

April 23, 2015

Project LC-07-04279A

Ms. Melissa Erdman, Town Clerk
Town of Onalaska
Town Hall
N5589 Commerce Road
Onalaska, WI 54650

Re: First Quarter 2015 Onalaska Landfill Gas Monitoring
Onalaska Municipal Landfill Site
Onalaska, Wisconsin

RECEIVED

APR 27 2015

DNR-WCR

Dear Ms. Erdman:

Braun Intertec Corporation (Braun Intertec) is presenting gas-monitoring data for the referenced site. The landfill gas monitoring is based on requirements of item number 18 of the Consent Decree with the United States Environmental Protection Agency (USEPA). Item number 18 states that the "settling Defendant shall take explosimeter and oxygen readings at all landfill gas monitoring wells on a quarterly basis according to procedures to be established by USEPA and Wisconsin Department of Natural Resources (WDNR), unless approval is obtained from the USEPA in consultation with WDNR to perform such readings on a less frequent basis." Mr. Larry Lester of the WDNR—South Central Region Headquarters, provided the Consent Decree information to Braun Intertec.

On March 30, 2015, Braun Intertec personnel collected oxygen and explosimeter (LEL) readings at seven landfill gas monitoring wells, identified on the landfill gas piping map, for the Onalaska municipal landfill site as LG-1 through LG-7. March oxygen level readings at gas monitoring points LG-1, LG-4 and LG-7 were higher than the previous gas monitoring. Oxygen level readings at gas monitoring points LG-2, LG-5 and LG-6 were lower than the previous gas monitoring. Oxygen level readings at gas monitoring point LG-3 remained the same as the previous gas monitoring. Figure 1 depicts the oxygen level readings versus time. The March LEL readings at gas monitoring points LG-1 through LG-7 remained the same as the previous gas monitoring. Figure 2 depicts the LEL readings versus time. Tables 1A and 1B provide a historical summary of oxygen and LEL readings. The LEL and oxygen field readings, along with site observations, are provided on the Site Visit Sheet.

If you have any questions or comments regarding this project, please call David Bradshaw at 608.781.7277.

Sincerely,

BRAUN INTERTEC CORPORATION



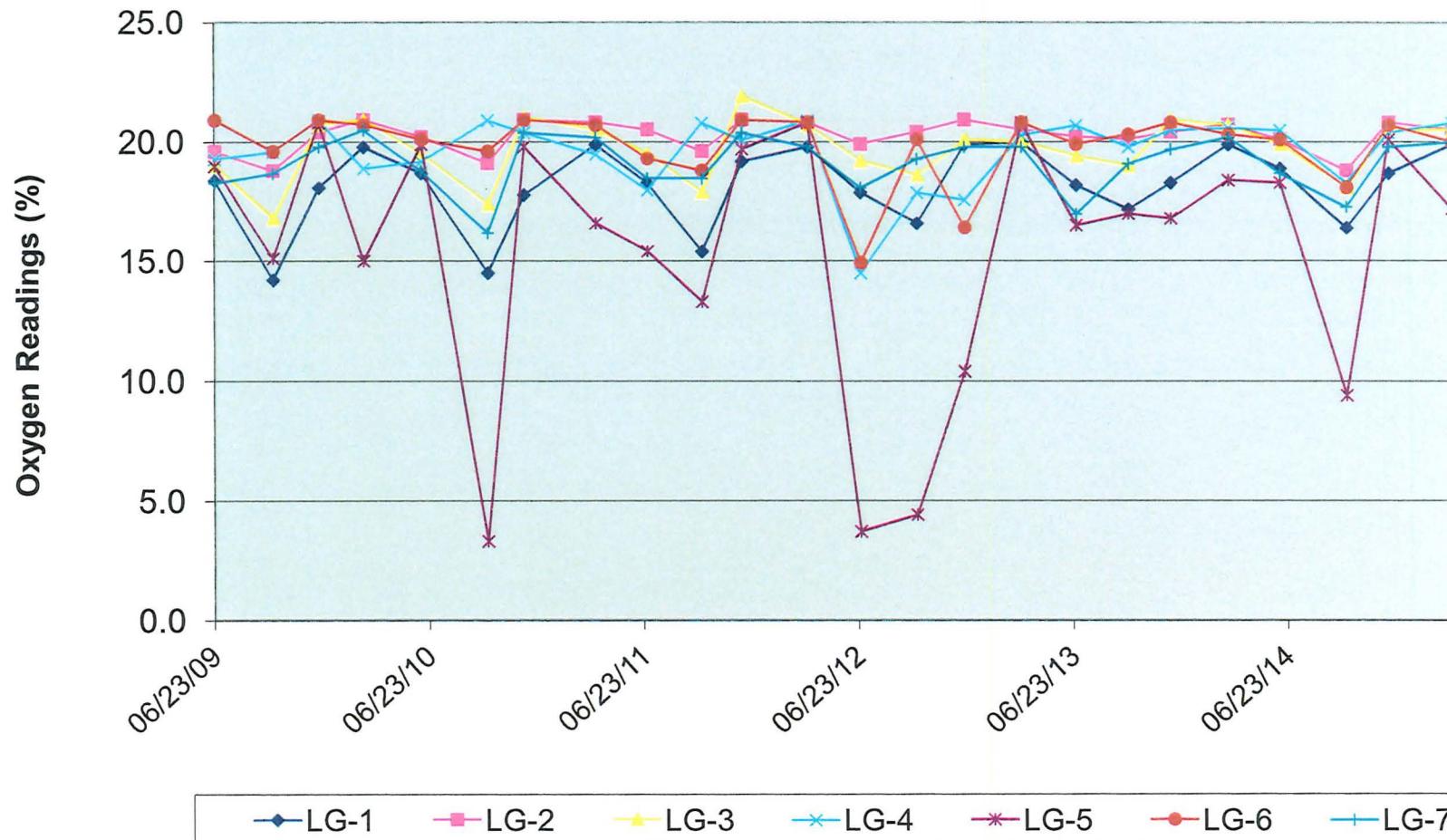
David M. Bradshaw
Environmental Field Technician

Attachments:

- Figure 1 - Oxygen Level Trends
- Figure 2 - LEL Concentration Trends
- Table 1A - Landfill Oxygen Monitoring Results
- Table 1B - Landfill LEL Monitoring Results
- Site Visit Sheet

AA/EOE

Oxygen Levels

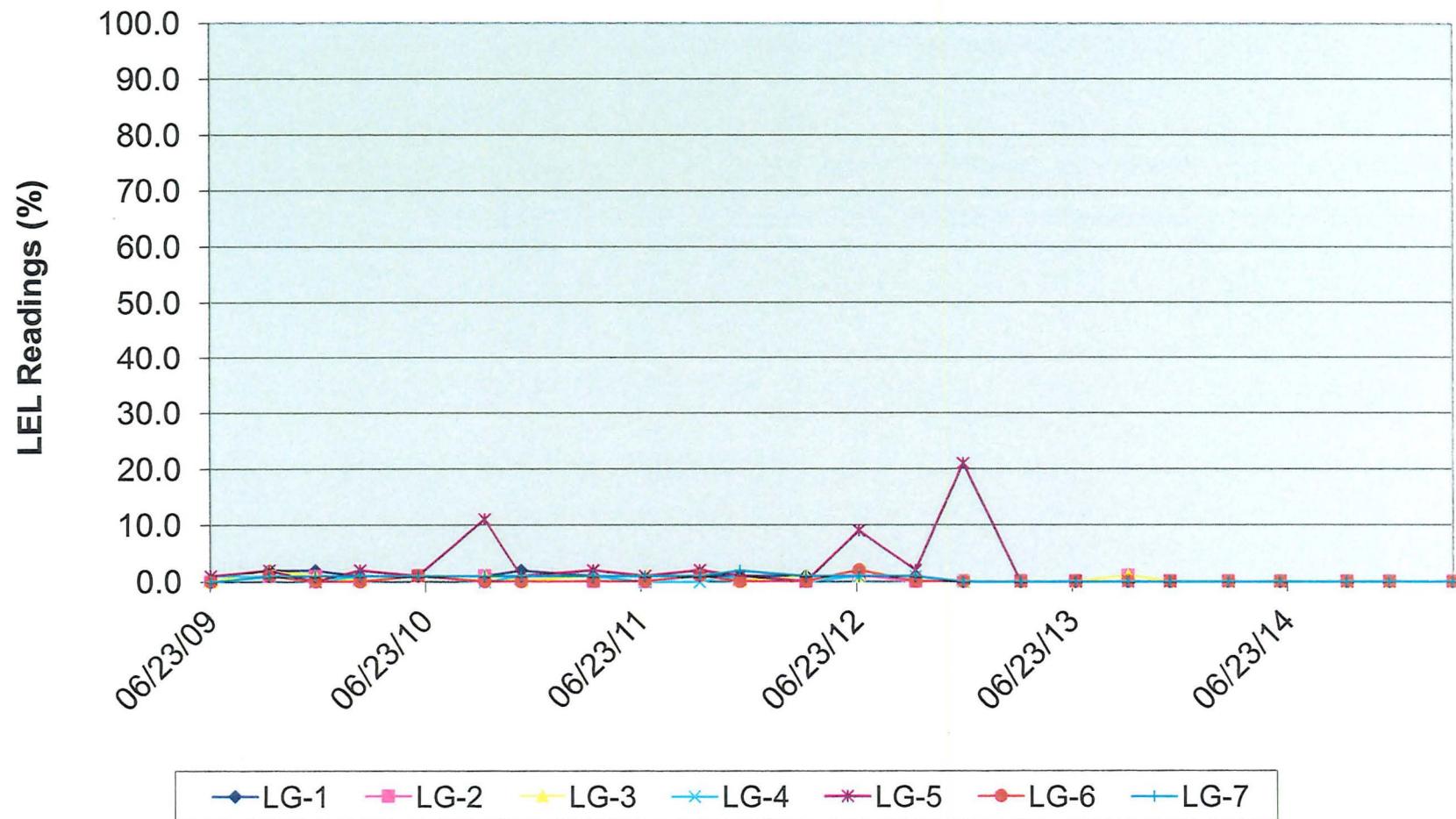


BRAUNSM
INTERTEC

OXYGEN TRENDS (PERCENT)
Monthly Monitoring Report
Onalaska Municipal Landfill
Onalaska, Wisconsin

DRAWN BY:	DATE	SHEET
DMB	3/26/2008	
APP'D BY:	MLG	OF
JOB NO.	LC-07-04279	
DWG. NO.	FIGURE NO.	
SCALE		1

LEL Levels



BRAUNSM
INTERTEC

LEL TRENDS (PERCENT)
Monthly Monitoring Report
Onalaska Municipal Landfill
Onalaska, Wisconsin

DRAWN BY:	DATE	SHEET
DMB	3/26/2008	
APP'D BY:	MLG	OF
JOB NO.	LC-07-04279	
DWG. NO.		FIGURE NO.
SCALE		2

Onalaska Municipal Landfill

LC-07-04279

TABLE 1A
Landfill Gas Monitoring

Site Visit Date	Oxygen Readings (%)						
	Gas Monitoring Points						
	LG-1	LG-2	LG-3	LG-4	LG-5	LG-6	LG-7
05/09/97	18.8	20.2	20.1	20.9	20.8	20.8	20.7
06/18/97	19.9	20.9	20.7	20.7	19.9	20.9	20.9
07/16/97	15.8	19.3	19.0	18.9	11.7	20.8	11.4
08/14/97	12.7	18.6	17.7	0.6	0.0	7.0	2.1
09/18/97	10.0	17.1	15.6	11.7	0.0	11.2	8.1
10/28/97	14.3	18.9	19.3	20.5	19.4	20.9	20.9
11/24/97	17.4			20.9	20.9	20.9	20.9
12/16/97	18.1	19.8	20.1	17.2	20.8	20.9	20.9
01/19/98	19.6			20.8	20.7	20.9	20.9
02/27/98	19.0	20.6	20.3	17.9	18.3	20.5	20.8
03/23/98	19.4	20.5	20.2	20.6	20.7	20.7	20.8
04/14/98	19.2	20.3	20.5	20.9	20.9	20.9	20.6
05/15/98	18.6	19.8	19.9	19.9	18.6	20.7	20.4
06/23/98	20.2	20.3	20.4	19.9	19.2	19.9	17.8
07/14/98	13.7	18.4	13.7	20.5	20.5	19.8	20.5
08/12/98	11.4	18.0	16.6	18.4	16.0	17.8	1.0
09/17/98	10.6	17.4	16.1	19.6	17.5	19.9	14.4
10/14/98	13.6	18.7	17.7	18.3	4.5	17.4	19.1
11/17/98	14.8	19.4	18.7	20.9	20.8	20.4	17.8
12/23/98				20.8	20.1	20.9	20.8
01/15/99	18.6			0.0	0.1	8.7	18.1
02/12/99	19.8	20.9		18.8	18.3	20.1	20.9
03/12/99	19.6	20.5		17.2	13.9	19.5	20.4
04/09/99	19.2	20.5	20.8	20.7	20.7	20.4	20.8
05/07/99	19.0	20.4	20.5	20.8	20.7	20.8	20.8
06/10/99	15.8	19.8	20.1	20.2	19.6	20.4	15.8
07/06/99	16.1	19.1	19.0	20.9	20.9	20.6	20.9
08/16/99	13.3	17.6	17.1	20.5	19.2	17.3	20.2
09/13/99	12.8	18.3	17.3	20.7	18.4	19.9	18.7
10/20/99	15.6	19.6	19.0	18.8	7.8	17.8	19.9
11/30/99	18.2	20.7	20.1	9.3	16.9	19.3	19.3
12/23/99	19.0	20.9		19.0	14.4	20.4	19.2
01/18/00	20.0			19.2	15.0	20.8	20.9
02/18/00	19.9			18.3	19.3	20.9	20.8
03/24/00	20.2	20.7	20.7	20.0	19.8	20.7	20.9
04/24/00	20.9	20.7	20.5	5.2	19.2	19.6	17.7
05/23/00	19.1	20.7	20.3	20.4	20.4	20.1	
06/15/00	17.8	19.5	19.4	20.9	20.8	19.8	20.8
07/21/00	15.1	20.9	17.8	20.8	20.6	20.7	20.2
08/15/00	13.2	18.8	17.6	20.7	20.8	20.7	20.9
09/19/00	16.3	18.9	18.2	20.9	20.9	20.9	20.7
10/26/00	15.0	19.9	19.0	6.4	18.6	7.1	19.5
12/28/00	19.7	19.7	18.9	19.5	19.7	19.7	19.2
03/20/01	20.8	20.8	20.7	20.9	20.6	20.7	20.8
06/20/01	20.7	20.7	20.9	20.8	20.7	20.8	20.8
07/30/01	20.8	20.9	20.9	20.8	20.8	20.9	20.8
08/28/01	20.9	20.2	20.5	18.6	20.1	19.1	20.9
09/26/01	20.8	20.9	20.8	20.8	20.9	20.9	20.9
10/29/01	20.9	20.7	20.7	20.2	20.7	20.6	20.8
12/04/01	20.8	20.8	20.9	20.8	20.9	20.7	20.9
03/29/02	20.9	20.9	20.8	20.9	20.8	20.8	20.8

Onalaska Municipal Landfill
LC-07-04279

TABLE 1A
Landfill Gas Monitoring

Site Visit Date	Oxygen Readings (%)						
	Gas Monitoring Points						
	LG-1	LG-2	LG-3	LG-4	LG-5	LG-6	LG-7
06/07/02	20.9	20.3	20.9	14.2	14.3	19.6	19.0
07/18/02	20.9	20.9	20.9	18.6	18.2	20.8	20.9
08/15/02	14.5	20.9	18.6	18.2	11.4	18.3	16.8
10/10/02	14.5	21.7	19.9	9.4	3.8	12.5	17.1
12/11/02	19.9	20.7	19.7	18.3	18.9	20.7	20.9
03/31/03	20.4	20.9	21.0	7.3	18.0	17.6	17.5
06/30/03	20.9	20.8	20.8	20.7	19.9	20.9	20.9
07/30/03	20.8	20.7	20.3	18.6	19.2	20.8	20.8
08/21/03	18.7	19.2	16.4	17.3	18.6	19.7	19.9
09/30/03	18.2	19.6	14.4	20.9	20.0	20.9	20.6
10/30/03	18.9	19.4	15.3	21.3	20.1	20.6	20.4
12/18/03	20.9	20.9	18.7	19.5	20.9	20.7	20.9
03/25/04	20.8	19.8	15.8	18.9	20.2	20.9	20.6
06/18/04	20.8	20.7	17.6	19.4	19.7	20.9	20.0
07/20/04	20.9	20.9	18.2	20.1	18.6	19.8	20.4
08/19/04	20.9	20.8	20.1	17.6	20.1	20.6	20.9
09/23/04	20.9	20.9	20.8	20.7	20.8	20.9	20.9
10/15/04	20.9	20.9	20.9	20.8	20.9	20.9	20.9
12/10/04	20.8	20.7	20.6	19.9	20.2	20.7	20.8
01/31/05	20.9	20.8		20.1		20.8	20.9
03/08/05	20.9	20.9	20.8	15.6	18.9	19.7	20.8
06/27/05	20.9	20.9	20.4	18.9	20.2	20.8	20.9
07/19/05	18.8	20.7	20.9	20.7	14.1	20.2	20.9
08/23/05	17.2	20.2	18.1	18.7	20.1	17.4	16.7
09/26/05	12.1	18.1	16.2	16.3	5.3	20.2	16.9
10/13/05	13.2	18.4	16.8	19.9	19.2	12.9	12.9
03/06/06	20.1	20.9	20.9	20.9	20.9	20.9	20.5
06/30/06	17.9	20.5	19.4	20.9	20.9	20.7	20.3
09/21/06	15.4	18.9	17.2	19.6	16.6	19.5	19.3
12/29/06	18.2	20.6	20.1	20.3	19.2	20.9	20.2
03/31/07	19.3	20.4	20.5	20.6	20.2	20.2	19.3
06/21/07	17.7	19.2	20.1	20.8	19.9	20.4	17.5
09/28/07	13.8	18.4	17.2	20.4	19.5	20.9	16.8
12/31/07	20.9	20.9	21.0	20.8	20.6	20.9	21.0
03/26/08	20.0	20.9	20.8	20.9	20.9	20.9	20.9
06/26/08	18.3	19.8	20.0	20.1	19.7	20.9	18.5
09/12/08	15.9	19.9	18.6	19.6	16.1	19.7	18.6
12/18/08	19.9	20.9	20.8	20.6	18.7	20.9	20.5
03/31/09	20.2	20.9	20.9	19.6	19.3	20.9	20.5
06/23/09	18.4	19.6	19.0	19.3	19.0	20.9	18.3
09/30/09	14.2	18.8	16.8	19.6	15.1	19.6	18.7
12/17/09	18.1	20.4	20.7	20.9	20.8	20.9	19.8
03/03/10	19.8	20.9	20.9	18.9	15	20.7	20.5
06/09/10	18.7	20.2	19.5	19.2	19.9	20.1	18.8
09/30/10	14.5	19.1	17.4	20.9	3.3	19.6	16.2
12/01/10	17.8	20.9	21.0	20.4	19.8	20.9	20.4
04/02/11	19.9	20.8	20.5	19.5	16.6	20.7	20.2

Onalaska Municipal Landfill
LC-07-04279

TABLE 1A
Landfill Gas Monitoring

Site Visit Date	Oxygen Readings (%)						
	Gas Monitoring Points						
	LG-1	LG-2	LG-3	LG-4	LG-5	LG-6	LG-7
06/29/11	18.3	20.5	19.5	18.0	15.4	19.3	18.5
09/30/11	15.4	19.6	17.9	20.8	13.3	18.8	18.5
12/07/11	19.2	20.9	21.9	20.1	19.7	20.9	20.4
03/28/12	19.8	20.8	20.7	20.9	20.8	20.8	19.8
06/26/12	17.9	19.9	19.2	14.5	3.7	14.9	18.1
09/30/12	16.6	20.4	18.6	17.9	4.4	20.1	19.3
12/20/12	19.9	20.9	20.1	17.6	10.4	16.4	19.8
03/27/13	20.0	20.5	20.0	20.3	20.8	20.8	19.8
06/28/13	18.2	20.2	19.4	20.7	16.5	19.9	17.0
09/25/13	17.2	20.1	19.0	19.8	17.0	20.3	19.1
12/05/13	18.3	20.4	20.9	20.5	16.8	20.8	19.7
03/14/14	19.9	20.7	20.7	20.6	18.4	20.3	20.2
06/10/14	18.9	20.1	19.9	20.5	18.3	20.1	18.7
10/01/14	16.4	18.8	18.1	18.3	9.4	18.1	17.3
12/12/14	18.7	20.8	20.5	20.4	20.1	20.7	19.8
03/30/15	19.9	20.5	20.5	20.8	17.2	20.0	20.0

Onalaska Municipal Landfill
LC-07-04279

TABLE 1B
Landfill Gas Monitoring

Site Visit Date	LEL Readings (%)						
	Gas Monitoring Points						
	LG-1	LG-2	LG-3	LG-4	LG-5	LG-6	LG-7
05/09/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06/18/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07/16/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08/14/97	0.0	0.0	0.0	3.0	5.0	0.0	0.0
09/18/97	0.0	0.0	0.0	1.0	3.0	0.0	9.0
10/28/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/24/97	0.0			0.0	0.0	0.0	0.0
12/16/97	0.0	0.0	0.0	0.0	0.0	0.0	0.0
01/19/98	0.0			0.0	0.0	0.0	0.0
02/27/98	0.0	0.0	0.0	15.0	18.0	0.0	0.0
03/23/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04/14/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05/15/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06/23/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07/14/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08/12/98	0.0	0.0	0.0	3.0	20.0	0.0	7.0
09/17/98	0.0	0.0	0.0	0.0	3.0	0.0	0.0
10/14/98	0.0	0.0	0.0	0.0	50.0	0.0	0.0
11/17/98	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/23/98			0.0	0.0	0.0	0.0	0.0
01/15/99	0.0			4.0	11.0	12.0	2.0
02/12/99	0.0	0.0		0.0	0.0	0.0	0.0
03/12/99	0.0	0.0		0.0	0.0	0.0	0.0
04/09/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05/07/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06/10/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07/06/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08/16/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09/13/99	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/20/99	0.0	0.0	0.0	0.0	30.0	0.0	0.0
11/30/99	0.0	0.0	0.0	57.0	3.0	0.0	0.0
12/23/99	0.0	0.0		0.0	8.0	0.0	0.0
01/18/00	0.0			0.0	0.0	0.0	0.0
02/18/00	0.0			0.0	0.0	0.0	0.0
03/24/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04/24/00	0.0	0.0	0.0	58.0	0.0	0.0	0.0
05/23/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06/15/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07/21/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08/15/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09/19/00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/26/00	0.0	0.0	0.0	49	1.0	0.0	0.0
12/28/00	0.0	0.0	0.0	0.0	1.0	0.0	0.0
03/20/01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06/20/01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07/30/01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08/28/01	0.0	0.0	0.0	14.0	1.0	1.0	0.0
09/26/01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/29/01	0.0	0.0	0.0	2.0	0.0	1.0	0.0
12/04/01	0.0	0.0	0.0	0.0	0.0	1.0	0.0
03/29/02	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Onalaska Municipal Landfill
LC-07-04279

TABLE 1B
Landfill Gas Monitoring

Site Visit Date	LEL Readings (%)						
	Gas Monitoring Points						
	LG-1	LG-2	LG-3	LG-4	LG-5	LG-6	LG-7
06/07/02	0.0	0.0	0.0	21.0	15.0	1.0	1.0
07/18/02	0.0	0.0	0.0	12.0	8.0	0.0	0.0
08/15/02	2.0	0.0	1.0	11.0	15.0	1.0	2.0
10/10/02	2.0	0.0	2.0	100.0	100.0	45.0	2.0
12/11/02	1.0	0.0	2.0	1.0	2.0	0.0	3.0
03/31/03	1.0	0.0	0.0	57.0	27.0	3.0	14.0
06/30/03	0.0	0.0	0.0	0.0	0.1	0.0	0.0
07/30/03	0.0	0.0	0.0	12.0	7.0	0.0	0.0
08/21/03	0.0	0.0	3.0	5.0	1.0	0.0	0.0
09/30/03	3.0	2.0	3.0	0.0	2.0	0.0	2.0
10/30/03	0.0	1.0	0.0	3.0	1.0	0.0	0.0
12/18/03	0.0	0.0	1.0	1.0	0.0	0.0	0.0
03/25/04	0.0	0.0	3.0	1.0	1.0	0.0	0.0
06/18/04	0.0	1.0	2.0	0.0	0.0	0.0	0.0
07/20/04	0.0	0.0	1.0	1.0	1.0	0.0	0.0
08/19/04	0.0	0.0	1.0	0.0	1.0	0.0	0.0
09/23/04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/15/04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/10/04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
01/31/05	0.0	0.0		0.0		0.0	0.0
03/08/05	0.0	1.0	1.0	7.0	12.0	1.0	0.0
06/27/05	0.0	0.0	0.0	4.0	2.0	0.0	0.0
07/19/05	2.0	0.0	0.0	0.0	2.0	1.0	0.0
08/23/05	2.0	0.0	1.0	1.0	0.0	2.0	2.0
09/26/05	3.0	1.0	2.0	17.0	100.0	0.0	2.0
10/13/05	2.0	1.0	2.0	1.0	17.0	2.0	2.0
03/06/06	2.0	1.0	0.0	0.0	0.0	0.0	2.0
06/30/06	2.0	1.0	2.0	1.0	1.0	0.0	1.0
09/21/06	2.0	1.0	2.0	1.0	5.0	1.0	1.0
12/29/06	1.0	1.0	1.0	0.0	1.0	0.0	1.0
03/31/07	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06/21/07	1.0	0.0	0.0	0.0	1.0	0.0	1.0
09/28/07	1.0	1.0	1.0	1.0	1.0	0.0	2.0
12/31/07	0.0	0.0	0.0	0.0	0.0	0.0	1.0
03/26/08	1.0	0.0	1.0	1.0	0.0	1.0	1.0
06/26/08	1.0	0.0	1.0	0.0	1.0	0.0	1.0
09/12/08	1.0	0.0	0.0	0.0	2.0	0.0	1.0
12/18/08	0.0	0.0	0.0	0.0	2.0	0.0	1.0
03/31/09	0.0	0.0	0.0	1.0	1.0	0.0	0.0
06/23/09	0.0	0.0	0.0	1.0	1.0	0.0	0.0
09/30/09	2.0	1.0	2.0	1.0	2.0	1.0	1.0
12/17/09	2.0	1.0	1.0	0.0	0.0	0.0	1.0
03/03/10	1.0	0.0	0.0	1.0	2.0	0.0	1.0
06/09/10	1.0	1.0	1.0	1.0	1.0	1.0	1.0
09/30/10	1.0	1.0	1.0	0.0	11.0	0.0	1.0
12/01/10	2.0	0.0	0.0	1.0	1.0	0.0	1.0
4/2/2011	1.0	0.0	1.0	1.0	2.0	0.0	1.0

Onalaska Municipal Landfill
LC-07-04279

TABLE 1B
Landfill Gas Monitoring

Site Visit Date	LEL Readings (%)						
	Gas Monitoring Points						
	LG-1	LG-2	LG-3	LG-4	LG-5	LG-6	LG-7
06/29/11	0.0	0.0	1.0	0.0	1.0	0.0	1.0
09/30/11	1.0	1.0	1.0	0.0	2.0	1.0	1.0
12/07/11	1.0	0.0	0.0	1.0	1.0	0.0	2.0
03/28/12	1.0	0.0	1.0	0.0	0.0	0.0	1.0
06/26/12	1.0	1.0	1.0	1.0	9.0	2.0	1.0
09/30/12	1.0	0.0	1.0	1.0	2.0	0.0	1.0
12/20/12	0.0	0.0	0.0	0.0	21.0	0.0	0.0
03/27/13	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06/28/13	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09/25/13	1.0	1.0	1.0	0.0	0.0	0.0	0.0
12/05/13	0.0	0.0	0.0	0.0	0.0	0.0	0.0
03/14/14	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06/10/14	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/01/14	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/12/14	0.0	0.0	0.0	0.0	0.0	0.0	0.0
03/30/15	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Landfill Gas Monitoring
LC-07-04279A
Town of Onalaska

Date: 3/30/15
Technician: Dave B
Weather: overcast, calm,
45°

Well Number	Time Monitored	Oxygen Readings	LEL Readings	Comments
LG-1	11:18	19.9	0.0	
LG-2	10:10	20.5	0.0	
LG-3	10:57	20.5	0.0	
LG-4	10:48	20.8	0.0	
LG-5	10:40	17.2	0.0	
LG-6	11:39	20.0	0.0	
LG-7	11:28	20.0	0.0	

Additional Notes
