

Appendix A  
Table A-1  
Operational Data  
OU-1 South Oxygen Injection System  
Operations, Maintenance and Monitoring Program  
Bay Shore/Brightwaters Former MGP Site  
Operational Unit No. 1 (OU-1)

Weight of Oxygen Injected through Q1 2009 1,381 lbs

	Operational Days	Oxygen Injected Per Month (Lbs)
Month 1	Apr-09 30	151
Month 2	May-09 31	150
Month 3	Jun-09 18	87
Total Operational Days In Q2 2009		79
Total Oxygen in Q2 2009 (Lbs)		387.73
Running Total Through Q2 2009 (Lbs)		1,768.57

**Notes:**

SCFH (M) = Measured flow rate  
 SCFH (C\*) = Flow rate converted for oxygen  
 CV/D (V) = Volume of oxygen injected  
 PSI (M) = Measured pressure  
 PSla (P) = Pressure converted to atmospheric pressure.  
 n = PV/RT = Mass of Oxygen  
 Temperature = Degrees Rankine  
 R = Constant (0.73)

		4/15/2009							5/8/2009							*						
		85							85							85						
		10.73							10.73							10.73						
		530							530							530						
		Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSla (P)	n=PV/RT lbs O2	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSla (P)	n=PV/RT lbs O2	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSla (P)	n=PV/RT lbs O2		
Injection Bank 1	Point 1	41	22	30.933	61.865	17.5	32.2	0.298	29	40.775	81.549	17.5	32.2	0.392	29	40.775	81.549	17.5	32.2	0.392		
	Point 4	26	34	39.244	78.488	7.0	21.7	0.255	29	33.473	66.946	7.0	21.7	0.217	29	33.473	66.946	7.0	21.7	0.217		
	Point 5	41	26	34.211	68.422	13.5	28.2	0.288	29	38.495	76.990	14.0	28.7	0.330	29	38.495	76.990	14.0	28.7	0.330		
	Point 8	26	38	43.861	87.722	7.0	21.7	0.285	29	33.473	66.946	7.0	21.7	0.217	29	33.473	66.946	7.0	21.7	0.217		
	Point 9	41	30	39.474	78.948	13.5	28.2	0.333	29	38.495	76.990	14.0	28.7	0.330	29	38.495	76.990	14.0	28.7	0.330		
	Point 12	26	42	49.033	98.067	7.5	22.2	0.325	29	33.856	67.713	7.5	22.2	0.225	29	33.856	67.713	7.5	22.2	0.225		
	Point 13	41	38	50.442	100.883	14.0	28.7	0.433	28	37.490	74.980	14.5	29.2	0.327	28	37.490	74.980	14.5	29.2	0.327		
	Point 16	26	36	42.499	84.998	8.0	22.7	0.288	31	36.597	73.193	8.0	22.7	0.248	31	36.597	73.193	8.0	22.7	0.248		
<b>Total Oxygen Injected per Day (LBS)</b>		<b>2.505</b>							<b>2.288</b>							<b>2.288</b>						
Injection Bank 2	Point 2	26	30	35.024	70.048	7.5	22.2	0.232	32	37.359	74.717	7.5	22.2	0.248	32	37.359	74.717	7.5	22.2	0.248		
	Point 3	41	30	42.181	84.361	17.5	32.2	0.406	33	46.399	92.798	17.5	32.2	0.447	33	46.399	92.798	17.5	32.2	0.447		
	Point 6	26	34	39.694	79.387	7.5	22.2	0.263	32	37.359	74.717	7.5	22.2	0.248	32	37.359	74.717	7.5	22.2	0.248		
	Point 7	41	30	39.474	78.948	13.5	28.2	0.333	32	42.477	84.954	14.0	28.7	0.364	32	42.477	84.954	14	28.7	0.364		
	Point 10	26	34	40.138	80.276	8.0	22.7	0.272	33	38.958	77.915	8.0	22.7	0.264	33	38.958	77.915	8	22.7	0.264		
	Point 11	41	34	44.737	89.474	13.5	28.2	0.377	32	42.106	84.211	13.5	28.2	0.355	32	42.106	84.211	13.5	28.2	0.355		
	Point 14	26	34	39.694	79.387	7.5	22.2	0.263	32	37.359	74.717	7.5	22.2	0.248	32	37.359	74.717	7.5	22.2	0.248		
	Point 15	41	32	42.846	85.691	14.5	29.2	0.374	32	42.846	85.691	14.5	29.2	0.374	32	42.846	85.691	14.5	29.2	0.374		
<b>Total Oxygen Injected per Day (LBS)</b>		<b>2.522</b>							<b>2.548</b>							<b>2.548</b>						
<b>System Total Per Day (LBS)</b>		<b>5.03</b>							<b>4.84</b>							<b>4.84</b>						

**System Operating Specs**

Total of 2 injection banks  
 Oxygen is injected for 10 minutes during each injection cycle  
 Each Injection bank operates for 12 injection cycles per day  
 Each injection point injects oxygen for 120 min per day (10 min per cycle \* 12 Cycles)

**Example**

Bank 1 starts at 7AM  
 Bank 1 finishes injection at 710AM  
 System is recharging 710AM to 800AM  
 Bank 2 starts injection at 800AM  
 Bank 2 finishes injection at 810AM  
 System is recharging 810AM to 900AM  
 Bank 1 starts injection at 900AM  
 Bank 1 finishes injection at 910AM  
 System is recharging from 910AM to 10AM  
 Bank 2 starts injection at 10AM

(Keep repeating cycle for course of day)

**System Alarms**

\* System was not inspected in June. The system was turned off from 6/17/09 through 6/29/09 while the system elevation was adjusted to match the future site grading. The Pressures and Flow Rates were assumed to be equal to the May Inspection.