamine ¹	106-50-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pronamide ¹	23950-58-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pyrene ¹	129-00-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	0.00025	x
Pyridine	110-86-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
RDX ¹	121-82-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Safrole ¹	94-59-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
sym-Trinitrobenzene ¹ (1,3,5-trinitrobenzene, 1,3,5-TNB)	99-35-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Semi Volatile Organic Compounds - Phenolics															
2,3,4,6-Tetrachlorophenol ¹	58-90-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4,5-Trichlorophenol ¹	95-95-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4,6-Trichlorophenol ¹	88-06-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4-Dichlorophenol ¹	120-83-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4-Dimethylphenol ¹	105-67-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4-Dinitrophenol ¹	51-28-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,6-Dichlorophenol ¹	87-65-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Chlorophenol ¹	95-57-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Methylphenol (o-Cresol) ¹	95-48-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2-Nitrophenol (o-Nitrophenol) ¹	88-75-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
3-Methylphenol/4-Methylphenol (m&p-Cresol) ¹	98-39-4/106-44	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) ¹	534-52-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
p-Chloro-m-cresol (4-Chloro-3-methylphenol) ¹	59-50-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4-Nitrophenol (p-Nitrophenol) ¹	100-02-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
5-Nitro-o-toluidine ¹	99-55-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Pentachlorophenol ¹	87-86-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Phenol ¹ (a)	108-95-2	mg/L	0.005	x	x	x	x	x	x	x	x	x	x	x	x
Radium 226 and 228	NA	pCi/L	5						0.641					3.88	3.88
Ra-226, total	NA	pCi/L	-	x	x	x	x	x	0.283	x	x	x	x	1.06	1.06
Ra-228 ¹ , total	NA	pCi/L	-	x	x	x	x	x	0.358	x	x	x	x	2.81	2.81
Chlorinated Pesticides															
4,4'-DDD (p,p'-DDD) ¹	72-54-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4,4'-DDE (p,p'-DDE) ¹	72-55-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
4,4'-DDT (p,p'-DDT) ¹	50-29-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
aldrin ¹	309-00-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
alpha-BHC ¹	319-84-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
alpha-Chlordane ¹	5103-71-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
beta-BHC ¹	319-85-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Chlordane ¹	57-74-9	mg/L	0.002	x	x	x	x	x	x	x	x	x	x	x	x
delta-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dieldrin ¹	60-57-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
gamma-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Heptachlor ¹	76-44-8	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Isodrin ¹	465-73-6	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Kepone ¹	143-50-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Methoxychlor ¹	72-43-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Toxaphene ¹	8001-35-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Polychlorinated Biphenyls (PCBs)¹		mg/L	0.001												
Arochlor-1016	12674-11-2	mg/L	-	x	x	x	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1221	11104-28-2	mg/L	-	x	x	x	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1232	11141-16-5	mg/L	-	x	x	x	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1242	53469-21-9	mg/L	-	x	x	x	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1248	12672-29-6	mg/L	-	x	x	x	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1254	11097-69-1	mg/L	-	x	x	x	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1260	11096-82-5	mg/L	-	x	x	x	x	x	<0.00025	x	x	x	x	x	x
Other Pesticides and Herbicides¹															
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x	x	x	x	x	x	x

APPENDIX B

Las Cruces Foothills Landfill MW-3

Las Cruces Foothills Landfill monitoring well MW-3

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-3										baseline	standard
														average	deviation
				6/19/12	12/19/12	6/25/13	12/19/13	6/26/14	12/11/14	6/18/15	12/17/15	6/16/16	12/11/17	1/12/99 to 5/18/00	1/12/99 to 5/18/00
date															
2,4,5-T ¹	93-76-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Famphur ¹	52-58-7	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Phorate ¹	298-02-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
Silvex ¹	93-72-1	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x

¹ hazardous
x parameter not analyzed
(*) See section entitled 'Semi volatile organic compounds - phenolics' for break-out of phenolics con
(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.
(*) This concentration attributed to laboratory contamination of method blank and not the presence of
(#) Scanned for and not detected , breaks down almost immediately in water.

MW-4

APPENDIX B
Las Cruces Foothills Landfill MW-4

Las Cruces Foothills Landfill monitoring well MW-4

Table with columns: constituent, CAS Number, unit, GWPS, and RESULTS FOR MW-4 (dates from 1/12/99 to 9/25/02). Rows include Field Parameters, Major Ions, Nitrogen Species, Metals, Volatile Organic Compounds, and various chemical constituents like aluminum, copper, and zinc.

MW-5

APPENDIX B Las Cruces Foothills Landfill MW-5

Las Cruces Foothills Landfill monitoring well MW-5

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-5								
				7/15/03	8/27/03	9/29/03	10/29/03	11/25/03	12/29/03	12/2/04	12/14/05	
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Endrin ketone	53494-70-5	mg/L	-	<0.00002	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
gamma-BHC ¹	319-86-8	mg/L	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	<0.0001	see above	see above	see above	see above	see above	see above	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Heptachlor ¹	76-44-8	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Isodrin ¹	465-73-6	mg/L	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Kepone ¹	143-50-0	mg/L	-	<0.025	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Methoxychlor ¹	72-43-5	mg/L	-	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Toxaphene ¹	8001-35-2	mg/L	-	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Polychlorinated Biphenyls (PCBs)¹			0.001									
Arochlor-1016	12674-11-2	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1221	11104-28-2	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1232	11141-16-5	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1242	53469-21-9	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1248	12672-29-6	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1254	11097-69-1	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1260	11096-82-5	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Other Pesticides and Herbicides¹												
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Dimethoate ¹	60-51-5	mg/L	-	<0.0005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Dinoseb ¹	88-85-7	mg/L	-	<0.005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Disulfoton ¹	298-04-4	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Famphur ¹	52-58-7	mg/L	-	<0.0005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Methyl parathion ¹	298-00-0	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Phorate ¹	298-02-2	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x

* baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in Environmental Protection, subpart 803. Ground Water Sampling and Analysis, 1995.

¹ hazardous

x parameter not analyzed

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) Scanned for and not detected, breaks down almost immediately in water.

APPENDIX B
Las Cruces Foothills Landfill MW-5

Las Cruces Foothills Landfill monitoring well MW-5

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-5								
				12/12/06	1/18/08	12/23/08	12/29/09	12/29/10	12/28/11	6/19/12	12/20/12	6/26/13
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
gamma-BHC ¹	319-86-8	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	x	x	x	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Heptachlor ¹	76-44-8	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Isodrin ¹	465-73-6	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Kepone ¹	143-50-0	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Methoxychlor ¹	72-43-5	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Toxaphene ¹	8001-35-2	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Polychlorinated Biphenyls (PCBs)¹			0.001									
Arochlor-1016	12674-11-2	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1221	11104-28-2	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1232	11141-16-5	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1242	53469-21-9	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1248	12672-29-6	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1254	11097-69-1	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1260	11096-82-5	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Other Pesticides and Herbicides¹												
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	<0.000934	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	x	x	<0.00005	x	x	x	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	<0.00005	x	x	x	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	<0.00005	x	x	x	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Famphur ¹	52-58-7	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	<0.001	x	x	x	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Phorate ¹	298-02-2	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	x	x	<0.00005	x	x	x	x	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	<0.001	x	x	x	x	x	x

* baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in E

¹ hazardous

x parameter not analyzed

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) Scanned for and not detected , breaks down almost immediately in water.

APPENDIX B

Las Cruces Foothills Landfill MW-5

Las Cruces Foothills Landfill monitoring well MW-5

constituent	CAS Number	unit	GWPS					baseline	standard
				6/16/16	12/27/16	6/27/17	12/6/17	average	deviation
date									
							7/15/03 to 12/2/04	7/15/03 to 12/2/04	
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	x	x	x	x	<0.001	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	x	x	x	x	<0.001	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	x	x	x	x	<0.001	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	x	x	x	x	<0.001	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	<0.00002	x
Endrin ¹	72-20-8	mg/L	-	x	x	x	x	<0.001	x
gamma-BHC ¹	319-86-8	mg/L	-	x	x	x	x	<0.0001	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	see above	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	x	x	x	x	<0.001	x
Heptachlor ¹	76-44-8	mg/L	-	x	x	x	x	<0.001	x
Isodrin ¹	465-73-6	mg/L	-	x	x	x	x	<0.02	x
Kepone ¹	143-50-0	mg/L	-	x	x	x	x	<0.02	x
Methoxychlor ¹	72-43-5	mg/L	-	x	x	x	x	<0.01	x
Toxaphene ¹	8001-35-2	mg/L	-	x	x	x	x	<0.001	x
Polychlorinated Biphenyls (PCBs)¹			0.001						
Arochlor-1016	12674-11-2	mg/L	-	x	x	x	x	<0.0005	x
Arochlor-1221	11104-28-2	mg/L	-	x	x	x	x	<0.0005	x
Arochlor-1232	11141-16-5	mg/L	-	x	x	x	x	<0.0005	x
Arochlor-1242	53469-21-9	mg/L	-	x	x	x	x	<0.0005	x
Arochlor-1248	12672-29-6	mg/L	-	x	x	x	x	<0.0005	x
Arochlor-1254	11097-69-1	mg/L	-	x	x	x	x	<0.0005	x
Arochlor-1260	11096-82-5	mg/L	-	x	x	x	x	<0.0005	x
Other Pesticides and Herbicides¹									
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	x	x	x	x	<0.002	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	x	x	<0.01	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	x	x	<0.02	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	x	x	<0.02	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	x	x	<0.01	x
Famphur ¹	52-58-7	mg/L	-	x	x	x	x	<0.02	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	x	x	<0.01	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	x	x	<0.01	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	x	x	<0.01	x
Phorate ¹	298-02-2	mg/L	-	x	x	x	x	<0.01	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	x	x	x	x	<0.002	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	x	x	<0.02	x

* baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in E

¹ hazardous

x parameter not analyzed

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) Scanned for and not detected, breaks down almost immediately in water.

MW-6

APPENDIX B

Las Cruces Foothills Landfill MW-6

Las Cruces Foothills Landfill monitoring well MW-6

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-6								
				7/15/03	8/27/03	9/29/03	10/27/03	11/25/03	12/29/03	12/2/04	12/14/05	
date												
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Endrin ketone	53494-70-5	mg/L	-	<0.00002	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
gamma-BHC ¹	319-86-8	mg/L	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	<0.0001	see above	see above	see above	see above	see above	see above	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Heptachlor ¹	76-44-8	mg/L	-	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Isodrin ¹	465-73-6	mg/L	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Kepone ¹	143-50-0	mg/L	-	<0.025	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Methoxychlor ¹	72-43-5	mg/L	-	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Toxaphene ¹	8001-35-2	mg/L	-	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	x	x
Polychlorinated Biphenyls (PCBs)¹			0.001									
Arochlor-1016	12674-11-2	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1221	11104-28-2	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1232	11141-16-5	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1242	53469-21-9	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1248	12672-29-6	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1254	11097-69-1	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Arochlor-1260	11096-82-5	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x
Other Pesticides and Herbicides¹												
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x	x	<1.30	x
2,4,5-T ¹	93-76-5	mg/L	-	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Dimethoate ¹	60-51-5	mg/L	-	<0.0005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Dinoseb ¹	88-85-7	mg/L	-	<0.005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Disulfoton ¹	298-04-4	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Famphur ¹	52-58-7	mg/L	-	<0.0005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x
Methyl parathion ¹	298-00-0	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Phorate ¹	298-02-2	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x

* baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in Environmental Protection, subpart 803. Ground Water Sampling and Analysis, 1995.

¹ hazardous

x parameter not analyzed

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) Scanned for and not detected, breaks down almost immediately in water.

APPENDIX B

Las Cruces Foothills Landfill MW-6

Las Cruces Foothills Landfill monitoring well MW-6

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-6								
				12/12/06	1/18/08	12/23/08	12/29/09	12/29/10	12/28/11	6/19/12	12/20/12	
date												
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
gamma-BHC ¹	319-86-8	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	x	x	x	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Heptachlor ¹	76-44-8	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Isodrin ¹	465-73-6	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Kepone ¹	143-50-0	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Methoxychlor ¹	72-43-5	mg/L	-	x	x	<0.00004	x	x	x	x	x	x
Toxaphene ¹	8001-35-2	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Polychlorinated Biphenyls (PCBs)¹			0.001									
Arochlor-1016	12674-11-2	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1221	11104-28-2	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1232	11141-16-5	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1242	53469-21-9	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1248	12672-29-6	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1254	11097-69-1	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Arochlor-1260	11096-82-5	mg/L	-	x	x	<0.00025	x	x	x	x	x	x
Other Pesticides and Herbicides¹												
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	<0.000717	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	x	x	<0.00005	x	x	x	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	<0.00005	x	x	x	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	<0.00005	x	x	x	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Famphur ¹	52-58-7	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	<0.001	x	x	x	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Phorate ¹	298-02-2	mg/L	-	x	x	<0.001	x	x	x	x	x	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	x	x	<0.00005	x	x	x	x	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	<0.001	x	x	x	x	x	x

* baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in Enviro

¹ hazardous

x parameter not analyzed

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) Scanned for and not detected, breaks down almost immediately in water.

APPENDIX B

Las Cruces Foothills Landfill MW-6

Las Cruces Foothills Landfill monitoring well MW-6									baseline	standard
constituent	CAS Number	unit	GWPS						average	deviation
				6/26/13	6/16/16	12/27/16	6/27/17	12/6/17	7/15/03 to 12/2/04	7/15/03 to 12/2/04
bis (2-Chloroethyl) ether ¹	111-44-4	mg/L	-	x	x	x	x	x	<0.01	x
bis (2-Chloroisopropyl) ether (bis (2-chloro-1-methylethyl) ether) ¹	108-60-1	mg/L	-	x	x	x	x	x	<0.01	x
bis (2-Ethylhexyl) phthalate	117-81-7	mg/L	-	x	x	x	x	x	<0.02	x
Butylbenzylphthalate ¹	85-68-7	mg/L	-	x	x	x	x	x	<0.01	x
Carbazole	86-74-8	mg/L	-	x	x	x	x	x	<0.005	x
Chlorobenzilate ¹	510-15-6	mg/L	-	x	x	x	x	x	<0.01	x
Chrysene ¹	218-01-9	mg/L	-	x	x	x	x	x	<0.01	x
Diallate ¹	2303-16-4	mg/L	-	x	x	x	x	x	<0.01	x
Dibenz (a,j) acridine	224-42-0	mg/L	-	x	x	x	x	x	<0.01	x
Dibenzo (a,h) anthracene ¹	226-36-8	mg/L	-	x	x	x	x	x	<0.01	x
Dibenzofuran ¹	132-64-9	mg/L	-	x	x	x	x	x	<0.01	x
Diethylene Glycol Monobutyl Ether	112-34-5	mg/L	-	x	x	x	x	x	x	x
Diethylphthalate ¹	84-66-2	mg/L	-	x	x	x	x	x	<0.01	x
Dimethylphthalate ¹	131-11-3	mg/L	-	x	x	x	x	x	<0.01	x
Di-n-butylphthalate ¹	84-74-2	mg/L	-	x	x	x	x	x	<0.01	x
Di-n-octylphthalate ¹	117-84-0	mg/L	-	x	x	x	x	x	<0.01	x
Diphenylamine ¹	122-39-4	mg/L	-	x	x	x	x	x	<0.01	x
Ethyl methanesulfonate ¹	62-50-0	mg/L	-	x	x	x	x	x	<0.02	x
Fluoranthene ¹	206-44-0	mg/L	-	x	x	x	x	x	<0.01	x
Fluorene ¹	86-73-7	mg/L	-	x	x	x	x	x	<0.01	x
Hexachlorobenzene ¹	118-74-1	mg/L	-	x	x	x	x	x	<0.001	x
Hexachlorocyclopentadiene ¹	77-47-4	mg/L	-	x	x	x	x	x	<0.01	x
Hexachloroethane ¹	67-72-1	mg/L	-	x	x	x	x	x	<0.05	x
Hexachloropropene ¹	1888-71-7	mg/L	-	x	x	x	x	x	<0.01	x
HMX ¹	2691-41-0	mg/L	-	x	x	x	x	x	x	x
Indeno (1,2,3-cd) pyrene ¹	193-39-5	mg/L	-	x	x	x	x	x	<0.01	x
Isophorone ¹	78-59-1	mg/L	-	x	x	x	x	x	<0.01	x
Isosafrole ¹	120-58-1	mg/L	-	x	x	x	x	x	<0.01	x
m-Dinitrobenzene (1,3-DNB)	99-65-0	mg/L	-	x	x	x	x	x	<0.02	x
Methapyrilene ¹	91-80-5	mg/L	-	x	x	x	x	x	<0.02	x
Methyl methanesulfonate ¹	66-27-3	mg/L	-	x	x	x	x	x	<0.01	x
Naphthalene ¹	91-20-3	mg/L	0.03	x	x	x	x	x	<0.01	x
Nitrobenzene ¹	98-95-3	mg/L	-	x	x	x	x	x	<0.01	x
n-Nitrosodiethylamine ¹	55-18-5	mg/L	-	x	x	x	x	x	<0.02	x
n-Nitrosodimethylamine ¹	62-75-9	mg/L	-	x	x	x	x	x	<0.002	x
n-Nitrosodi-n-butylamine ¹	924-16-3	mg/L	-	x	x	x	x	x	<0.01	x
n-Nitrosodipropylamine ¹	621-64-7	mg/L	-	x	x	x	x	x	<0.01	x
n-Nitrosodiphenylamine ¹	86-30-6	mg/L	-	x	x	x	x	x	<0.005	x
n-Nitrosomethylethylamine ¹	10595-95-6	mg/L	-	x	x	x	x	x	<0.01	x
n-Nitrosopiperidine ¹	100-75-4	mg/L	-	x	x	x	x	x	<0.02	x
n-Nitrosopyrrolidine ¹	930-55-2	mg/L	-	x	x	x	x	x	<0.04	x
o-Toluidine ¹	95-53-4	mg/L	-	x	x	x	x	x	<0.002	x
p-(Dimethylamino) azobenzene ¹	60-11-7	mg/L	-	x	x	x	x	x	<0.01	x
Pentachlorobenzene ¹	608-93-5	mg/L	-	x	x	x	x	x	<0.01	x
Pentachloronitrobenzene ¹	82-68-8	mg/L	-	x	x	x	x	x	<0.02	x
Phenacetin ¹	62-44-2	mg/L	-	x	x	x	x	x	<0.01	x
Phenanthrene ¹	85-01-8	mg/L	-	x	x	x	x	x	<0.001	x
p-Phenylenediamine ¹	106-50-3	mg/L	-	x	x	x	x	x	<0.01	x
Pronamide ¹	23950-58-5	mg/L	-	x	x	x	x	x	<0.01	x
Pyrene ¹	129-00-0	mg/L	-	x	x	x	x	x	<0.01	x
Pyridine	110-86-1	mg/L	-	x	x	x	x	x	<0.01	x
RDX ¹	121-82-4	mg/L	-	x	x	x	x	x	x	x
Safrole ¹	94-59-7	mg/L	-	x	x	x	x	x	<0.01	x
sym-Trinitrobenzene ¹ (1,3,5-TNB)	99-35-4	mg/L	-	x	x	x	x	x	<0.01	x
Semi Volatile Organic Compounds - Phenolics										
2,3,4,6-Tetrachlorophenol ¹	58-90-2	mg/L	-	x	x	x	x	x	<0.01	x
2,4,5-Trichlorophenol ¹	95-95-4	mg/L	-	x	x	x	x	x	<0.01	x
2,4,6-Trichlorophenol ¹	88-06-2	mg/L	-	x	x	x	x	x	<0.01	x
2,4-Dichlorophenol ¹	120-83-2	mg/L	-	x	x	x	x	x	<0.01	x
2,4-Dimethylphenol ¹	105-67-9	mg/L	-	x	x	x	x	x	<0.01	x
2,4-Dinitrophenol ¹	51-28-5	mg/L	-	x	x	x	x	x	<0.05	x
2,6-Dichlorophenol ¹	87-65-0	mg/L	-	x	x	x	x	x	<0.01	x
2-Chlorophenol ¹	95-57-8	mg/L	-	x	x	x	x	x	<0.01	x
2-Methylphenol (o-Cresol) ¹	95-48-7	mg/L	-	x	x	x	x	x	<0.01	x
2-Nitrophenol (o-Nitrophenol) ¹	88-75-5	mg/L	-	x	x	x	x	x	<0.01	x
3-Methylphenol/4-Methylphenol (m&p-Cresol) ¹	98-39-4/106-44	mg/L	-	x	x	x	x	x	<0.02	x
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) ¹	534-52-1	mg/L	-	x	x	x	x	x	<0.05	x
p-Chloro-m-cresol (4-Chloro-3-methylphenol) ¹	59-50-7	mg/L	-	x	x	x	x	x	<0.005	x
4-Nitrophenol (p-Nitrophenol) ¹	100-02-7	mg/L	-	x	x	x	x	x	<0.05	x
Pentachlorophenol ¹	87-86-5	mg/L	-	x	x	x	x	x	<0.02	x
Phenol ¹ (a)	108-95-2	mg/L	0.005	x	x	x	x	x	<0.01	x
Radium 226 and 228										
Ra-226, total	NA	pCi/L	-	x	x	x	x	x	<2.5	x
Ra-228 ¹ , total	NA	pCi/L	-	x	x	x	x	x	<2.5	x
Chlorinated Pesticides										
4,4'-DDD (p,p'-DDD) ¹	72-54-8	mg/L	-	x	x	x	x	x	<0.001	x
4,4'-DDE (p,p'-DDE) ¹	72-55-9	mg/L	-	x	x	x	x	x	<0.001	x
4,4'-DDT (p,p'-DDT) ¹	50-29-3	mg/L	-	x	x	x	x	x	<0.001	x
aldrin ¹	309-00-2	mg/L	-	x	x	x	x	x	<0.01	x
alpha-BHC ¹	319-84-6	mg/L	-	x	x	x	x	x	<0.0001	x
alpha-Chlordane ¹	5103-71-9	mg/L	-	x	x	x	x	x	alpha +	x
beta-BHC ¹	319-85-7	mg/L	-	x	x	x	x	x	<0.0001	x
Chlordane ¹	57-74-9	mg/L	0.002	x	x	x	x	x	x	x
delta-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	<0.0001	x
Dieldrin ¹	60-57-1	mg/L	-	x	x	x	x	x	<0.001	x
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	x	x	x	x	x	<0.001	x

APPENDIX B

Las Cruces Foothills Landfill MW-6

Las Cruces Foothills Landfill monitoring well MW-6									baseline	standard
constituent	CAS Number	unit	GWPS						average	deviation
date				6/26/13	6/16/16	12/27/16	6/27/17	12/6/17	7/15/03 to 12/2/04	7/15/03 to 12/2/04
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	x	x	x	x	x	<0.001	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	x	x	x	x	x	<0.001	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	x	x	x	x	x	<0.001	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	x	<0.00002	x
Endrin ¹	72-20-8	mg/L	-	x	x	x	x	x	<0.001	x
gamma-BHC ¹	319-86-8	mg/L	-	x	x	x	x	x	<0.0001	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	x	see above	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	x	x	x	x	x	<0.001	x
Heptachlor ¹	76-44-8	mg/L	-	x	x	x	x	x	<0.001	x
Isodrin ¹	465-73-6	mg/L	-	x	x	x	x	x	<0.02	x
Kepone ¹	143-50-0	mg/L	-	x	x	x	x	x	<0.02	x
Methoxychlor ¹	72-43-5	mg/L	-	x	x	x	x	x	<0.01	x
Toxaphene ¹	8001-35-2	mg/L	-	x	x	x	x	x	<0.001	x
Polychlorinated Biphenyls (PCBs)¹			0.001							
Arochlor-1016	12674-11-2	mg/L	-	x	x	x	x	x	<0.0005	x
Arochlor-1221	11104-28-2	mg/L	-	x	x	x	x	x	<0.0005	x
Arochlor-1232	11141-16-5	mg/L	-	x	x	x	x	x	<0.0005	x
Arochlor-1242	53469-21-9	mg/L	-	x	x	x	x	x	<0.0005	x
Arochlor-1248	12672-29-6	mg/L	-	x	x	x	x	x	<0.0005	x
Arochlor-1254	11097-69-1	mg/L	-	x	x	x	x	x	<0.0005	x
Arochlor-1260	11096-82-5	mg/L	-	x	x	x	x	x	<0.0005	x
Other Pesticides and Herbicides¹										
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	x	x	x	x	x	<0.002	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	x	x	x	<0.01	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	x	x	x	<0.02	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	x	x	x	<0.02	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	x	x	x	<0.01	x
Famphur ¹	52-58-7	mg/L	-	x	x	x	x	x	<0.02	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	x	x	x	<0.01	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	x	x	x	<0.01	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	x	x	x	<0.01	x
Phorate ¹	298-02-2	mg/L	-	x	x	x	x	x	<0.01	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	x	x	x	x	x	<0.002	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	x	x	x	<0.02	x

* baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in Enviro

¹ hazardous

x parameter not analyzed

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) Scanned for and not detected, breaks down almost immediately in water.

MW-7

APPENDIX B

Las Cruces Foothills Landfill MW-7

Las Cruces Foothills Landfill monitoring well MW-7

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-7									
				7/15/03	8/27/03	9/29/03	10/27/03	11/25/03	12/29/03	12/2/04	12/14/05	12/12/06	
date													
Arochlor-1221	11104-28-2	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x	x
Arochlor-1232	11141-16-5	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x	x
Arochlor-1242	53469-21-9	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x	x
Arochlor-1248	12672-29-6	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x	x
Arochlor-1254	11097-69-1	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x	x
Arochlor-1260	11096-82-5	mg/L	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	x	x	x
Other Pesticides and Herbicides¹													
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	<0.0005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	<0.005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x	x
Famphur ¹	52-58-7	mg/L	-	<0.0005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x	x
Phorate ¹	298-02-2	mg/L	-	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	x	x	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	x	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	x	x	x

* baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in Environmental Protection, subpart 803. Ground Water Sampling and Analysis, 1995.

¹ hazardous

x parameter not analyzed

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) Scanned for and not detected, breaks down almost immediately in water.

APPENDIX B

Las Cruces Foothills Landfill MW-7

Las Cruces Foothills Landfill monitoring well MW-7

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-7										
				1/18/08	12/23/08	12/29/09	12/29/10	12/28/11	6/19/12	12/19/12	6/26/13	12/19/13	6/26/14	
Arochlor-1221	11104-28-2	mg/L	-	x	<0.00025	x	x	x	x	x	x	x	x	x
Arochlor-1232	11141-16-5	mg/L	-	x	<0.00025	x	x	x	x	x	x	x	x	x
Arochlor-1242	53469-21-9	mg/L	-	x	<0.00025	x	x	x	x	x	x	x	x	x
Arochlor-1248	12672-29-6	mg/L	-	x	<0.00025	x	x	x	x	x	x	x	x	x
Arochlor-1254	11097-69-1	mg/L	-	x	<0.00025	x	x	x	x	x	x	x	x	x
Arochlor-1260	11096-82-5	mg/L	-	x	<0.00025	x	x	x	x	x	x	x	x	x
Other Pesticides and Herbicides¹														
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	<0.00117	x	x	x	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	x	<0.00005	x	x	x	x	x	x	x	x	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	<0.00005	x	x	x	x	x	x	x	x	x
Dimethoate ¹	60-51-5	mg/L	-	x	<0.001	x	x	x	x	x	x	x	x	x
Dinoseb ¹	88-85-7	mg/L	-	x	<0.00005	x	x	x	x	x	x	x	x	x
Disulfoton ¹	298-04-4	mg/L	-	x	<0.001	x	x	x	x	x	x	x	x	x
Famphur ¹	52-58-7	mg/L	-	x	<0.001	x	x	x	x	x	x	x	x	x
Methyl parathion ¹	298-00-0	mg/L	-	x	<0.001	x	x	x	x	x	x	x	x	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	<0.001	x	x	x	x	x	x	x	x	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	<0.001	x	x	x	x	x	x	x	x	x
Phorate ¹	298-02-2	mg/L	-	x	<0.001	x	x	x	x	x	x	x	x	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	x	<0.00005	x	x	x	x	x	x	x	x	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	<0.001	x	x	x	x	x	x	x	x	x

* baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in Enviro

¹ hazardous

x parameter not analyzed

(^^) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) Scanned for and not detected , breaks down almost immediately in water.

APPENDIX B

Las Cruces Foothills Landfill MW-7

Las Cruces Foothills Landfill monitoring well MW-7

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-7								baseline	standard	
				12/11/14	6/18/15	12/17/15	6/16/16	12/28/16	6/27/17	12/13/17	6/20/18	average	deviation	
date												7/15/03 to 12/2/04	7/15/03 to 12/2/04	
Arochlor-1221	11104-28-2	mg/L	-	<0.00025	x	x	x	x	x	x	x	x	<0.0005	x
Arochlor-1232	11141-16-5	mg/L	-	<0.00025	x	x	x	x	x	x	x	x	<0.0005	x
Arochlor-1242	53469-21-9	mg/L	-	<0.00025	x	x	x	x	x	x	x	x	<0.0005	x
Arochlor-1248	12672-29-6	mg/L	-	<0.00025	x	x	x	x	x	x	x	x	<0.0005	x
Arochlor-1254	11097-69-1	mg/L	-	<0.00025	x	x	x	x	x	x	x	x	<0.0005	x
Arochlor-1260	11096-82-5	mg/L	-	<0.00025	x	x	x	x	x	x	x	x	<0.0005	x
Other Pesticides and Herbicides¹														
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	x	x	x	x	x	x	x	x	x	x	x
2,4,5-T ¹	93-76-5	mg/L	-	x	x	x	x	x	x	x	x	x	<0.002	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	x	x	x	x	x	x	x	x	x	<0.01	x
Dimethoate ¹	60-51-5	mg/L	-	x	x	x	x	x	x	x	x	x	<0.02	x
Dinoseb ¹	88-85-7	mg/L	-	x	x	x	x	x	x	x	x	x	<0.02	x
Disulfoton ¹	298-04-4	mg/L	-	x	x	x	x	x	x	x	x	x	<0.01	x
Famphur ¹	52-58-7	mg/L	-	x	x	x	x	x	x	x	x	x	<0.02	x
Methyl parathion ¹	298-00-0	mg/L	-	x	x	x	x	x	x	x	x	x	<0.01	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	x	x	x	x	x	x	x	x	x	<0.01	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	x	x	x	x	x	x	x	x	x	<0.01	x
Phorate ¹	298-02-2	mg/L	-	x	x	x	x	x	x	x	x	x	<0.01	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	x	x	x	x	x	x	x	x	x	<0.002	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	x	x	x	x	x	x	x	x	x	<0.02	x

* baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in Enviro

¹ hazardous

x parameter not analyzed

(**) See section entitled 'Polychlorinated Biphenyls (PCBs)' for break-out of PCB concentrations.

(#) Scanned for and not detected , breaks down almost immediately in water.

MW-8

APPENDIX B Las Cruces Foothills Landfill MW-8

Las Cruces Foothills Landfill monitoring well MW-8

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-8								baseline average	standard deviation
				12/29/10	5/18/11	8/23/11	11/28/11	12/29/11	12/20/12	6/26/13	12/21/17		
4-Nitrophenol (p-Nitrophenol) ¹	100-02-7	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Pentachlorophenol ¹	87-86-5	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Phenol ¹ (a)	108-95-2	mg/L	0.005	<0.01	x	x	x	x	x	x	x	<0.01	x
Radium 226 and 228	NA	pCi/L	5	0.752	1.29	2.41	0.507	0.199	x	x	x	1.03	0.87
Ra-226, total	NA	pCi/L	-	0.000	0.060	2.29	0.293	0.093	x	x	x	0.55	0.98
Ra-228 ¹ , total	NA	pCi/L	-	0.752	1.23	0.123	0.214	0.106	x	x	x	0.49	0.49
Chlorinated Pesticides													
4,4'-DDD (p,p'-DDD) ¹	309-00-2	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
4,4'-DDE (p,p'-DDE) ¹	319-84-6	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
4,4'-DDT (p,p'-DDT) ¹	319-85-7	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
aldrin ¹	319-86-8	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
alpha-BHC ¹	319-86-8	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
alpha-Chlordane ¹	5103-71-9	mg/L	-	x	x	x	x	x	x	x	x	x	x
beta-BHC ¹	5103-74-2	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
Chlordane ¹	57-74-9	mg/L	0.002	<0.005	x	x	x	x	x	x	x	<0.005	x
delta-BHC ¹	72-54-8	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
Dieldrin ¹	72-55-9	mg/L	-	<0.001	x	x	x	x	x	x	x	<0.001	x
Endosulfan I (alpha-Endosulfan) ¹	50-29-3	mg/L	-	<0.001	x	x	x	x	x	x	x	<0.001	x
Endosulfan II (beta-Endosulfan) ¹	60-57-1	mg/L	-	<0.001	x	x	x	x	x	x	x	<0.001	x
Endosulfan sulfate ¹	959-98-8	mg/L	-	<0.001	x	x	x	x	x	x	x	<0.001	x
Endrin aldehyde ¹	33213-65-9	mg/L	-	<0.001	x	x	x	x	x	x	x	<0.001	x
Endrin ketone	1031-07-8	mg/L	-	x	x	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	<0.001	x	x	x	x	x	x	x	<0.001	x
gamma-BHC ¹	7421-93-4	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
gamma-Chlordane ¹	53494-70-5	mg/L	-	x	x	x	x	x	x	x	x	x	x
Heptachlor epoxide ¹	76-44-8	mg/L	-	<0.001	x	x	x	x	x	x	x	<0.001	x
Heptachlor ¹	1024-57-3	mg/L	-	<0.001	x	x	x	x	x	x	x	<0.001	x
Isodrin ¹	465-73-6	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Kepon ¹	143-50-0	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Methoxychlor ¹	72-43-5	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Toxaphene ¹	8001-35-2	mg/L	-	<0.001	x	x	x	x	x	x	x	<0.001	x
Polychlorinated Biphenyls (PCBs)													
Arochlor-1016	12674-11-2	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	<0.00025	x
Arochlor-1221	11104-28-2	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	<0.00025	x
Arochlor-1232	11141-16-5	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	<0.00025	x
Arochlor-1242	53469-21-9	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	<0.00025	x
Arochlor-1248	12672-29-6	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	<0.00025	x
Arochlor-1254	11097-69-1	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	<0.00025	x
Arochlor-1260	11096-82-5	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	<0.00025	x
Other Pesticides and Herbicides¹													
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	<0.000546	x	x	x	x	x	x	x	<0.000546	x
2,4,5-T ¹	93-76-5	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
Dimethoate ¹	60-51-5	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Dinoseb ¹	88-85-7	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
Disulfoton ¹	298-04-4	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Famphur ¹	52-58-7	mg/L	-	<0.005	x	x	x	x	x	x	x	<0.005	x
Methyl parathion ¹	298-00-0	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Phorate ¹	298-02-2	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	<0.0001	x	x	x	x	x	x	x	<0.0001	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	<0.01	x	x	x	x	x	x	x	<0.01	x

¹ baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in EPA, Subpart 803., Ground Water Sampling and Analysis, 1995.

hazardous
x parameter not analyzed

(#) Scanned for and not detected, breaks down almost immediately in water.

MW-9

APPENDIX B Las Cruces Foothills Landfill MW-9

Las Cruces Foothills Landfill monitoring well MW-9

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-9										baseline	standard	
				12/29/10	5/18/11	8/23/11	11/28/11	12/29/11	12/20/12	6/26/13	12/28/16	6/28/17	12/19/17	12/29/10 to 12/29/11	12/29/10 to 12/29/11	
alpha,alpha-Dimethylphenethylamine	122-09-8	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Aniline ¹	62-53-3	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Anthracene ¹	120-12-7	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Benzidine ¹	92-87-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Benzo (a) anthracene ¹	56-55-3	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Benzo (a) pyrene ¹	50-32-8	mg/L	0.0002	<0.0001	<0.00007	<0.00007	<0.00007	<0.00007	<0.00007	x	x	x	x	x	<0.0001	x
Benzo (b) fluoranthene ¹	205-99-2	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Benzo (g,h,i) perylene ¹	191-24-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Benzo (k) fluoranthene ¹	207-08-9	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Benzoic acid ¹	65-85-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x
Benzyl alcohol ¹	100-51-6	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
bis (2-Chloroethoxy) methane ¹	111-91-1	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
bis (2-Chloroethyl) ether ¹	111-44-4	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
bis (2-Chloroisopropyl) ether (bis (2-chloro-1-methylethyl) ether) ¹	108-60-1	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
bis (2-Ethylhexyl) phthalate	117-81-7	mg/L	-	<0.005	x	x	x	x	x	x	x	x	x	x	<0.005	x
Butylbenzylphthalate ¹	85-68-7	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Carbazole	86-74-8	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Chlorobenzilate ¹	510-15-6	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Chrysene ¹	218-01-9	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Diallate ¹	2303-16-4	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Dibenz (a,j) acridine	224-42-0	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x
Dibenzo (a,h) anthracene ¹	226-36-8	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Dibenzofuran ¹	132-64-9	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Diethylene Glycol Monobutyl Ether	112-34-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x
Diethylphthalate ¹	84-66-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Dimethylphthalate ¹	131-11-3	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Di-n-butylphthalate ¹	84-74-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Di-n-octylphthalate ¹	117-84-0	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Diphenylamine ¹	122-39-4	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Ethyl methanesulfonate ¹	62-50-0	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Fluoranthene ¹	206-44-0	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Fluorene ¹	86-73-7	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Hexachlorobenzene ¹	118-74-1	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
Hexachlorocyclopentadiene ¹	77-47-4	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Hexachloroethane ¹	67-72-1	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Hexachloropropene ¹	1888-71-7	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
HMX ¹	2691-41-0	mg/L	-	0.00101	<0.0001	<0.0001	x	x	x	x	x	x	x	x	<0.0001	x
Indeno (1,2,3-cd) pyrene ¹	193-39-5	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Isophorone ¹	78-59-1	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Isosafrole ¹	120-58-1	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
m-Dinitrobenzene (1,3-DNB)	99-65-0	mg/L	-	<0.0001	<0.0001	<0.0001	x	x	x	x	x	x	x	x	<0.0001	x
Methapyrilene ¹	91-80-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Methyl methanesulfonate ¹	66-27-3	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Naphthalene ¹	91-20-3	mg/L	0.03	<0.01	<0.002	<0.002	<0.002	<0.002	x	x	x	x	x	x	<0.01	x
Nitrobenzene ¹	98-95-3	mg/L	-	<0.01	<0.0001	<0.0001	x	x	x	x	x	x	x	x	<0.01	x
n-Nitrosodiethylamine ¹	55-18-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
n-Nitrosodimethylamine ¹	62-75-9	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
n-Nitrosodi-n-butylamine ¹	924-16-3	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
n-Nitrosodipropylamine ¹	621-64-7	mg/L	-	<0.010	x	x	x	x	x	x	x	x	x	x	<0.01	x
n-Nitrosodiphenylamine ¹	86-30-6	mg/L	-	<0.002	x	x	x	x	x	x	x	x	x	x	<0.002	x
n-Nitrosomethylethylamine ¹	10595-95-6	mg/L	-	<0.002	x	x	x	x	x	x	x	x	x	x	<0.002	x
n-Nitrosopiperidine ¹	100-75-4	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
n-Nitrosopyrrolidine ¹	930-55-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
o-Toluidine ¹	95-53-4	mg/L	-	<0.002	x	x	x	x	x	x	x	x	x	x	<0.002	x
p-(Dimethylamino) azobenzene ¹	60-11-7	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Pentachlorobenzene ¹	608-93-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Pentachloronitrobenzene ¹	82-68-8	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Phenacetin ¹	62-44-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Phenanthrene ¹	85-01-8	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
p-Phenylenediamine ¹	106-50-3	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Pronamide ¹	23950-58-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Pyrene ¹	129-00-0	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Pyridine	110-86-1	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
RDx ¹	121-82-4	mg/L	-	0.000370	<0.0001	<0.0001	x	x	x	x	x	x	x	x	<0.0001	x
Safrole ¹	94-59-7	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
sym-Trinitrobenzene ¹ (1,3,5-TNB)	99-35-4	mg/L	-	<0.0001	<0.0001	<0.0001	x	x	x	x	x	x	x	x	<0.0001	x
Semi Volatile Organic Compounds - Phenolics																
2,3,4,6-Tetrachlorophenol ¹	58-90-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
2,4,5-Trichlorophenol ¹	95-95-4	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
2,4,6-Trichlorophenol ¹	88-06-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
2,4-Dichlorophenol ¹	120-83-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
2,4-Dimethylphenol ¹	105-67-9	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
2,4-Dinitrophenol ¹	51-28-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
2,6-Dichlorophenol ¹	87-65-0	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
2-Chlorophenol ¹	95-57-8	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
2-Methylphenol (o-Cresol) ¹	95-48-7	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
2-Nitrophenol (o-Nitrophenol) ¹	88-75-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
3-Methylphenol/4-Methylphenol (m&p-Cresol) ¹	98-39-4/106-44	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) ¹	534-52-1	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
p-Chloro-m-cresol (4-Chloro-3-methylphenol) ¹	59-50-7	mg/L	-	<0.005	x	x	x	x	x	x	x	x	x	x	<0.005	x

APPENDIX B

Las Cruces Foothills Landfill MW-9

Las Cruces Foothills Landfill monitoring well MW-9

constituent	CAS Number	unit	GWPS	RESULTS FOR MW-9										baseline	standard	
				12/29/10	5/18/11	8/23/11	11/28/11	12/29/11	12/20/12	6/26/13	12/28/16	6/28/17	12/19/17	12/29/10 to 12/29/11	12/29/10 to 12/29/11	
4-Nitrophenol (p-Nitrophenol) ¹	100-02-7	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Pentachlorophenol ¹	87-86-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Pheno ¹ (a)	108-95-2	mg/L	0.005	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Radium 226 and 228	NA	pCi/L	5	10.24	8.74	6.51	5.73	3.78	x	x	x	x	x	x	7.00	2.54
Ra-226, total	NA	pCi/L	-	1.88	1.210	0.788	1.71	1.26	x	x	x	x	x	x	1.37	0.43
Ra-228 ¹ , total	NA	pCi/L	-	8.36	7.53	5.72	4.02	2.52	x	x	x	x	x	x	5.63	2.42
Chlorinated Pesticides																
4,4'-DDD (p,p'-DDD) ¹	72-54-8	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.01	x
4,4'-DDE (p,p'-DDE) ¹	72-55-9	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
4,4'-DDT (p,p'-DDT) ¹	50-29-3	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
aldrin ¹	309-00-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.0001	x
alpha-BHC ¹	319-84-6	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
alpha-Chlordane ¹	5103-71-9	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x
beta-BHC ¹	319-85-7	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Chlordane ¹	57-74-9	mg/L	0.002	<0.005	x	x	x	x	x	x	x	x	x	x	<0.005	x
delta-BHC ¹	319-86-8	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Dieldrin ¹	60-57-1	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
Endosulfan I (alpha-Endosulfan) ¹	959-98-8	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
Endosulfan II (beta-Endosulfan) ¹	33213-65-9	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
Endosulfan sulfate ¹	1031-07-8	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
Endrin aldehyde ¹	7421-93-4	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
Endrin ketone	53494-70-5	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x
Endrin ¹	72-20-8	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
gamma-BHC ¹	319-86-8	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
gamma-Chlordane ¹	5103-74-2	mg/L	-	x	x	x	x	x	x	x	x	x	x	x	x	x
Heptachlor epoxide ¹	1024-57-3	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
Heptachlor ¹	76-44-8	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
Isodrin ¹	465-73-6	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Kepone ¹	143-50-0	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Methoxychlor ¹	72-43-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Toxaphene ¹	8001-35-2	mg/L	-	<0.001	x	x	x	x	x	x	x	x	x	x	<0.001	x
Polychlorinated Biphenyls (PCBs)																
Arochlor-1016	12674-11-2	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	x	x	<0.00025	x
Arochlor-1221	11104-28-2	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	x	x	<0.00025	x
Arochlor-1232	11141-16-5	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	x	x	<0.00025	x
Arochlor-1242	53469-21-9	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	x	x	<0.00025	x
Arochlor-1248	12672-29-6	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	x	x	<0.00025	x
Arochlor-1254	11097-69-1	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	x	x	<0.00025	x
Arochlor-1260	11096-82-5	mg/L	-	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	x	x	x	x	x	<0.00025	x
Other Pesticides and Herbicides¹																
2,3,7,8-TCDD	1746-01-6	ng/L	0.03	<0.000394	x	x	x	x	x	x	x	x	x	x	<0.000394	x
2,4,5-T ¹	93-76-5	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
2,4-Dichlorophenoxyacetic acid (2,4-D) ¹	94-75-7	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Dimethoate ¹	60-51-5	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Dinoseb ¹	88-85-7	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
Disulfoton ¹	298-04-4	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Famphur ¹	52-58-7	mg/L	-	<0.005	x	x	x	x	x	x	x	x	x	x	<0.005	x
Methyl parathion ¹	298-00-0	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
o,o,o-Triethyl phosphorothioate ¹	126-68-1	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Parathion (Ethyl) ¹	56-38-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Phorate ¹	298-02-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x
Silvex ¹ (2,4,5-TP)	93-72-1	mg/L	-	<0.0001	x	x	x	x	x	x	x	x	x	x	<0.0001	x
o,o-Diethyl o-2pyrazinyl phosphorothioate (Thionazin) ¹	297-97-2	mg/L	-	<0.01	x	x	x	x	x	x	x	x	x	x	<0.01	x

¹ baseline averages and standard deviations are based on 1999 and 2000 data only as per requirements in EPA, Subpart 803, Ground Water Sampling and Analysis, 1995.

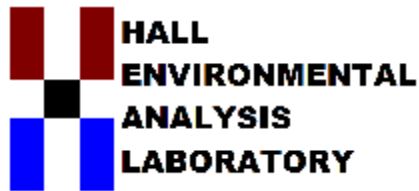
¹ hazardous

x parameter not analyzed

(#) Scanned for and not detected, breaks down almost immediately in water.

Appendix C.

**Copy of laboratory reports for the
June 20 and 27, 2018 sampling event**



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 17, 2018

Luis Guerra

City of Las Cruces

PO Box 20000

Las Cruces, NM 88004

TEL: (575) 528-3635

FAX (575) 528-3513

RE: CLC Foothills Landfill Closure Monitoring Wells

OrderNo.: 1806H19

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/28/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: **1806H19**

Date Reported: **7/17/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces

Lab Order: 1806H19

Project: CLC Foothills Landfill Closure Monitoring Well

Lab ID: 1806H19-001

Collection Date: 6/27/2018 10:31:00 AM

Client Sample ID: CLC MW#1

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 504.1: EDB/DBCP							Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.019		µg/L	1	7/3/2018 9:31:23 PM	39020
1,2-Dibromoethane	ND	0.0095		µg/L	1	7/3/2018 9:31:23 PM	39020
EPA METHOD 9060 TOC							Analyst: CLP
Total Organic Carbon	ND	1.0		mg/L	1	7/10/2018 6:50:57 PM	R52607
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	57	10		mg/L	20	6/29/2018 1:37:49 PM	R5237E
Sulfate	30	0.50		mg/L	1	6/29/2018 1:00:35 PM	R5237E
Nitrate+Nitrite as N	2.8	1.0		mg/L	5	7/12/2018 7:06:13 AM	A52642
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	450	5.0		µmhos/c	1	7/9/2018 1:08:29 PM	R5253E
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO3)	72.88	20.00		mg/L Ca	1	7/2/2018 5:19:17 PM	R5245E
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	7/2/2018 5:19:17 PM	R5245E
Total Alkalinity (as CaCO3)	72.88	20.00		mg/L Ca	1	7/2/2018 5:19:17 PM	R5245E
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	273	20.0		mg/L	1	7/2/2018 6:58:00 PM	38995
SM 4500 NH3: AMMONIA							Analyst: smb
Nitrogen, Ammonia	ND	1.0		mg/L	1	7/16/2018 2:14:00 PM	R5272E
SM4500-H+B / 9040C: PH							Analyst: JRR
pH	8.16		H	pH units	1	7/2/2018 5:19:17 PM	R5245E
EPA METHOD 200.7: TOTAL METALS							Analyst: pmf
Barium	0.11	0.0020		mg/L	1	7/9/2018 7:18:23 PM	38978
Beryllium	ND	0.0020		mg/L	1	7/6/2018 5:19:46 PM	38978
Cadmium	ND	0.0020		mg/L	1	7/9/2018 7:18:23 PM	38978
Calcium	30	1.0		mg/L	1	7/6/2018 5:19:46 PM	38978
Chromium	ND	0.0060		mg/L	1	7/9/2018 7:18:23 PM	38978
Cobalt	ND	0.0060		mg/L	1	7/6/2018 5:19:46 PM	38978
Copper	ND	0.0060		mg/L	1	7/9/2018 7:18:23 PM	38978
Iron	0.078	0.020		mg/L	1	7/6/2018 5:19:46 PM	38978
Magnesium	7.6	1.0		mg/L	1	7/6/2018 5:19:46 PM	38978
Manganese	0.0084	0.0020		mg/L	1	7/6/2018 5:19:46 PM	38978
Nickel	ND	0.010		mg/L	1	7/9/2018 7:18:23 PM	38978
Potassium	3.0	1.0		mg/L	1	7/6/2018 5:19:46 PM	38978
Silver	ND	0.0050		mg/L	1	7/9/2018 7:18:23 PM	38978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces

Lab Order: 1806H19

Project: CLC Foothills Landfill Closure Monitoring Well

EPA METHOD 200.7: TOTAL METALS

Analyst: **pmf**

Sodium	43	1.0	mg/L	1	7/9/2018 7:18:23 PM	38978
Vanadium	ND	0.050	mg/L	1	7/6/2018 5:19:46 PM	38978
Zinc	ND	0.010	mg/L	1	7/9/2018 7:18:23 PM	38978

200.8 ICPMS METALS:TOTAL

Analyst: **ELS**

Antimony	ND	0.0010	mg/L	1	7/2/2018 11:01:56 AM	38978
Arsenic	ND	0.0010	mg/L	1	7/2/2018 11:01:56 AM	38978
Lead	ND	0.00050	mg/L	1	7/2/2018 11:01:56 AM	38978
Selenium	0.0017	0.0010	mg/L	1	7/2/2018 11:01:56 AM	38978
Thallium	ND	0.00050	mg/L	1	7/2/2018 11:01:56 AM	38978

EPA METHOD 8260B: VOLATILES, TABLE I

Analyst: **DJF**

Benzene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Toluene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Ethylbenzene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Acetone	ND	10	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Bromodichloromethane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Bromoform	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Bromomethane	ND	2.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
2-Butanone	ND	10	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Carbon disulfide	ND	10	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Carbon Tetrachloride	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Chlorobenzene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Chloroethane	ND	2.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Chloroform	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Chloromethane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
cis-1,2-DCE	4.7	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Dibromochloromethane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Dibromomethane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,2-Dichlorobenzene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,4-Dichlorobenzene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Dichlorodifluoromethane	1.8	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,1-Dichloroethane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,1-Dichloroethene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,2-Dichloropropane	ND	0.50	µg/L	1	7/6/2018 10:49:46 AM	LF5252
2-Hexanone	ND	10	µg/L	1	7/6/2018 10:49:46 AM	LF5252
4-Methyl-2-pentanone	ND	10	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Methylene Chloride	ND	2.5	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Styrene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Tetrachloroethene (PCE)	11	0.50	µg/L	1	7/6/2018 10:49:46 AM	LF5252

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces

Lab Order: 1806H19

Project: CLC Foothills Landfill Closure Monitoring Well

EPA METHOD 8260B: VOLATILES, TABLE I

Analyst: **DJF**

trans-1,2-DCE	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,1,1-Trichloroethane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,1,2-Trichloroethane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Trichloroethene (TCE)	2.2	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Trichlorofluoromethane	1.1	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
1,2,3-Trichloropropane	ND	1.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Vinyl chloride	ND	0.40	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Xylenes, Total	ND	2.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Acrylonitrile	ND	10	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Bromochloromethane	ND	2.0	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Iodomethane	ND	10	µg/L	1	7/6/2018 10:49:46 AM	LF5252
trans-1,4-Dichloro-2-butene	ND	10	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Vinyl acetate	ND	10	µg/L	1	7/6/2018 10:49:46 AM	LF5252
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	7/6/2018 10:49:46 AM	LF5252
Surr: 4-Bromofluorobenzene	113	70-130	%Rec	1	7/6/2018 10:49:46 AM	LF5252
Surr: Dibromofluoromethane	96.4	70-130	%Rec	1	7/6/2018 10:49:46 AM	LF5252
Surr: Toluene-d8	101	70-130	%Rec	1	7/6/2018 10:49:46 AM	LF5252

TOTAL PHENOLICS BY SW-846 9067

Analyst: **CLP**

Phenolics	ND	2.5	µg/L	1	7/13/2018	39199
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Analytical Report

Lab Order: 1806H19

Date Reported: 7/17/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces

Lab Order: 1806H19

Project: CLC Foothills Landfill Closure Monitoring Well

Lab ID: 1806H19-002

Collection Date: 6/27/2018 1:14:00 PM

Client Sample ID: CLC MW#4

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 504.1: EDB/DBCP							Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.019		µg/L	1	7/3/2018 9:46:53 PM	39020
1,2-Dibromoethane	ND	0.0095		µg/L	1	7/3/2018 9:46:53 PM	39020
EPA METHOD 9060 TOC							Analyst: CLP
Total Organic Carbon	ND	1.0		mg/L	1	7/10/2018 7:37:29 PM	R52607
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	6.9	0.50		mg/L	1	6/29/2018 2:15:03 PM	R5237E
Sulfate	32	0.50		mg/L	1	6/29/2018 2:15:03 PM	R5237E
Nitrate+Nitrite as N	ND	1.0		mg/L	5	7/12/2018 7:18:38 AM	A52642
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	720	5.0		µmhos/c	1	7/9/2018 1:12:30 PM	R5253E
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO3)	349.4	20.00		mg/L Ca	1	7/2/2018 5:26:46 PM	R5245E
Carbonate (As CaCO3)	ND	2.000		mg/L Ca	1	7/2/2018 5:26:46 PM	R5245E
Total Alkalinity (as CaCO3)	349.4	20.00		mg/L Ca	1	7/2/2018 5:26:46 PM	R5245E
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	452	20.0		mg/L	1	7/2/2018 6:58:00 PM	38995
SM 4500 NH3: AMMONIA							Analyst: smb
Nitrogen, Ammonia	ND	1.0		mg/L	1	7/16/2018 2:14:00 PM	R5272E
SM4500-H+B / 9040C: PH							Analyst: JRR
pH	7.31		H	pH units	1	7/2/2018 5:26:46 PM	R5245E
EPA METHOD 200.7: TOTAL METALS							Analyst: pmf
Barium	0.082	0.0020		mg/L	1	7/9/2018 7:20:26 PM	38978
Beryllium	ND	0.0020		mg/L	1	7/6/2018 5:21:51 PM	38978
Cadmium	ND	0.0020		mg/L	1	7/9/2018 7:20:26 PM	38978
Calcium	110	5.0		mg/L	5	7/9/2018 7:22:33 PM	38978
Chromium	ND	0.0060		mg/L	1	7/9/2018 7:20:26 PM	38978
Cobalt	ND	0.0060		mg/L	1	7/6/2018 5:21:51 PM	38978
Copper	0.026	0.0060		mg/L	1	7/9/2018 7:20:26 PM	38978
Iron	ND	0.020		mg/L	1	7/6/2018 5:21:51 PM	38978
Magnesium	14	1.0		mg/L	1	7/6/2018 5:21:51 PM	38978
Manganese	ND	0.0020		mg/L	1	7/6/2018 5:21:51 PM	38978
Nickel	ND	0.010		mg/L	1	7/9/2018 7:20:26 PM	38978
Potassium	2.7	1.0		mg/L	1	7/6/2018 5:21:51 PM	38978
Silver	ND	0.0050		mg/L	1	7/9/2018 7:20:26 PM	38978

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** City of Las Cruces**Lab Order:** 1806H19**Project:** CLC Foothills Landfill Closure Monitoring Well**EPA METHOD 200.7: TOTAL METALS**Analyst: **pmf**

Sodium	32	1.0	mg/L	1	7/9/2018 7:20:26 PM	38978
Vanadium	ND	0.050	mg/L	1	7/6/2018 5:21:51 PM	38978
Zinc	0.019	0.010	mg/L	1	7/9/2018 7:20:26 PM	38978

200.8 ICPMS METALS:TOTALAnalyst: **ELS**

Antimony	ND	0.0010	mg/L	1	7/2/2018 11:04:19 AM	38978
Arsenic	ND	0.0010	mg/L	1	7/2/2018 11:04:19 AM	38978
Lead	0.0016	0.00050	mg/L	1	7/2/2018 11:04:19 AM	38978
Selenium	ND	0.0010	mg/L	1	7/2/2018 11:04:19 AM	38978
Thallium	ND	0.00050	mg/L	1	7/2/2018 11:04:19 AM	38978

EPA METHOD 8260B: VOLATILES, TABLE IAnalyst: **DJF**

Benzene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Toluene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Ethylbenzene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Acetone	ND	10	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Bromodichloromethane	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Bromoform	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Bromomethane	ND	2.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
2-Butanone	ND	10	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Carbon disulfide	ND	10	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Carbon Tetrachloride	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Chlorobenzene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Chloroethane	ND	2.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Chloroform	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Chloromethane	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
cis-1,2-DCE	2.3	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Dibromochloromethane	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Dibromomethane	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,2-Dichlorobenzene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,4-Dichlorobenzene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Dichlorodifluoromethane	1.8	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,1-Dichloroethane	3.3	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,1-Dichloroethene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,2-Dichloropropane	ND	0.50	µg/L	1	7/6/2018 12:17:24 PM	LF5252
2-Hexanone	ND	10	µg/L	1	7/6/2018 12:17:24 PM	LF5252
4-Methyl-2-pentanone	ND	10	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Methylene Chloride	12	2.5	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Styrene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Tetrachloroethene (PCE)	8.4	0.50	µg/L	1	7/6/2018 12:17:24 PM	LF5252

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces

Lab Order: 1806H19

Project: CLC Foothills Landfill Closure Monitoring Well

EPA METHOD 8260B: VOLATILES, TABLE I

Analyst: DJF

trans-1,2-DCE	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,1,1-Trichloroethane	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,1,2-Trichloroethane	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Trichloroethene (TCE)	2.7	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Trichlorofluoromethane	1.1	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
1,2,3-Trichloropropane	ND	1.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Vinyl chloride	ND	0.40	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Xylenes, Total	ND	2.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Acrylonitrile	ND	10	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Bromochloromethane	ND	2.0	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Iodomethane	ND	10	µg/L	1	7/6/2018 12:17:24 PM	LF5252
trans-1,4-Dichloro-2-butene	ND	10	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Vinyl acetate	ND	10	µg/L	1	7/6/2018 12:17:24 PM	LF5252
Surr: 1,2-Dichloroethane-d4	99.1	70-130	%Rec	1	7/6/2018 12:17:24 PM	LF5252
Surr: 4-Bromofluorobenzene	117	70-130	%Rec	1	7/6/2018 12:17:24 PM	LF5252
Surr: Dibromofluoromethane	89.3	70-130	%Rec	1	7/6/2018 12:17:24 PM	LF5252
Surr: Toluene-d8	104	70-130	%Rec	1	7/6/2018 12:17:24 PM	LF5252

TOTAL PHENOLICS BY SW-846 9067

Analyst: CLP

Phenolics	ND	2.5	µg/L	1	7/13/2018	39199
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID	MB-38978	SampType:	MBLK	TestCode:	EPA Method 200.7: Total Metals					
Client ID:	PBW	Batch ID:	38978	RunNo:	52501					
Prep Date:	6/29/2018	Analysis Date:	7/6/2018	SeqNo:	1721962	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID	LLLCS-38978	SampType:	LCSLL	TestCode:	EPA Method 200.7: Total Metals					
Client ID:	BatchQC	Batch ID:	38978	RunNo:	52501					
Prep Date:		Analysis Date:	7/6/2018	SeqNo:	1721963	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020	0.002000	0	97.0	50	150			
Beryllium	ND	0.0020	0.002000	0	98.5	50	150			
Cadmium	0.0021	0.0020	0.002000	0	104	50	150			
Calcium	ND	1.0	0.5000	0	106	50	150			
Chromium	ND	0.0060	0.006000	0	96.8	50	150			
Cobalt	0.0062	0.0060	0.006000	0	104	50	150			
Copper	0.0062	0.0060	0.006000	0	103	50	150			
Iron	0.025	0.020	0.02000	0	127	50	150			
Magnesium	ND	1.0	0.5000	0	102	50	150			
Manganese	0.0022	0.0020	0.002000	0	112	50	150			
Nickel	ND	0.010	0.005000	0	120	50	150			
Potassium	ND	1.0	0.5000	0	103	50	150			
Silver	0.0051	0.0050	0.005000	0	102	50	150			
Sodium	ND	1.0	0.5000	0	106	50	150			
Vanadium	ND	0.050	0.01000	0	107	50	150			
Zinc	ND	0.010	0.005000	0	139	50	150			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID	LCS-38978		SampType:	LCS		TestCode:	EPA Method 200.7: Total Metals				
Client ID:	LCSW		Batch ID:	38978		RunNo:	52501				
Prep Date:	6/29/2018		Analysis Date:	7/6/2018		SeqNo:	1721964		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Barium	0.49	0.0020	0.5000	0	98.4	85	115				
Beryllium	0.52	0.0020	0.5000	0	104	85	115				
Cadmium	0.51	0.0020	0.5000	0	102	85	115				
Calcium	49	1.0	50.00	0	97.0	85	115				
Chromium	0.50	0.0060	0.5000	0	101	85	115				
Cobalt	0.50	0.0060	0.5000	0	99.6	85	115				
Copper	0.50	0.0060	0.5000	0	100	85	115				
Iron	0.50	0.020	0.5000	0	99.5	85	115				
Magnesium	48	1.0	50.00	0	96.9	85	115				
Manganese	0.50	0.0020	0.5000	0	101	85	115				
Nickel	0.50	0.010	0.5000	0	99.5	85	115				
Potassium	49	1.0	50.00	0	97.3	85	115				
Silver	0.10	0.0050	0.1000	0	100	85	115				
Sodium	50	1.0	50.00	0	100	85	115				
Vanadium	0.51	0.050	0.5000	0	102	85	115				
Zinc	0.50	0.010	0.5000	0	99.5	85	115				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID	MB-38978	SampType:	MBLK	TestCode:	200.8 ICPMS Metals:Total					
Client ID:	PBW	Batch ID:	38978	RunNo:	52400					
Prep Date:	6/29/2018	Analysis Date:	7/2/2018	SeqNo:	1717760	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Thallium	ND	0.00050								

Sample ID	MSLLCS-38978	SampType:	LCSLL	TestCode:	200.8 ICPMS Metals:Total					
Client ID:	BatchQC	Batch ID:	38978	RunNo:	52400					
Prep Date:	6/29/2018	Analysis Date:	7/2/2018	SeqNo:	1717761	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.0011	0.0010	0.001000	0	109	50	150			
Arsenic	0.0010	0.0010	0.001000	0	103	50	150			
Lead	ND	0.00050	0.0005000	0	99.7	50	150			
Selenium	ND	0.0010	0.001000	0	91.9	50	150			
Thallium	ND	0.00050	0.0005000	0	95.0	50	150			

Sample ID	MSLCS-38978	SampType:	LCS	TestCode:	200.8 ICPMS Metals:Total					
Client ID:	LCSW	Batch ID:	38978	RunNo:	52400					
Prep Date:	6/29/2018	Analysis Date:	7/2/2018	SeqNo:	1717762	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	102	85	115			
Arsenic	0.024	0.0010	0.02500	0	96.3	85	115			
Lead	0.012	0.00050	0.01250	0	94.6	85	115			
Selenium	0.024	0.0010	0.02500	0	94.1	85	115			
Thallium	0.012	0.00050	0.01250	0	95.7	85	115			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R52379		RunNo: 52379							
Prep Date:	Analysis Date: 6/29/2018		SeqNo: 1717107		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID LCS	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R52379		RunNo: 52379							
Prep Date:	Analysis Date: 6/29/2018		SeqNo: 1717108		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.7	90	110			
Sulfate	9.2	0.50	10.00	0	92.0	90	110			

Sample ID 1806H19-001EMS	SampType: ms		TestCode: EPA Method 300.0: Anions							
Client ID: CLC MW#1	Batch ID: R52379		RunNo: 52379							
Prep Date:	Analysis Date: 6/29/2018		SeqNo: 1717126		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	41	0.50	10.00	29.72	109	84.3	120			

Sample ID 1806H19-001EMSD	SampType: msd		TestCode: EPA Method 300.0: Anions							
Client ID: CLC MW#1	Batch ID: R52379		RunNo: 52379							
Prep Date:	Analysis Date: 6/29/2018		SeqNo: 1717127		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	40	0.50	10.00	29.72	105	84.3	120	1.08	20	

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: A52642		RunNo: 52642							
Prep Date:	Analysis Date: 7/11/2018		SeqNo: 1728086		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID LCS	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: A52642		RunNo: 52642							
Prep Date:	Analysis Date: 7/11/2018		SeqNo: 1728087		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.4	0.20	3.500	0	98.5	90	110			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID MB-39020	SampType: MBLK		TestCode: EPA Method 504.1: EDB/DBCP							
Client ID: PBW	Batch ID: 39020		RunNo: 52467							
Prep Date: 7/3/2018	Analysis Date: 7/3/2018		SeqNo: 1720398		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	0.020								
1,2-Dibromoethane	ND	0.010								

Sample ID LCS-39020	SampType: LCS		TestCode: EPA Method 504.1: EDB/DBCP							
Client ID: LCSW	Batch ID: 39020		RunNo: 52467							
Prep Date: 7/3/2018	Analysis Date: 7/3/2018		SeqNo: 1720399		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.087	0.020	0.1000	0	87.1	70	130			
1,2-Dibromoethane	0.10	0.010	0.1000	0	103	70	130			

Sample ID 1806H19-002BMS	SampType: MS		TestCode: EPA Method 504.1: EDB/DBCP							
Client ID: CLC MW#4	Batch ID: 39020		RunNo: 52467							
Prep Date: 7/3/2018	Analysis Date: 7/3/2018		SeqNo: 1720403		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.083	0.019	0.09511	0	87.1	30.3	143			
1,2-Dibromoethane	0.051	0.0095	0.09511	0	53.8	25.9	131			

Sample ID 1806H19-002BMSD	SampType: MSD		TestCode: EPA Method 504.1: EDB/DBCP							
Client ID: CLC MW#4	Batch ID: 39020		RunNo: 52467							
Prep Date: 7/3/2018	Analysis Date: 7/3/2018		SeqNo: 1720404		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.084	0.019	0.09537	0	88.2	30.3	143	1.51	25.6	
1,2-Dibromoethane	0.068	0.0095	0.09537	0	71.8	25.9	131	28.9	23.2	R

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID	rb	SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles, Table I				
Client ID:	PBW	Batch ID:	LF52520		RunNo:	52520				
Prep Date:		Analysis Date:	7/6/2018		SeqNo:	1722647	Units:	µg/L		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
Acetone	ND	10								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	2.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	0.50								
2-Hexanone	ND	10								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	2.5								
Styrene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
Tetrachloroethene (PCE)	ND	0.50								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	1.0								
Vinyl chloride	ND	0.40								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID rb	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles, Table I							
Client ID: PBW	Batch ID: LF52520		RunNo: 52520							
Prep Date:	Analysis Date: 7/6/2018		SeqNo: 1722647		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	2.0								
Acrylonitrile	ND	10								
Bromochloromethane	ND	2.0								
Iodomethane	ND	10								
trans-1,4-Dichloro-2-butene	ND	10								
Vinyl acetate	ND	10								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.7	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.5	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: Volatiles, Table I							
Client ID: LCSW	Batch ID: LF52520		RunNo: 52520							
Prep Date:	Analysis Date: 7/6/2018		SeqNo: 1722653		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	108	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	97.0	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		116	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.0	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID 1806h19-001a ms	SampType: MS		TestCode: EPA Method 8260B: Volatiles, Table I							
Client ID: CLC MW#1	Batch ID: LF52520		RunNo: 52520							
Prep Date:	Analysis Date: 7/6/2018		SeqNo: 1722655		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0.1154	112	60.5	137			
Toluene	21	1.0	20.00	0.07300	102	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	70	130			
Trichloroethene (TCE)	22	1.0	20.00	2.181	98.7	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		115	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID	1806h19-001a msd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles, Table I					
Client ID:	CLC MW#1	Batch ID:	LF52520	RunNo:	52520					
Prep Date:		Analysis Date:	7/6/2018	SeqNo:	1722656	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.1154	101	60.5	137	9.45	20	
Toluene	20	1.0	20.00	0.07300	99.9	70	130	2.42	20	
Chlorobenzene	20	1.0	20.00	0	101	70	130	0.969	20	
1,1-Dichloroethene	20	1.0	20.00	0	102	70	130	8.40	20	
Trichloroethene (TCE)	20	1.0	20.00	2.181	89.6	70	130	8.65	20	
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	12		10.00		115	70	130	0	0	
Surr: Dibromofluoromethane	9.4		10.00		94.3	70	130	0	0	
Surr: Toluene-d8	10		10.00		103	70	130	0	0	

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID MB	SampType: MBLK		TestCode: EPA Method 9060 TOC							
Client ID: PBW	Batch ID: R52607		RunNo: 52607							
Prep Date:	Analysis Date: 7/10/2018		SeqNo: 1726695		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	ND	1.0								

Sample ID LCS ST9060--17010	SampType: LCS		TestCode: EPA Method 9060 TOC							
Client ID: LCSW	Batch ID: R52607		RunNo: 52607							
Prep Date:	Analysis Date: 7/10/2018		SeqNo: 1726696		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	4.8	1.0	4.850	0	99.3	90	110			

Sample ID 1806H19-001CMS	SampType: MS		TestCode: EPA Method 9060 TOC							
Client ID: CLC MW#1	Batch ID: R52607		RunNo: 52607							
Prep Date:	Analysis Date: 7/10/2018		SeqNo: 1726698		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	5.4	1.0	4.650	0.7247	100	75	125			

Sample ID 1806H19-001CMSD	SampType: MSD		TestCode: EPA Method 9060 TOC							
Client ID: CLC MW#1	Batch ID: R52607		RunNo: 52607							
Prep Date:	Analysis Date: 7/10/2018		SeqNo: 1726699		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	5.4	1.0	4.650	0.7247	99.5	75	125	0.763	20	

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID	MB-39199	SampType:	MBLK	TestCode:	Total Phenolics by SW-846 9067					
Client ID:	PBW	Batch ID:	39199	RunNo:	52699					
Prep Date:	7/13/2018	Analysis Date:	7/13/2018	SeqNo:	1730213	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	ND	2.5								

Sample ID	LCS-39199	SampType:	LCS	TestCode:	Total Phenolics by SW-846 9067					
Client ID:	LCSW	Batch ID:	39199	RunNo:	52699					
Prep Date:	7/13/2018	Analysis Date:	7/13/2018	SeqNo:	1730214	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	19	2.5	20.00	0	94.5	53.3	138			

Sample ID	1806H19-002DMS	SampType:	MS	TestCode:	Total Phenolics by SW-846 9067					
Client ID:	CLC MW#4	Batch ID:	39199	RunNo:	52699					
Prep Date:	7/13/2018	Analysis Date:	7/13/2018	SeqNo:	1730217	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	12	2.5	20.00	2.208	47.8	70.1	127			S

Sample ID	1806H19-002DMSD	SampType:	MSD	TestCode:	Total Phenolics by SW-846 9067					
Client ID:	CLC MW#4	Batch ID:	39199	RunNo:	52699					
Prep Date:	7/13/2018	Analysis Date:	7/13/2018	SeqNo:	1730218	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	13	2.5	20.00	2.208	53.9	70.1	127	9.83	23.8	S

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID	ics-1 99.1uS eC		SampType: LCS	TestCode: SM2510B: Specific Conductance						
Client ID:	LCSW		Batch ID: R52538	RunNo: 52538						
Prep Date:			Analysis Date: 7/9/2018	SeqNo: 1723759	Units: µmhos/cm					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	99	5.0	99.10	0	99.9	80	120			

Sample ID	ics-2 99.1uS eC		SampType: LCS	TestCode: SM2510B: Specific Conductance						
Client ID:	LCSW		Batch ID: R52538	RunNo: 52538						
Prep Date:			Analysis Date: 7/9/2018	SeqNo: 1723790	Units: µmhos/cm					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	100	5.0	99.10	0	103	80	120			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID MB	SampType: MBLK		TestCode: SM 4500 NH3: Ammonia							
Client ID: PBW	Batch ID: R52722		RunNo: 52722							
Prep Date:	Analysis Date: 7/16/2018		SeqNo: 1731086		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	ND	1.0								

Sample ID LCS	SampType: LCS		TestCode: SM 4500 NH3: Ammonia							
Client ID: LCSW	Batch ID: R52722		RunNo: 52722							
Prep Date:	Analysis Date: 7/16/2018		SeqNo: 1731087		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	10	1.0	10.00	0	101	80	120			

Sample ID 1806H19-001EMS	SampType: MS		TestCode: SM 4500 NH3: Ammonia							
Client ID: CLC MW#1	Batch ID: R52722		RunNo: 52722							
Prep Date:	Analysis Date: 7/16/2018		SeqNo: 1731096		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	11	1.0	10.00	0.7000	104	75	125			

Sample ID 1806H19-001EMSD	SampType: MSD		TestCode: SM 4500 NH3: Ammonia							
Client ID: CLC MW#1	Batch ID: R52722		RunNo: 52722							
Prep Date:	Analysis Date: 7/16/2018		SeqNo: 1731097		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	11	1.0	10.00	0.7000	104	75	125	0	20	

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID	mb-1 alk	SampType:	MBLK	TestCode:	SM2320B: Alkalinity					
Client ID:	PBW	Batch ID:	R52453	RunNo:	52453					
Prep Date:		Analysis Date:	7/2/2018	SeqNo:	1719941	Units:	mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID	ics-1 alk	SampType:	LCS	TestCode:	SM2320B: Alkalinity					
Client ID:	LCSW	Batch ID:	R52453	RunNo:	52453					
Prep Date:		Analysis Date:	7/2/2018	SeqNo:	1719942	Units:	mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	82.12	20.00	80.00	0	103	90	110			

Sample ID	mb-2 alk	SampType:	MBLK	TestCode:	SM2320B: Alkalinity					
Client ID:	PBW	Batch ID:	R52453	RunNo:	52453					
Prep Date:		Analysis Date:	7/2/2018	SeqNo:	1719967	Units:	mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID	ics-2 alk	SampType:	LCS	TestCode:	SM2320B: Alkalinity					
Client ID:	LCSW	Batch ID:	R52453	RunNo:	52453					
Prep Date:		Analysis Date:	7/2/2018	SeqNo:	1719968	Units:	mg/L CaCO3			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	79.04	20.00	80.00	0	98.8	90	110			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806H19

18-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Well

Sample ID MB-38995	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 38995	RunNo: 52428								
Prep Date: 7/1/2018	Analysis Date: 7/2/2018	SeqNo: 1718634	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID LCS-38995	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 38995	RunNo: 52428								
Prep Date: 7/1/2018	Analysis Date: 7/2/2018	SeqNo: 1718635	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1040	20.0	1000	0	104	80	120			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

Sample Log-In Check List

Client Name: City of Las Cruces

Work Order Number: 1806H19

RcptNo: 1

Received By: Erin Melendrez 6/28/2018 9:00:00 AM

EM

Completed By: Erin Melendrez 6/28/2018 2:25:29 PM

EM

Reviewed By: *Sub 28/18*
 LB: JAB 06/28/18

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present

2. How was the sample delivered? FedEx

Log In

3. Was an attempt made to cool the samples? Yes No NA

4. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA

5. Sample(s) in proper container(s)? Yes No

6. Sufficient sample volume for indicated test(s)? Yes No

7. Are samples (except VOA and ONG) properly preserved? Yes No

8. Was preservative added to bottles? Yes No NA

9. VOA vials have zero headspace? Yes No No VOA Vials

10. Were any sample containers received broken? Yes No

11. Does paperwork match bottle labels? Yes No
 (Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes No

13. Is it clear what analyses were requested? Yes No

14. Were all holding times able to be met? Yes No
 (If no, notify customer for authorization.)

of preserved bottles checked for pH: 7
 (<2 or >12 unless noted)
 Adjusted? N^o
 Checked by: JAB

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes			

October 12, 2009

Table 1. Reduced parameter list for water-quality sampling at Las Cruces Foothills Landfill monitoring wells
MW-1 through MW-7, Las Cruces, New Mexico

parameters	CAS no.	method	GWPS	PQL	AML	CAL	units	included in Append I, Part 258, 40 CFR
acetone	67-64-1	8260B	-	0.01	0.0195	-	mg/L	y
acrylonitrile	107-13-1	8260B	-	0.1	0.195	-	mg/L	y
benzene	71-43-2	8260B	0.005	0.001	0.0025	0.00375	mg/L	y
bromochloromethane	74-97-5	8260B	-	0.001	0.00195	-	mg/L	y
bromodichloromethane	75-27-4	8260B	-	0.005	0.00975	-	mg/L	y
bromoform	75-25-2	8260B	-	0.015	0.02925	-	mg/L	y
carbon disulfide	75-15-0	8260B	-	0.001	0.00195	-	mg/L	y
carbon tetrachloride	56-23-5	8260B	0.005	0.002	0.0025	0.00375	mg/L	y
chlorobenzene	108-90-7	8260B	0.1	0.005	0.05	0.075	mg/L	y
chloroethane	75-00-3	8260B	-	0.01	0.0195	-	mg/L	y
chloroform	67-66-3	8260B	0.1	0.005	0.05	0.75	mg/L	y
dibromochloromethane	124-48-1	8260B	-	0.005	0.00975	-	mg/L	y
1,2-dibromo-3- chloropropane	96-12-8	504.1	0.0002	0.0001	0.0001	0.00015	mg/L	y
1,2-dichlorobenzene	95-50-1	8260B	0.06	0.01	0.03	0.045	mg/L	y
1,3-dichlorobenzene	541-73-1	8260B	-	0.01	0.0195	-	mg/L	y
1,4-dichlorobenzene	106-46-7	8260B	0.075	0.015	0.0375	0.5625	mg/L	n
trans-1,4-dichloro-2- butene	110-57-6	8260B	-	0.001	0.00195	-	mg/L	y
dichlorodifluoromethan e	75-71-8	8260B	-	0.005	0.00975	-	mg/L	y
1,1-dichloroethane	75-34-3	8260B	0.025	0.005	0.0125	0.01875	mg/L	n
1,2-dichloroethane (EDC)	107-06-2	8260B	0.005	0.001	0.0025	0.00375	mg/L	y

Table 1. Reduced parameter list for water-quality sampling at Las Cruces Foothills Landfill monitoring wells MW-1 through MW-7, Las Cruces, New Mexico (continued)

parameters	CAS no.	method	GWPS	PQL	AML	CAL	units	included in Append I, Part 258, 40 CFR
1,1-dichloroethylene (1,1-DCE)	75-35-4	8260B	0.005	0.001	0.0025	0.00375	mg/L	y
cis-1,2-dichloroethylene	156-59-2	8260B	0.07	0.005	0.035	0.0525	mg/L	y
trans-1,2- dichloroethylene	156-60-5	8260B	0.1	0.005	0.05	0.075	mg/L	y
1,2-dichloropropane	78-87-5	8260B	0.005	0.0005	0.0025	0.00375	mg/L	y
cis-1,3-dichloropropene	10061-01-5	8260B	-	0.02	0.039	-	mg/L	y
trans-1,3- dichloropropene	10061-02-6	8260B	-	0.01	0.0195	-	mg/L	y
ethylbenzene	100-41-4	8260B	0.7	0.01	0.35	0.525	mg/L	y
ethylene dibromide (EDB)	106-93-4	504.1	0.00005	0.000025	0.000025	0.000038	mg/L	y
2-hexanone	591-78-6	8260B	-	0.04	0.078	-	mg/L	y
methyl bromide	74-83-9	8260B	-	0.01	0.0195	-	mg/L	y
methyl chloride	74-87-3	8260B	-	0.001	0.00195	-	mg/L	y
methyl ethyl ketone	78-93-3	8260B	-	0.01	0.0195	-	mg/L	y
methyl iodide	74-88-4	8260B	-	0.05	0.0975	-	mg/L	y
4-methyl-2-pentanone	108-10-1	8260B	-	0.001	0.00195	-	mg/L	y
methylene bromide	74-95-3	8260B	-	0.001	0.00195	-	mg/L	y
methylene chloride	74-87-3	8260B	0.005	0.001	0.0025	0.00375	mg/L	y
styrene	100-42-5	8260B	0.1	0.001	0.05	0.075	mg/L	y
1,1,1,2- tetrachloroethane	630-20-6	8260B	-	0.001	0.00195	-	mg/L	y
1,1,2,2- tetrachloroethane	79-34-5	8260B	0.01	0.005	0.005	0.0075	mg/L	y
tetrachloroethylene (PCE)	127-18-4	8260B	0.005	0.0005	0.0025	0.00375	mg/L	y

Table 1. Reduced parameter list for water-quality sampling at Las Cruces Foothills Landfill monitoring wells MW-1 through MW-7, Las Cruces, New Mexico (continued)

parameters	CAS no.	method	GWPS	PQL	AML	CAL	units	included in Appendix I, Part 258, 40 CFR
toluene	108-88-3	8260B	0.75	0.001	0.375	0.5625	mg/L	y
1,1,1-trichloroethane	71-55-6	8260B	0.06	0.005	0.03	0.045	mg/L	y
1,1,2-trichloroethane	79-00-5	8260B	0.005	0.002	0.0025	0.00375	mg/L	y
trichloroethylene (TCE)	79-01-6	8260B	0.005	0.001	0.0025	0.00375	mg/L	y
trichlorofluoromethane	75-69-4	8260B	-	0.01	0.0195	-	mg/L	y
1,2,3-trichloropropane	96-18-4	8260B	-	0.05	0.0975	-	mg/L	y
vinyl acetate	108-05-4	8260B	-	0.0004	0.00078	-	mg/L	y
vinyl chloride	75-01-4	8260B	0.001	0.0004	0.0005	0.00075	mg/L	y
xylenes	1330-20-7	8260B	0.62	0.0015	0.31	0.465	mg/L	y
ammonia as (N)	N/A	SM 4500 NH3	-	0.5	-	-	mg/L	n
nitrate (as N)	N/A	300.0	10	1.0	5.0	7.5	mg/L	n
chloride	16887-00-6	300.0	250	5.0	187.5	250	mg/L	n
sulfate	14808-79-8	300.0	250	5.0	187.5	250	mg/L	n
total dissolved solids	N/A	SM 2540C	500	5.0	-	-	mg/L	n
carbonate alkalinity	3812-32-6	SM 2320B	-	10	-	-	mg/L	n
bicarbonate alkalinity	71-52-3	SM 2320B	-	10	-	-	mg/L	n
total phenolics	N/A	9067	0.005	0.0025	0.0025	0.00375	mg/L	n
total organic carbon	N/A	9060	-	1	-	-	mg/L	n
barium (total)	7440-39-3	6010B	1	0.01	0.5	0.75	mg/L	y
beryllium (total)	7440-41-7	6010B	0.004	0.002	0.002	0.003	mg/L	y
cadmium (total)	7440-43-9	6010B	0.005	0.002	0.0025	0.00375	mg/L	y
calcium (total)	7440-70-2	6010B	-	1	-	-	mg/L	n
chromium (total)	7440-47-3	6010B	0.05	0.006	0.025	0.0375	mg/L	y
cobalt (total)	7440-48-4	6010B	0.05	0.006	0.025	0.0375	mg/L	y
copper (total)	7440-50-8	6010B	1	0.006	0.5	0.75	mg/L	y

Table 1. Reduced parameter list for water-quality sampling at Las Cruces Foothills Landfill monitoring wells MW-1 through MW-7, Las Cruces, New Mexico (concluded)

parameters	CAS no.	method	GWPS	PQL	AML	CAL	units	included in Append I, Part 258, 40 CFR
iron (total)	7439-89-6	6010B	0.3	0.1	0.225	0.3	mg/L	n
lead (total)	7439-92-1	6010B	0.05	0.005	0.025	0.0375	mg/L	y
magnesium (total)	7439-95-4	6010B	-	1	-	-	mg/L	n
manganese (total)	7439-96-5	6010B	0.05	0.03	0.0375	0.05	mg/L	n
nickel (total)	7440-02-0	6010B	0.2	0.01	0.1	0.15	mg/L	y
potassium (total)	7440-09-7	6010B	-	1	-	-	mg/L	n
silver (total)	7440-22-4	6010B	0.05	0.005	0.025	0.0375	mg/L	y
sodium (total)	7440-23-5	6010B	-	1	-	-	mg/L	n
vanadium (total)	7440-62-2	6010B	-	0.05	-	-	mg/L	y
zinc (total)	7440-66-6	6010B	5	0.02	2.5	3.75	mg/L	y
antimony (total)	7440-36-0	6020	0.006	0.001	0.003	0.0045	mg/L	y
arsenic (total)	7440-38-2	6020	0.01	0.004	0.005	0.0075	mg/L	y
selenium (total)	7782-49-2	6020	0.05	0.001	0.025	0.0375	mg/L	y
thallium (total)	7440-28-0	6020	0.002	0.001	0.001	0.0015	mg/L	y
pH	N/A	SM4500	6.5-8.5	+/- 0.1	-	-	S.U.	n
specific conductance	N/A	120.1	-	+/- 25	-	-	µS/cm	n
temperature	N/A	field	-	+/- 0.5	-	-	°F	n
water level elevation	N/A	field	-	+/- 0.01	-	-	ft	n

GWPS - ground water protection standard

PQL - practical quantitation limit

AML - assessment monitoring level

CAL - corrective action level

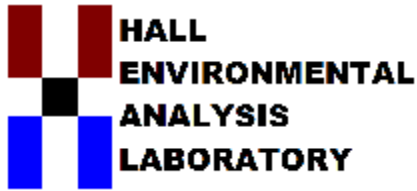
mg/L - milligrams per liter

µS/cm - microSiemens per centimeter

S.U. - standard pH units

°F - degrees Fahrenheit

ft - feet



Hall Environmental Analysis Laboratory
4901 Hawkins NE
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Website: www.hallenvironmental.com

July 23, 2018

Luis Guerra

City of Las Cruces

PO Box 20000

Las Cruces, NM 88004

TEL: (575) 528-3635

FAX (575) 528-3513

RE: CLC Foothills Landfill Closure Monitoring Wells

OrderNo.: 1806D07

Dear Luis Guerra:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/21/2018 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 11, 2018.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** City of Las Cruces**Client Sample ID:** CLC MW#7**Project:** CLC Foothills Landfill Closure Monitori**Collection Date:** 6/20/2018 12:57:00 PM**Lab ID:** 1806D07-001**Matrix:** AQUEOUS**Received Date:** 6/21/2018 8:45:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB/DBCP							Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.0041	0.019		µg/L	1	6/27/2018 8:03:14 PM
1,2-Dibromoethane	ND	0.0048	0.0094		µg/L	1	6/27/2018 8:03:14 PM
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	21	0.59	10		mg/L	20	6/22/2018 12:16:31 PM
Nitrogen, Nitrate (As N)	1.1	0.0066	0.10		mg/L	1	6/22/2018 12:04:08 PM
Sulfate	100	4.1	10		mg/L	20	6/22/2018 12:16:31 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: pmf
Barium	0.071	0.0010	0.0020		mg/L	1	6/28/2018 2:11:08 PM
Beryllium	ND	0.00026	0.0020		mg/L	1	6/28/2018 2:11:08 PM
Cadmium	ND	0.00058	0.0020		mg/L	1	6/28/2018 2:11:08 PM
Calcium	88	0.045	1.0		mg/L	1	6/28/2018 2:11:08 PM
Chromium	ND	0.0018	0.0060		mg/L	1	6/28/2018 2:11:08 PM
Cobalt	ND	0.0014	0.0060		mg/L	1	6/28/2018 2:11:08 PM
Copper	ND	0.0041	0.0060		mg/L	1	6/28/2018 2:11:08 PM
Iron	ND	0.010	0.020		mg/L	1	6/28/2018 2:11:08 PM
Magnesium	10	0.12	1.0		mg/L	1	6/28/2018 2:11:08 PM
Manganese	0.0055	0.0011	0.0020		mg/L	1	6/28/2018 2:11:08 PM
Nickel	ND	0.0036	0.010		mg/L	1	6/28/2018 2:11:08 PM
Potassium	2.6	0.071	1.0		mg/L	1	6/28/2018 2:11:08 PM
Silver	0.0024	0.0012	0.0050	J	mg/L	1	6/28/2018 2:11:08 PM
Sodium	36	0.16	1.0		mg/L	1	6/28/2018 2:11:08 PM
Vanadium	0.0042	0.00076	0.050	J	mg/L	1	6/28/2018 2:11:08 PM
Zinc	ND	0.0033	0.010		mg/L	1	6/28/2018 2:11:08 PM
200.8 ICPMS METALS:TOTAL							Analyst: ELS
Antimony	ND	0.00024	0.0010		mg/L	1	6/29/2018 8:58:32 AM
Arsenic	0.00087	0.00041	0.0010	J	mg/L	1	6/29/2018 8:58:32 AM
Lead	ND	0.00023	0.00050		mg/L	1	6/29/2018 8:58:32 AM
Selenium	0.0015	0.00098	0.0010		mg/L	1	6/29/2018 8:58:32 AM
Thallium	ND	0.000034	0.00050		mg/L	1	6/29/2018 8:58:32 AM
EPA METHOD 8260B: VOLATILES, TABLE I							Analyst: DJF
Benzene	0.81	0.062	1.0	J	µg/L	1	6/21/2018 4:30:15 PM
Toluene	ND	0.064	1.0		µg/L	1	6/21/2018 4:30:15 PM
Ethylbenzene	ND	0.093	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,2-Dichloroethane (EDC)	ND	0.40	1.0		µg/L	1	6/21/2018 4:30:15 PM
Acetone	ND	0.82	10		µg/L	1	6/21/2018 4:30:15 PM
Bromodichloromethane	ND	0.18	1.0		µg/L	1	6/21/2018 4:30:15 PM
Bromoform	ND	0.21	1.0		µg/L	1	6/21/2018 4:30:15 PM
Bromomethane	ND	0.26	2.0		µg/L	1	6/21/2018 4:30:15 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** City of Las Cruces**Client Sample ID:** CLC MW#7**Project:** CLC Foothills Landfill Closure Monitori**Collection Date:** 6/20/2018 12:57:00 PM**Lab ID:** 1806D07-001**Matrix:** AQUEOUS**Received Date:** 6/21/2018 8:45:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I							Analyst: DJF
2-Butanone	ND	1.1	10		µg/L	1	6/21/2018 4:30:15 PM
Carbon disulfide	ND	0.40	10		µg/L	1	6/21/2018 4:30:15 PM
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/21/2018 4:30:15 PM
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/21/2018 4:30:15 PM
Chloroethane	ND	0.23	2.0		µg/L	1	6/21/2018 4:30:15 PM
Chloroform	ND	0.40	1.0		µg/L	1	6/21/2018 4:30:15 PM
Chloromethane	ND	0.29	1.0		µg/L	1	6/21/2018 4:30:15 PM
cis-1,2-DCE	3.9	0.20	1.0		µg/L	1	6/21/2018 4:30:15 PM
cis-1,3-Dichloropropene	ND	0.082	1.0		µg/L	1	6/21/2018 4:30:15 PM
Dibromochloromethane	ND	0.072	1.0		µg/L	1	6/21/2018 4:30:15 PM
Dibromomethane	ND	0.091	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,2-Dichlorobenzene	ND	0.090	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,4-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/21/2018 4:30:15 PM
Dichlorodifluoromethane	3.4	1.0	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,1-Dichloroethane	1.3	0.40	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,1-Dichloroethene	0.38	0.081	1.0	J	µg/L	1	6/21/2018 4:30:15 PM
1,2-Dichloropropane	ND	0.10	0.50		µg/L	1	6/21/2018 4:30:15 PM
2-Hexanone	ND	0.66	10		µg/L	1	6/21/2018 4:30:15 PM
4-Methyl-2-pentanone	ND	0.71	10		µg/L	1	6/21/2018 4:30:15 PM
Methylene Chloride	2.8	0.11	2.5		µg/L	1	6/21/2018 4:30:15 PM
Styrene	ND	0.16	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,1,1,2-Tetrachloroethane	ND	0.10	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,1,2,2-Tetrachloroethane	ND	0.14	1.0		µg/L	1	6/21/2018 4:30:15 PM
Tetrachloroethene (PCE)	13	0.13	0.50		µg/L	1	6/21/2018 4:30:15 PM
trans-1,2-DCE	ND	0.18	1.0		µg/L	1	6/21/2018 4:30:15 PM
trans-1,3-Dichloropropene	ND	0.22	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,1,1-Trichloroethane	ND	0.073	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,1,2-Trichloroethane	ND	0.14	1.0		µg/L	1	6/21/2018 4:30:15 PM
Trichloroethene (TCE)	3.7	0.11	1.0		µg/L	1	6/21/2018 4:30:15 PM
Trichlorofluoromethane	2.5	0.18	1.0		µg/L	1	6/21/2018 4:30:15 PM
1,2,3-Trichloropropane	ND	0.39	1.0		µg/L	1	6/21/2018 4:30:15 PM
Vinyl chloride	0.45	0.18	0.40		µg/L	1	6/21/2018 4:30:15 PM
Xylenes, Total	ND	0.32	2.0		µg/L	1	6/21/2018 4:30:15 PM
Acrylonitrile	ND	0.56	10		µg/L	1	6/21/2018 4:30:15 PM
Bromochloromethane	ND	0.43	2.0		µg/L	1	6/21/2018 4:30:15 PM
Iodomethane	ND	0.27	10		µg/L	1	6/21/2018 4:30:15 PM
trans-1,4-Dichloro-2-butene	ND	0.39	10		µg/L	1	6/21/2018 4:30:15 PM
Vinyl acetate	ND	0.60	10		µg/L	1	6/21/2018 4:30:15 PM
Surr: 1,2-Dichloroethane-d4	115	0	70-130		%Rec	1	6/21/2018 4:30:15 PM
Surr: 4-Bromofluorobenzene	108	0	70-130		%Rec	1	6/21/2018 4:30:15 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** City of Las Cruces**Client Sample ID:** CLC MW#7**Project:** CLC Foothills Landfill Closure Monitori**Collection Date:** 6/20/2018 12:57:00 PM**Lab ID:** 1806D07-001**Matrix:** AQUEOUS**Received Date:** 6/21/2018 8:45:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I							Analyst: DJF
Surr: Dibromofluoromethane	110	0	70-130		%Rec	1	6/21/2018 4:30:15 PM
Surr: Toluene-d8	98.7	0	70-130		%Rec	1	6/21/2018 4:30:15 PM
TOTAL PHENOLICS BY SW-846 9067							Analyst: CLP
Phenolics	ND	1.3	2.5		µg/L	1	7/9/2018
EPA METHOD 9060 TOC							Analyst: CLP
Total Organic Carbon	0.59	0.18	1.0	J	mg/L	1	6/22/2018 8:42:34 PM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	670	5.0	5.0		µmhos/c	1	6/25/2018 3:42:52 PM
SM 4500 NH3: AMMONIA							Analyst: smb
Nitrogen, Ammonia	ND	0.36	1.0		mg/L	1	7/3/2018 1:33:00 PM
SM4500-H+B / 9040C: PH							Analyst: JRR
pH	7.59			H	pH units	1	6/25/2018 3:42:52 PM
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO3)	183.8	20.00	20.00		mg/L CaC	1	6/25/2018 3:42:52 PM
Carbonate (As CaCO3)	ND	2.000	2.000		mg/L CaC	1	6/25/2018 3:42:52 PM
Total Alkalinity (as CaCO3)	183.8	20.00	20.00		mg/L CaC	1	6/25/2018 3:42:52 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	428	20.0	20.0		mg/L	1	6/27/2018 6:52:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** City of Las Cruces**Client Sample ID:** CLC MW#2**Project:** CLC Foothills Landfill Closure Monitori**Collection Date:** 6/20/2018 2:20:00 PM**Lab ID:** 1806D07-002**Matrix:** AQUEOUS**Received Date:** 6/21/2018 8:45:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB/DBCP							Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.0041	0.019		µg/L	1	6/27/2018 8:18:45 PM
1,2-Dibromoethane	ND	0.0049	0.0096		µg/L	1	6/27/2018 8:18:45 PM
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	9.8	0.029	0.50		mg/L	1	6/28/2018 1:17:20 PM
Sulfate	35	0.21	0.50		mg/L	1	6/28/2018 1:17:20 PM
Nitrate+Nitrite as N	3.4	0.27	1.0		mg/L	5	7/7/2018 3:41:51 AM
EPA METHOD 200.7: TOTAL METALS							Analyst: pmf
Barium	0.036	0.0010	0.0020		mg/L	1	6/28/2018 2:13:25 PM
Beryllium	ND	0.00026	0.0020		mg/L	1	6/28/2018 2:13:25 PM
Cadmium	ND	0.00058	0.0020		mg/L	1	6/28/2018 2:13:25 PM
Calcium	43	0.045	1.0		mg/L	1	6/28/2018 2:13:25 PM
Chromium	ND	0.0018	0.0060		mg/L	1	6/28/2018 2:13:25 PM
Cobalt	ND	0.0014	0.0060		mg/L	1	6/28/2018 2:13:25 PM
Copper	ND	0.0041	0.0060		mg/L	1	6/28/2018 2:13:25 PM
Iron	ND	0.010	0.020		mg/L	1	6/28/2018 2:13:25 PM
Magnesium	5.9	0.12	1.0		mg/L	1	6/28/2018 2:13:25 PM
Manganese	0.0019	0.0011	0.0020	J	mg/L	1	6/28/2018 2:13:25 PM
Nickel	ND	0.0036	0.010		mg/L	1	6/28/2018 2:13:25 PM
Potassium	1.7	0.071	1.0		mg/L	1	6/28/2018 2:13:25 PM
Silver	ND	0.0012	0.0050		mg/L	1	6/28/2018 2:13:25 PM
Sodium	31	0.16	1.0		mg/L	1	6/28/2018 2:13:25 PM
Vanadium	0.0078	0.00076	0.050	J	mg/L	1	6/28/2018 2:13:25 PM
Zinc	ND	0.0033	0.010		mg/L	1	6/28/2018 2:13:25 PM
200.8 ICPMS METALS:TOTAL							Analyst: ELS
Antimony	ND	0.00024	0.0010		mg/L	1	6/29/2018 9:00:55 AM
Arsenic	0.0016	0.00041	0.0010		mg/L	1	6/29/2018 9:00:55 AM
Lead	ND	0.00023	0.00050		mg/L	1	6/29/2018 9:00:55 AM
Selenium	ND	0.00098	0.0010		mg/L	1	6/29/2018 9:00:55 AM
Thallium	ND	0.000034	0.00050		mg/L	1	6/29/2018 9:00:55 AM
EPA METHOD 8260B: VOLATILES, TABLE I							Analyst: DJF
Benzene	ND	0.062	1.0		µg/L	1	6/21/2018 5:00:11 PM
Toluene	ND	0.064	1.0		µg/L	1	6/21/2018 5:00:11 PM
Ethylbenzene	ND	0.093	1.0		µg/L	1	6/21/2018 5:00:11 PM
1,2-Dichloroethane (EDC)	ND	0.40	1.0		µg/L	1	6/21/2018 5:00:11 PM
Acetone	ND	0.82	10		µg/L	1	6/21/2018 5:00:11 PM
Bromodichloromethane	ND	0.18	1.0		µg/L	1	6/21/2018 5:00:11 PM
Bromoform	ND	0.21	1.0		µg/L	1	6/21/2018 5:00:11 PM
Bromomethane	ND	0.26	2.0		µg/L	1	6/21/2018 5:00:11 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: City of Las Cruces

Client Sample ID: CLC MW#2

Project: CLC Foothills Landfill Closure Monitori

Collection Date: 6/20/2018 2:20:00 PM

Lab ID: 1806D07-002

Matrix: AQUEOUS

Received Date: 6/21/2018 8:45:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I							Analyst: DJF
2-Butanone	ND	1.1	10		µg/L	1	6/21/2018 5:00:11 PM
Carbon disulfide	ND	0.40	10		µg/L	1	6/21/2018 5:00:11 PM
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/21/2018 5:00:11 PM
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/21/2018 5:00:11 PM
Chloroethane	ND	0.23	2.0		µg/L	1	6/21/2018 5:00:11 PM
Chloroform	ND	0.40	1.0		µg/L	1	6/21/2018 5:00:11 PM
Chloromethane	ND	0.29	1.0		µg/L	1	6/21/2018 5:00:11 PM
cis-1,2-DCE	0.69	0.20	1.0	J	µg/L	1	6/21/2018 5:00:11 PM
cis-1,3-Dichloropropene	ND	0.082	1.0		µg/L	1	6/21/2018 5:00:11 PM
Dibromochloromethane	ND	0.072	1.0		µg/L	1	6/21/2018 5:00:11 PM
Dibromomethane	ND	0.091	1.0		µg/L	1	6/21/2018 5:00:11 PM
1,2-Dichlorobenzene	ND	0.090	1.0		µg/L	1	6/21/2018 5:00:11 PM
1,4-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/21/2018 5:00:11 PM
Dichlorodifluoromethane	ND	1.0	1.0		µg/L	1	6/21/2018 5:00:11 PM
1,1-Dichloroethane	0.53	0.40	1.0	J	µg/L	1	6/21/2018 5:00:11 PM
1,1-Dichloroethene	ND	0.081	1.0		µg/L	1	6/21/2018 5:00:11 PM
1,2-Dichloropropane	ND	0.10	0.50		µg/L	1	6/21/2018 5:00:11 PM
2-Hexanone	ND	0.66	10		µg/L	1	6/21/2018 5:00:11 PM
4-Methyl-2-pentanone	ND	0.71	10		µg/L	1	6/21/2018 5:00:11 PM
Methylene Chloride	0.49	0.11	2.5	J	µg/L	1	6/21/2018 5:00:11 PM
Styrene	ND	0.16	1.0		µg/L	1	6/21/2018 5:00:11 PM
1,1,1,2-Tetrachloroethane	ND	0.10	1.0		µg/L	1	6/21/2018 5:00:11 PM
1,1,2,2-Tetrachloroethane	ND	0.14	1.0		µg/L	1	6/21/2018 5:00:11 PM
Tetrachloroethene (PCE)	2.3	0.13	0.50		µg/L	1	6/21/2018 5:00:11 PM
trans-1,2-DCE	ND	0.18	1.0		µg/L	1	6/21/2018 5:00:11 PM
trans-1,3-Dichloropropene	ND	0.22	1.0		µg/L	1	6/21/2018 5:00:11 PM
1,1,1-Trichloroethane	ND	0.073	1.0		µg/L	1	6/21/2018 5:00:11 PM
1,1,2-Trichloroethane	ND	0.14	1.0		µg/L	1	6/21/2018 5:00:11 PM
Trichloroethene (TCE)	0.57	0.11	1.0	J	µg/L	1	6/21/2018 5:00:11 PM
Trichlorofluoromethane	0.43	0.18	1.0	J	µg/L	1	6/21/2018 5:00:11 PM
1,2,3-Trichloropropane	ND	0.39	1.0		µg/L	1	6/21/2018 5:00:11 PM
Vinyl chloride	ND	0.18	0.40		µg/L	1	6/21/2018 5:00:11 PM
Xylenes, Total	ND	0.32	2.0		µg/L	1	6/21/2018 5:00:11 PM
Acrylonitrile	ND	0.56	10		µg/L	1	6/21/2018 5:00:11 PM
Bromochloromethane	ND	0.43	2.0		µg/L	1	6/21/2018 5:00:11 PM
Iodomethane	ND	0.27	10		µg/L	1	6/21/2018 5:00:11 PM
trans-1,4-Dichloro-2-butene	ND	0.39	10		µg/L	1	6/21/2018 5:00:11 PM
Vinyl acetate	ND	0.60	10		µg/L	1	6/21/2018 5:00:11 PM
Surr: 1,2-Dichloroethane-d4	110	0	70-130		%Rec	1	6/21/2018 5:00:11 PM
Surr: 4-Bromofluorobenzene	102	0	70-130		%Rec	1	6/21/2018 5:00:11 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** City of Las Cruces**Client Sample ID:** CLC MW#2**Project:** CLC Foothills Landfill Closure Monitori**Collection Date:** 6/20/2018 2:20:00 PM**Lab ID:** 1806D07-002**Matrix:** AQUEOUS**Received Date:** 6/21/2018 8:45:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I							Analyst: DJF
Surr: Dibromofluoromethane	103	0	70-130		%Rec	1	6/21/2018 5:00:11 PM
Surr: Toluene-d8	96.5	0	70-130		%Rec	1	6/21/2018 5:00:11 PM
TOTAL PHENOLICS BY SW-846 9067							Analyst: CLP
Phenolics	ND	1.3	2.5		µg/L	1	7/9/2018
EPA METHOD 9060 TOC							Analyst: CLP
Total Organic Carbon	0.27	0.18	1.0	J	mg/L	1	6/22/2018 9:48:06 PM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: JRR
Conductivity	380	5.0	5.0		µmhos/c	1	6/25/2018 3:53:58 PM
SM 4500 NH3: AMMONIA							Analyst: smb
Nitrogen, Ammonia	ND	0.36	1.0		mg/L	1	7/3/2018 1:33:00 PM
SM4500-H+B / 9040C: PH							Analyst: JRR
pH	7.30			H	pH units	1	6/25/2018 3:53:58 PM
SM2320B: ALKALINITY							Analyst: JRR
Bicarbonate (As CaCO3)	135.7	20.00	20.00		mg/L CaC	1	6/25/2018 3:53:58 PM
Carbonate (As CaCO3)	ND	2.000	2.000		mg/L CaC	1	6/25/2018 3:53:58 PM
Total Alkalinity (as CaCO3)	135.7	20.00	20.00		mg/L CaC	1	6/25/2018 3:53:58 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	252	20.0	20.0		mg/L	1	6/27/2018 6:52:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** City of Las Cruces**Client Sample ID:** Trip Blank**Project:** CLC Foothills Landfill Closure Monitori**Collection Date:****Lab ID:** 1806D07-003**Matrix:** TRIP BLANK**Received Date:** 6/21/2018 8:45:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB/DBCP							Analyst: JME
1,2-Dibromo-3-chloropropane	ND	0.0041	0.019		µg/L	1	6/27/2018 8:34:19 PM
1,2-Dibromoethane	ND	0.0049	0.0095		µg/L	1	6/27/2018 8:34:19 PM
EPA METHOD 8260B: VOLATILES, TABLE I							Analyst: DJF
Benzene	ND	0.062	1.0		µg/L	1	6/21/2018 5:30:01 PM
Toluene	ND	0.064	1.0		µg/L	1	6/21/2018 5:30:01 PM
Ethylbenzene	ND	0.093	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,2-Dichloroethane (EDC)	ND	0.40	1.0		µg/L	1	6/21/2018 5:30:01 PM
Acetone	1.9	0.82	10	J	µg/L	1	6/21/2018 5:30:01 PM
Bromodichloromethane	ND	0.18	1.0		µg/L	1	6/21/2018 5:30:01 PM
Bromoform	ND	0.21	1.0		µg/L	1	6/21/2018 5:30:01 PM
Bromomethane	ND	0.26	2.0		µg/L	1	6/21/2018 5:30:01 PM
2-Butanone	ND	1.1	10		µg/L	1	6/21/2018 5:30:01 PM
Carbon disulfide	ND	0.40	10		µg/L	1	6/21/2018 5:30:01 PM
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/21/2018 5:30:01 PM
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/21/2018 5:30:01 PM
Chloroethane	ND	0.23	2.0		µg/L	1	6/21/2018 5:30:01 PM
Chloroform	ND	0.40	1.0		µg/L	1	6/21/2018 5:30:01 PM
Chloromethane	ND	0.29	1.0		µg/L	1	6/21/2018 5:30:01 PM
cis-1,2-DCE	ND	0.20	1.0		µg/L	1	6/21/2018 5:30:01 PM
cis-1,3-Dichloropropene	ND	0.082	1.0		µg/L	1	6/21/2018 5:30:01 PM
Dibromochloromethane	ND	0.072	1.0		µg/L	1	6/21/2018 5:30:01 PM
Dibromomethane	ND	0.091	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,2-Dichlorobenzene	ND	0.090	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,4-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/21/2018 5:30:01 PM
Dichlorodifluoromethane	ND	1.0	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,1-Dichloroethane	ND	0.40	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,1-Dichloroethene	ND	0.081	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,2-Dichloropropane	ND	0.10	0.50		µg/L	1	6/21/2018 5:30:01 PM
2-Hexanone	ND	0.66	10		µg/L	1	6/21/2018 5:30:01 PM
4-Methyl-2-pentanone	ND	0.71	10		µg/L	1	6/21/2018 5:30:01 PM
Methylene Chloride	0.56	0.11	2.5	J	µg/L	1	6/21/2018 5:30:01 PM
Styrene	ND	0.16	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,1,1,2-Tetrachloroethane	ND	0.10	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,1,2,2-Tetrachloroethane	ND	0.14	1.0		µg/L	1	6/21/2018 5:30:01 PM
Tetrachloroethene (PCE)	ND	0.13	0.50		µg/L	1	6/21/2018 5:30:01 PM
trans-1,2-DCE	ND	0.18	1.0		µg/L	1	6/21/2018 5:30:01 PM
trans-1,3-Dichloropropene	ND	0.22	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,1,1-Trichloroethane	ND	0.073	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,1,2-Trichloroethane	ND	0.14	1.0		µg/L	1	6/21/2018 5:30:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** City of Las Cruces**Client Sample ID:** Trip Blank**Project:** CLC Foothills Landfill Closure Monitori**Collection Date:****Lab ID:** 1806D07-003**Matrix:** TRIP BLANK**Received Date:** 6/21/2018 8:45:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES, TABLE I							Analyst: DJF
Trichloroethene (TCE)	ND	0.11	1.0		µg/L	1	6/21/2018 5:30:01 PM
Trichlorofluoromethane	ND	0.18	1.0		µg/L	1	6/21/2018 5:30:01 PM
1,2,3-Trichloropropane	ND	0.39	1.0		µg/L	1	6/21/2018 5:30:01 PM
Vinyl chloride	ND	0.18	0.40		µg/L	1	6/21/2018 5:30:01 PM
Xylenes, Total	ND	0.32	2.0		µg/L	1	6/21/2018 5:30:01 PM
Acrylonitrile	ND	0.56	10		µg/L	1	6/21/2018 5:30:01 PM
Bromochloromethane	ND	0.43	2.0		µg/L	1	6/21/2018 5:30:01 PM
Iodomethane	ND	0.27	10		µg/L	1	6/21/2018 5:30:01 PM
trans-1,4-Dichloro-2-butene	ND	0.39	10		µg/L	1	6/21/2018 5:30:01 PM
Vinyl acetate	ND	0.60	10		µg/L	1	6/21/2018 5:30:01 PM
Surr: 1,2-Dichloroethane-d4	115	0	70-130		%Rec	1	6/21/2018 5:30:01 PM
Surr: 4-Bromofluorobenzene	110	0	70-130		%Rec	1	6/21/2018 5:30:01 PM
Surr: Dibromofluoromethane	105	0	70-130		%Rec	1	6/21/2018 5:30:01 PM
Surr: Toluene-d8	98.1	0	70-130		%Rec	1	6/21/2018 5:30:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID MB-38872	SampType: MBLK	TestCode: EPA Method 200.7: Total Metals
Client ID: PBW	Batch ID: 38872	RunNo: 52335
Prep Date: 6/25/2018	Analysis Date: 6/28/2018	SeqNo: 1715520 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Copper	ND	0.0060								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID LL LCS-38872	SampType: LCSLL	TestCode: EPA Method 200.7: Total Metals
Client ID: BatchQC	Batch ID: 38872	RunNo: 52335
Prep Date: 6/25/2018	Analysis Date: 6/28/2018	SeqNo: 1715521 Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.0020	0.0020	0.002000	0	103	50	150			
Beryllium	0.0021	0.0020	0.002000	0	106	50	150			
Cadmium	0.0020	0.0020	0.002000	0	99.0	50	150			J
Calcium	0.51	1.0	0.5000	0	102	50	150			J
Chromium	0.0068	0.0060	0.006000	0	113	50	150			
Cobalt	0.0072	0.0060	0.006000	0	120	50	150			
Copper	0.0079	0.0060	0.006000	0	132	50	150			
Magnesium	0.50	1.0	0.5000	0	101	50	150			J
Manganese	0.0022	0.0020	0.002000	0	108	50	150			
Nickel	0.0041	0.010	0.005000	0	82.2	50	150			J
Potassium	0.45	1.0	0.5000	0	90.5	50	150			J
Silver	0.0052	0.0050	0.005000	0	104	50	150			
Sodium	0.50	1.0	0.5000	0	99.4	50	150			J
Vanadium	0.011	0.050	0.01000	0	113	50	150			J
Zinc	0.0063	0.010	0.005000	0	126	50	150			J

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID LCS-38872		SampType: LCS			TestCode: EPA Method 200.7: Total Metals					
Client ID: LCSW		Batch ID: 38872			RunNo: 52335					
Prep Date: 6/25/2018		Analysis Date: 6/28/2018			SeqNo: 1715522		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.52	0.0020	0.5000	0	104	85	115			
Beryllium	0.53	0.0020	0.5000	0	105	85	115			
Cadmium	0.52	0.0020	0.5000	0	104	85	115			
Calcium	49	1.0	50.00	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.4	85	115			
Cobalt	0.50	0.0060	0.5000	0	101	85	115			
Copper	0.50	0.0060	0.5000	0	100	85	115			
Magnesium	50	1.0	50.00	0	99.7	85	115			
Manganese	0.49	0.0020	0.5000	0	98.7	85	115			
Nickel	0.49	0.010	0.5000	0	97.8	85	115			
Potassium	49	1.0	50.00	0	98.1	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Sodium	51	1.0	50.00	0	101	85	115			
Vanadium	0.54	0.050	0.5000	0	108	85	115			
Zinc	0.49	0.010	0.5000	0	97.1	85	115			

Sample ID MB-38872		SampType: MBLK			TestCode: EPA Method 200.7: Total Metals					
Client ID: PBW		Batch ID: 38872			RunNo: 52335					
Prep Date: 6/25/2018		Analysis Date: 6/28/2018			SeqNo: 1715589		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID LLLCS-38872		SampType: LCSLL			TestCode: EPA Method 200.7: Total Metals					
Client ID: BatchQC		Batch ID: 38872			RunNo: 52335					
Prep Date: 6/25/2018		Analysis Date: 6/28/2018			SeqNo: 1715590		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.030	0.020	0.02000	0	149	50	150			

Sample ID LCS-38872		SampType: LCS			TestCode: EPA Method 200.7: Total Metals					
Client ID: LCSW		Batch ID: 38872			RunNo: 52335					
Prep Date: 6/25/2018		Analysis Date: 6/28/2018			SeqNo: 1715591		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.52	0.020	0.5000	0	104	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID	MB-38872	SampType:	MBLK	TestCode:	200.8 ICPMS Metals:Total					
Client ID:	PBW	Batch ID:	38872	RunNo:	52357					
Prep Date:	6/25/2018	Analysis Date:	6/29/2018	SeqNo:	1715975	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Thallium	ND	0.00050								

Sample ID	MSLLCS-38872	SampType:	LCSLL	TestCode:	200.8 ICPMS Metals:Total					
Client ID:	BatchQC	Batch ID:	38872	RunNo:	52357					
Prep Date:	6/25/2018	Analysis Date:	6/29/2018	SeqNo:	1715976	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.0010	0.0010	0.001000	0	102	50	150			
Arsenic	0.0011	0.0010	0.001000	0	105	50	150			
Lead	0.00048	0.00050	0.0005000	0	96.8	50	150			J
Selenium	0.0010	0.0010	0.001000	0	105	50	150			
Thallium	0.00046	0.00050	0.0005000	0	92.3	50	150			J

Sample ID	MSLCS-38872	SampType:	LCS	TestCode:	200.8 ICPMS Metals:Total					
Client ID:	LCSW	Batch ID:	38872	RunNo:	52357					
Prep Date:	6/25/2018	Analysis Date:	6/29/2018	SeqNo:	1715977	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	99.3	85	115			
Arsenic	0.024	0.0010	0.02500	0	96.0	85	115			
Lead	0.012	0.00050	0.01250	0	95.5	85	115			
Selenium	0.024	0.0010	0.02500	0	96.6	85	115			
Thallium	0.012	0.00050	0.01250	0	95.3	85	115			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID LCS	SampType: ics		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R52184		RunNo: 52184							
Prep Date:	Analysis Date: 6/22/2018		SeqNo: 1709480		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	97.1	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	102	90	110			
Sulfate	9.6	0.50	10.00	0	96.0	90	110			

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R52184		RunNo: 52184							
Prep Date:	Analysis Date: 6/22/2018		SeqNo: 1709495		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R52363		RunNo: 52363							
Prep Date:	Analysis Date: 6/28/2018		SeqNo: 1716075		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R52363		RunNo: 52363							
Prep Date:	Analysis Date: 6/28/2018		SeqNo: 1716076		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5.2	0.50	5.000	0	104	90	110			
Sulfate	10	0.50	10.00	0	103	90	110			

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R52505		RunNo: 52505							
Prep Date:	Analysis Date: 7/6/2018		SeqNo: 1723105		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID	LCS	SampType:	ics	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R52505	RunNo:	52505					
Prep Date:		Analysis Date:	7/6/2018	SeqNo:	1723106	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.6	0.20	3.500	0	104	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID MB-38912	SampType: MBLK		TestCode: EPA Method 504.1: EDB/DBCP							
Client ID: PBW	Batch ID: 38912		RunNo: 52304							
Prep Date: 6/27/2018	Analysis Date: 6/27/2018		SeqNo: 1714515		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	0.020								
1,2-Dibromoethane	ND	0.010								

Sample ID LCS-38912	SampType: LCS		TestCode: EPA Method 504.1: EDB/DBCP							
Client ID: LCSW	Batch ID: 38912		RunNo: 52304							
Prep Date: 6/27/2018	Analysis Date: 6/27/2018		SeqNo: 1714516		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.082	0.020	0.1000	0	82.0	70	130			
1,2-Dibromoethane	0.090	0.010	0.1000	0	90.4	70	130			

Sample ID LCSD-38912	SampType: LCSD		TestCode: EPA Method 504.1: EDB/DBCP							
Client ID: LCSS02	Batch ID: 38912		RunNo: 52304							
Prep Date: 6/27/2018	Analysis Date: 6/27/2018		SeqNo: 1714517		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.076	0.020	0.1000	0	76.2	70	130	7.32	20	
1,2-Dibromoethane	0.083	0.010	0.1000	0	83.4	70	130	8.12	20	

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles, Table I					
Client ID:	PBW	Batch ID:	LF52186	RunNo:	52186					
Prep Date:		Analysis Date:	6/21/2018	SeqNo:	1709743	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
Acetone	ND	10								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	2.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	0.50								
2-Hexanone	ND	10								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	2.5								
Styrene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
Tetrachloroethene (PCE)	ND	0.50								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	1.0								
Vinyl chloride	ND	0.40								

Qualifiers:

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles, Table I					
Client ID:	PBW	Batch ID:	LF52186	RunNo:	52186					
Prep Date:		Analysis Date:	6/21/2018	SeqNo:	1709743	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	ND	2.0								
Acrylonitrile	ND	10								
Bromochloromethane	ND	2.0								
Iodomethane	ND	10								
trans-1,4-Dichloro-2-butene	ND	10								
Vinyl acetate	ND	10								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		112	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.6	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles, Table I					
Client ID:	LCSW	Batch ID:	LF52186	RunNo:	52186					
Prep Date:		Analysis Date:	6/21/2018	SeqNo:	1709744	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.5	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.4	70	130			
Surr: Toluene-d8	9.8		10.00		97.8	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID MB	SampType: MBLK		TestCode: EPA Method 9060 TOC							
Client ID: PBW	Batch ID: R52188		RunNo: 52188							
Prep Date:	Analysis Date: 6/22/2018		SeqNo: 1709713		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	ND	1.0								

Sample ID LCS ST9060-17010	SampType: LCS		TestCode: EPA Method 9060 TOC							
Client ID: LCSW	Batch ID: R52188		RunNo: 52188							
Prep Date:	Analysis Date: 6/22/2018		SeqNo: 1709714		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	4.7	1.0	4.850	0	97.5	90	110			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID	MB-39099	SampType:	MBLK	TestCode:	Total Phenolics by SW-846 9067					
Client ID:	PBW	Batch ID:	39099	RunNo:	52565					
Prep Date:	7/9/2018	Analysis Date:	7/9/2018	SeqNo:	1724862	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	ND	2.5								

Sample ID	LCS-39099	SampType:	LCS	TestCode:	Total Phenolics by SW-846 9067					
Client ID:	LCSW	Batch ID:	39099	RunNo:	52565					
Prep Date:	7/9/2018	Analysis Date:	7/9/2018	SeqNo:	1724863	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	24	2.5	20.00	0	122	53.3	138			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID	Ics-1 ~20uS eC		SampType:	LCS		TestCode:	SM2510B: Specific Conductance				
Client ID:	LCSW		Batch ID:	R52261		RunNo:	52261				
Prep Date:			Analysis Date:	6/25/2018		SeqNo:	1712311		Units: µmhos/cm		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Conductivity	22	5.0	19.98	0	111	80	120				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID MB	SampType: MBLK		TestCode: SM 4500 NH3: Ammonia							
Client ID: PBW	Batch ID: R52458		RunNo: 52458							
Prep Date:	Analysis Date: 7/3/2018		SeqNo: 1720045		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	ND	1.0								

Sample ID LCS	SampType: LCS		TestCode: SM 4500 NH3: Ammonia							
Client ID: LCSW	Batch ID: R52458		RunNo: 52458							
Prep Date:	Analysis Date: 7/3/2018		SeqNo: 1720046		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	10	1.0	10.00	0	101	80	120			

Sample ID 1806D07-001EMS	SampType: MS		TestCode: SM 4500 NH3: Ammonia							
Client ID: CLC MW#7	Batch ID: R52458		RunNo: 52458							
Prep Date:	Analysis Date: 7/3/2018		SeqNo: 1720062		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	10	1.0	10.00	0	104	75	125			

Sample ID 1806D07-001EMSD	SampType: MSD		TestCode: SM 4500 NH3: Ammonia							
Client ID: CLC MW#7	Batch ID: R52458		RunNo: 52458							
Prep Date:	Analysis Date: 7/3/2018		SeqNo: 1720063		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	10	1.0	10.00	0	102	75	125	1.36	20	

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID mb-1 alk	SampType: MBLK		TestCode: SM2320B: Alkalinity							
Client ID: PBW	Batch ID: R52261		RunNo: 52261							
Prep Date:	Analysis Date: 6/25/2018		SeqNo: 1712267		Units: mg/L CaCO3					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID ics-1 alk	SampType: LCS		TestCode: SM2320B: Alkalinity							
Client ID: LCSW	Batch ID: R52261		RunNo: 52261							
Prep Date:	Analysis Date: 6/25/2018		SeqNo: 1712268		Units: mg/L CaCO3					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	78.68	20.00	80.00	0	98.4	90	110			

Sample ID mb-2 alk	SampType: MBLK		TestCode: SM2320B: Alkalinity							
Client ID: PBW	Batch ID: R52261		RunNo: 52261							
Prep Date:	Analysis Date: 6/25/2018		SeqNo: 1712291		Units: mg/L CaCO3					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID ics-2 alk	SampType: LCS		TestCode: SM2320B: Alkalinity							
Client ID: LCSW	Batch ID: R52261		RunNo: 52261							
Prep Date:	Analysis Date: 6/25/2018		SeqNo: 1712292		Units: mg/L CaCO3					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	79.72	20.00	80.00	0	99.7	90	110			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1806D07

23-Jul-18

Client: City of Las Cruces
Project: CLC Foothills Landfill Closure Monitoring Wel

Sample ID MB-38894	SampType: MBLK	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: PBW	Batch ID: 38894	RunNo: 52301								
Prep Date: 6/26/2018	Analysis Date: 6/27/2018	SeqNo: 1713529	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID LCS-38894	SampType: LCS	TestCode: SM2540C MOD: Total Dissolved Solids								
Client ID: LCSW	Batch ID: 38894	RunNo: 52301								
Prep Date: 6/26/2018	Analysis Date: 6/27/2018	SeqNo: 1713530	Units: mg/L							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | E Value above quantitation range |
| H Holding times for preparation or analysis exceeded | J Analyte detected below quantitation limits |
| ND Not Detected at the Reporting Limit | P Sample pH Not In Range |
| PQL Practical Quantitative Limit | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



Hall Environmental Analysis Laboratory
 4901 Hawkins NE
 Albuquerque, NM 87109
 TEL: 505-345-3975 FAX: 505-345-4107
 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Las Cruces

Work Order Number: 1806D07

RcptNo: 1

Received By: Mandy Woods 6/21/2018 8:45:00 AM

Completed By: Ashley Gallegos 6/21/2018 9:46:07 AM

Reviewed By: *mw 6/21/18*

ms
AG
 Labeled by: JO 6/21/18

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
 2. How was the sample delivered? FedEx

Log In

3. Was an attempt made to cool the samples? Yes No NA
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
 5. Sample(s) in proper container(s)? Yes No
 6. Sufficient sample volume for indicated test(s)? Yes No
 7. Are samples (except VOA and ONG) properly preserved? Yes No
 8. Was preservative added to bottles? Yes No NA
 9. VOA vials have zero headspace? Yes No No VOA Vials
 10. Were any sample containers received broken? Yes No
 11. Does paperwork match bottle labels? Yes No
 (Note discrepancies on chain of custody)
 12. Are matrices correctly identified on Chain of Custody? Yes No
 13. Is it clear what analyses were requested? Yes No
 14. Were all holding times able to be met? Yes No
 (If no, notify customer for authorization.)

of preserved bottles checked for pH: 6
 (<2 or >12 unless noted)
 Adjusted? NO
 Checked by: JO

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes No NA

Person Notified: _____ Date: _____
 By Whom: _____ Via: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

Chain-of-Custody Record

Client: City of Las Cruces
Water Quality Laboratory
 Mailing Address: PO Box 2600
Las Cruces N.M 88004
 Phone #: 575-528-3604
 email or Fax#: 575-528-3600

QA/QC Package:
 Standard Level 4 (Full Validation)
 Accreditation
 NELAP Other
 EDD (Type) EXCEL

Turn-Around Time:
 Standard Rush
 Project Name:
the foothill landfill closure
Monitoring Wells
 Project #: Lucif Guerrero
POC: Joshua Fremblitt
 Project Manager: Lucif Guerrero
lguerr@cs-cruces.org
 Sampler: Joshua Fremblitt
 On Ice: Yes No
 Sample Temperature: 2.8°

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
2018	1257	<u>Filtered Water</u>	<u>CHL MW# 7</u>	<u>Various</u>	<u>Various</u>	<u>-001</u>
2018	1420	<u>Filtered Water</u>	<u>CHL MW# 2</u>	<u>Various</u>	<u>Various</u>	<u>-002</u>
			<u>TRAP BLANK</u>	<u>---</u>	<u>---</u>	<u>-003</u>
			<u>TO 6/11/18</u>			

HALL ENVIRONMENTAL ANALYSIS LABORATORY
 www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
BTEX + MTBE + TMBs (8021)	
BTEX + MTBE + TPH (Gas only)	
TPH 8015B (GRO / DRO / MRO)	
TPH (Method 418.1)	
EDB (Method 504.1)	<input checked="" type="checkbox"/>
PAH's (8310 or 8270 SIMS)	
RCRA 8 Metals	
Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	
8081 Pesticides / 8082 PCBs	
8260B (VOA)	<input checked="" type="checkbox"/>
8270 (Semi-VOA)	
Air Bubbles (Y or N)	<input checked="" type="checkbox"/> <u>See: Report 157</u>

Remarks:
 Received by: Feder Date: 6/11/18 Time: 0845
 Received by: Joshua Fremblitt Date: 6/11/18 Time: 0845

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Table 1. Reduced parameter list for water-quality sampling at Las Cruces Foothills Landfill monitoring wells MW-1 through MW-7, Las Cruces, New Mexico

parameters	CAS no.	method	GWPS	PQL	AML	CAL	units	included in Append I, Part 258, 40 CFR
acetone	67-64-1	8260B	-	0.01	0.0195	-	mg/L	y
acrylonitrile	107-13-1	8260B	-	0.1	0.195	-	mg/L	y
benzene	71-43-2	8260B	0.005	0.001	0.0025	0.00375	mg/L	y
bromochloromethane	74-97-5	8260B	-	0.001	0.00195	-	mg/L	y
bromodichloromethane	75-27-4	8260B	-	0.005	0.00975	-	mg/L	y
bromoform	75-25-2	8260B	-	0.015	0.02925	-	mg/L	y
carbon disulfide	75-15-0	8260B	-	0.001	0.00195	-	mg/L	y
carbon tetrachloride	56-23-5	8260B	0.005	0.002	0.0025	0.00375	mg/L	y
chlorobenzene	108-90-7	8260B	0.1	0.005	0.05	0.075	mg/L	y
chloroethane	75-00-3	8260B	-	0.01	0.0195	-	mg/L	y
chloroform	67-66-3	8260B	0.1	0.005	0.05	0.75	mg/L	y
dibromochloromethane	124-48-1	8260B	-	0.005	0.00975	-	mg/L	y
1,2-dibromo-3-chloropropane	96-12-8	504.1	0.0002	0.0001	0.0001	0.00015	mg/L	y
1,2-dichlorobenzene	95-50-1	8260B	0.06	0.01	0.03	0.045	mg/L	y
1,3-dichlorobenzene	541-73-1	8260B	-	0.01	0.0195	-	mg/L	n
1,4-dichlorobenzene	106-46-7	8260B	0.075	0.015	0.0375	0.5625	mg/L	y
trans-1,4-dichloro-2-butene	110-57-6	8260B	-	0.001	0.00195	-	mg/L	y
dichlorodifluoromethane	75-71-8	8260B	-	0.005	0.00975	-	mg/L	n
1,1-dichloroethane	75-34-3	8260B	0.025	0.005	0.0125	0.01875	mg/L	y
1,2-dichloroethane (EDC)	107-06-2	8260B	0.005	0.001	0.0025	0.00375	mg/L	y

Table 1. Reduced parameter list for water-quality sampling at Las Cruces Foothills Landfill monitoring wells MW-1 through MW-7, Las Cruces, New Mexico (continued)

parameters	CAS no.	method	GWPS	PQL	AML	CAL	units	included in Append I, Part 258, 40 CFR
1,1-dichloroethylene (1,1-DCE)	75-35-4	8260B	0.005	0.001	0.0025	0.00375	mg/L	y
cis-1,2-dichloroethylene	156-59-2	8260B	0.07	0.005	0.035	0.0525	mg/L	y
trans-1,2- dichloroethylene	156-60-5	8260B	0.1	0.005	0.05	0.075	mg/L	y
1,2-dichloropropane	78-87-5	8260B	0.005	0.0005	0.0025	0.00375	mg/L	y
cis-1,3-dichloropropene	10061-01-5	8260B	-	0.02	0.039	-	mg/L	y
trans-1,3- dichloropropene	10061-02-6	8260B	-	0.01	0.0195	-	mg/L	y
ethylbenzene	100-41-4	8260B	0.7	0.01	0.35	0.525	mg/L	y
ethylene dibromide (EDB)	106-93-4	504.1	0.00005	0.000025	0.000025	0.000038	mg/L	y
2-hexanone	591-78-6	8260B	-	0.04	0.078	-	mg/L	y
methyl bromide	74-83-9	8260B	-	0.01	0.0195	-	mg/L	y
methyl chloride	74-87-3	8260B	-	0.001	0.00195	-	mg/L	y
methyl ethyl ketone	78-93-3	8260B	-	0.01	0.0195	-	mg/L	y
methyl iodide	74-88-4	8260B	-	0.05	0.0975	-	mg/L	y
4-methyl-2-pentanone	108-10-1	8260B	-	0.001	0.00195	-	mg/L	y
methylene bromide	74-95-3	8260B	-	0.001	0.00195	-	mg/L	y
methylene chloride	74-87-3	8260B	0.005	0.001	0.0025	0.00375	mg/L	y
styrene	100-42-5	8260B	0.1	0.001	0.05	0.075	mg/L	y
1,1,1,2- tetrachloroethane	630-20-6	8260B	-	0.001	0.00195	-	mg/L	y
1,1,2,2- tetrachloroethane	79-34-5	8260B	0.01	0.005	0.005	0.0075	mg/L	y
tetrachloroethylene (PCE)	127-18-4	8260B	0.005	0.0005	0.0025	0.00375	mg/L	y

Table 1. Reduced parameter list for water-quality sampling at Las Cruces Foothills Landfill monitoring wells MW-1 through MW-7, Las Cruces, New Mexico (continued)

parameters	CAS no.	method	GWPS	PQL	AML	CAL	units	included in Append I, Part 258, 40 CFR
toluene	108-88-3	8260B	0.75	0.001	0.375	0.5625	mg/L	y
1,1,1-trichloroethane	71-55-6	8260B	0.06	0.005	0.03	0.045	mg/L	y
1,1,2-trichloroethane	79-00-5	8260B	0.005	0.002	0.0025	0.00375	mg/L	y
trichloroethylene (TCE)	79-01-6	8260B	0.005	0.001	0.0025	0.00375	mg/L	y
trichlorofluoromethane	75-69-4	8260B	-	0.01	0.0195	-	mg/L	y
1,2,3-trichloropropane	96-18-4	8260B	-	0.05	0.0975	-	mg/L	y
vinyl acetate	108-05-4	8260B	-	0.0004	0.00078	-	mg/L	y
vinyl chloride	75-01-4	8260B	0.001	0.0004	0.0005	0.00075	mg/L	y
xylenes	1330-20-7	8260B	0.62	0.0015	0.31	0.465	mg/L	y
ammonia as (N)	N/A	SM 4500 NH3	-	0.5	-	-	mg/L	n
nitrate (as N)	N/A	300.0	10	1.0	5.0	7.5	mg/L	n
chloride	16887-00-6	300.0	250	5.0	187.5	250	mg/L	n
sulfate	14808-79-8	300.0	250	5.0	187.5	250	mg/L	n
total dissolved solids	N/A	SM 2540C	500	5.0	-	-	mg/L	n
carbonate alkalinity	3812-32-6	SM 2320B	-	10	-	-	mg/L	n
bicarbonate alkalinity	71-52-3	SM 2320B	-	10	-	-	mg/L	n
total phenolics	N/A	9067	0.005	0.0025	0.0025	0.00375	mg/L	n
total organic carbon	N/A	9060	-	1	-	-	mg/L	n
barium (total)	7440-39-3	6010B	1	0.01	0.5	0.75	mg/L	y
beryllium (total)	7440-41-7	6010B	0.004	0.002	0.002	0.003	mg/L	y
cadmium (total)	7440-43-9	6010B	0.005	0.002	0.0025	0.00375	mg/L	y
calcium (total)	7440-70-2	6010B	-	1	-	-	mg/L	n
chromium (total)	7440-47-3	6010B	0.05	0.006	0.025	0.0375	mg/L	y
cobalt (total)	7440-48-4	6010B	0.05	0.006	0.025	0.0375	mg/L	y
copper (total)	7440-50-8	6010B	1	0.006	0.5	0.75	mg/L	y

Table 1. Reduced parameter list for water-quality sampling at Las Cruces Foothills Landfill monitoring wells MW-1 through MW-7, Las Cruces, New Mexico (concluded)

parameters	CAS no.	method	GWPS	PQL	AML	CAL	units	included in Append I, Part 258, 40 CFR
iron (total)	7439-89-6	6010B	0.3	0.1	0.225	0.3	mg/L	n
lead (total)	7439-92-1	6010B	0.05	0.005	0.025	0.0375	mg/L	y
magnesium (total)	7439-95-4	6010B	-	1	-	-	mg/L	n
manganese (total)	7439-96-5	6010B	0.05	0.03	0.0375	0.05	mg/L	n
nickel (total)	7440-02-0	6010B	0.2	0.01	0.1	0.15	mg/L	y
potassium (total)	7440-09-7	6010B	-	1	-	-	mg/L	n
silver (total)	7440-22-4	6010B	0.05	0.005	0.025	0.0375	mg/L	y
sodium (total)	7440-23-5	6010B	-	1	-	-	mg/L	n
vanadium (total)	7440-62-2	6010B	-	0.05	-	-	mg/L	y
zinc (total)	7440-66-6	6010B	5	0.02	2.5	3.75	mg/L	y
antimony (total)	7440-36-0	6020	0.006	0.001	0.003	0.0045	mg/L	y
arsenic (total)	7440-38-2	6020	0.01	0.004	0.005	0.0075	mg/L	y
selenium (total)	7782-49-2	6020	0.05	0.001	0.025	0.0375	mg/L	y
thallium (total)	7440-28-0	6020	0.002	0.001	0.001	0.0015	mg/L	y
pH	N/A	SM4500	6.5-8.5	+/- 0.1	-	-	S.U.	n
specific conductance	N/A	120.1	-	+/- 25	-	-	µS/cm	n
temperature	N/A	field	-	+/- 0.5	-	-	°F	n
water level elevation	N/A	field	-	+/- 0.01	-	-	ft	n

GWPS - ground water protection standard

PQL - practical quantitation limit

AML - assessment monitoring level

CAL - corrective action level

mg/L - milligrams per liter

µS/cm - microSiemens per centimeter

S.U. - standard pH units

°F - degrees Fahrenheit

ft - feet