

2014 Fermentation Data- NoMoVo (EcoPAS was not installed yet)

Date	Red Wine Started Fermentation, 7 Day Running Total (tons)	White Wine Started Fermentation, 15 Day Running Total (tons)	Uncontrolled Fermentation Emissions (lb/day)	NoMoVo Controlled Emissions (lb/day)
8/7/2014	0.00	50.69	1.44	0.00
8/8/2014	0.00	94.81	2.69	0.00
8/9/2014	0.00	94.81	2.69	0.00
8/10/2014	0.00	94.81	2.69	0.00
8/11/2014	0.00	94.81	2.69	0.00
8/12/2014	0.00	94.81	2.69	0.00
8/13/2014	0.00	94.81	2.69	0.00
8/14/2014	0.00	94.81	2.69	0.00
8/15/2014	0.00	94.81	2.69	0.00
8/16/2014	0.00	94.81	2.69	0.00
8/17/2014	0.00	94.81	2.69	0.00
8/18/2014	0.00	94.81	2.69	0.00
8/19/2014	0.00	187.26	5.45	0.00
8/20/2014	23.79	279.27	11.70	0.00
8/21/2014	23.79	417.63	15.62	0.00
8/22/2014	23.79	475.99	17.28	0.00
8/23/2014	23.79	431.87	16.03	0.00
8/24/2014	23.79	431.87	16.03	0.00
8/25/2014	23.79	431.87	16.03	0.00
8/26/2014	80.33	466.07	25.51	0.00
8/27/2014	188.63	466.07	41.82	0.00
8/28/2014	213.39	514.63	46.92	0.00
8/29/2014	237.45	531.61	51.02	0.00
8/30/2014	237.45	536.58	51.17	0.00
8/31/2014	237.45	536.58	51.17	0.00
9/1/2014	237.45	536.58	51.17	0.00
9/2/2014	225.88	582.34	50.72	0.00
9/3/2014	166.58	593.73	41.97	0.00
9/4/2014	188.94	501.72	42.66	0.00
9/5/2014	245.82	410.53	48.65	46.17

Date	Red Wine Started Fermentation, 7 Day Running Total (tons)	White Wine Started Fermentation, 15 Day Running Total (tons)	Uncontrolled Fermentation Emissions (lb/day)	NoMoVo Controlled Emissions (lb/day)
9/6/2014	266.12	301.48	48.61	22.52
9/7/2014	266.12	301.48	48.61	14.14
9/8/2014	313.34	301.48	55.72	9.64
9/9/2014	315.59	301.48	56.06	17.74
9/10/2014	314.27	367.32	57.73	36.03
9/11/2014	316.10	493.67	61.58	25.67
9/12/2014	325.30	569.47	65.12	28.31
9/13/2014	313.95	552.49	62.93	46.43
9/14/2014	313.95	547.52	62.78	25.76
9/15/2014	343.36	632.91	69.63	32.63
9/16/2014	348.60	632.91	70.42	43.34
9/17/2014	362.30	587.15	71.19	80.84
9/18/2014	360.87	483.31	68.03	51.45
9/19/2014	396.67	513.12	74.26	24.67
9/20/2014	424.39	492.53	77.86	19.75
9/21/2014	424.39	492.53	77.86	50.01
9/22/2014	404.61	513.07	75.46	48.58
9/23/2014	396.03	534.54	74.78	83.59
9/24/2014	374.31	555.77	72.11	50.59
9/25/2014	366.88	499.98	69.41	32.09
9/26/2014	240.94	373.63	46.86	20.68
9/27/2014	329.18	249.27	56.63	36.07
9/28/2014	329.18	249.27	56.63	44.11
9/29/2014	296.12	249.27	51.65	41.93
9/30/2014	276.47	163.88	46.27	24.94
10/1/2014	235.54	163.88	40.11	41.47
10/2/2014	200.05	163.88	34.77	39.07
10/3/2014	200.05	163.88	34.77	33.38
10/4/2014	75.14	134.07	15.11	31.71
10/5/2014	75.14	107.49	14.36	0.00
10/6/2014	51.35	134.14	11.53	52.02
10/7/2014	37.91	136.79	9.58	25.21

Date	Red Wine Started Fermentation, 7 Day Running Total (tons)	White Wine Started Fermentation, 15 Day Running Total (tons)	Uncontrolled Fermentation Emissions (lb/day)	NoMoVo Controlled Emissions (lb/day)
10/8/2014	39.24	160.70	10.46	17.02
10/9/2014	59.43	181.45	14.09	19.29
10/10/2014	104.27	137.20	19.59	10.32
10/11/2014	104.27	137.20	19.59	4.05
10/12/2014	104.27	137.20	19.59	3.42
10/13/2014	104.27	137.20	19.59	7.43
10/14/2014	93.48	137.20	17.96	19.34
10/15/2014	112.99	137.20	20.90	22.15
10/16/2014	88.20	137.20	17.17	17.58
10/17/2014	43.36	137.20	10.42	12.22
10/18/2014	43.36	137.20	10.42	32.17
10/19/2014	43.36	137.20	10.42	20.85
10/20/2014	43.36	137.20	10.42	7.43
10/21/2014	43.36	110.55	9.66	2.66
10/22/2014	0.00	87.36	2.48	0.67
10/23/2014	0.00	41.98	1.19	0.00
Totals			2584.22	1377.12

Total days of fermentation season	78
Total days of fermentation season after initial operations of NoMoVo	48
Total days of NoMoVo Operation	47
Total days of NoMoVo Operation after initial operations of controls	47
Maximum Consecutive days of NoMoVo Operatation	30

2015 Fermentation Data- Combined NoMoVo and EcoPAS

Date	Red Wine Started Fermentation, 7 Day Running Total (tons)	White Wine Started Fermentation, 15 Day Running Total (tons)	Uncontrolled Fermentation Emissions (lb/day)	NoMoVo Controlled Emissions (lb/day)	EcoPAS Controlled Emissions (lb/day)
8/17/2015	68.82	0.00	10.36	0.00	0.00
8/18/2015	101.05	0.00	15.22	0.00	0.00
8/19/2015	101.05	0.00	15.22	0.00	0.00
8/20/2015	101.05	0.00	15.22	0.00	0.00
8/21/2015	169.93	46.17	26.89	0.00	0.00
8/22/2015	235.87	153.73	39.87	0.00	0.00
8/23/2015	235.87	153.73	39.87	0.00	0.00
8/24/2015	181.46	200.04	32.99	42.87	0.00
8/25/2015	157.92	383.17	34.63	14.09	0.00
8/26/2015	248.41	452.05	50.21	33.86	0.00
8/27/2015	248.41	524.64	52.27	42.16	0.00
8/28/2015	179.53	524.64	41.90	37.18	0.00
8/29/2015	160.37	524.64	39.01	16.29	1.91
8/30/2015	160.37	524.64	39.01	29.37	0.00
8/31/2015	192.70	524.64	43.88	24.41	2.60
9/1/2015	230.99	524.64	49.65	17.32	4.35
9/2/2015	233.19	617.45	52.61	18.49	6.55
9/3/2015	233.19	688.93	54.63	21.83	5.67
9/4/2015	282.01	688.93	61.98	13.58	5.51
9/5/2015	263.83	642.76	57.94	12.83	0.00
9/6/2015	263.83	535.20	54.89	34.64	2.31
9/7/2015	217.09	535.20	47.85	42.56	8.74
9/8/2015	235.35	488.89	49.29	39.16	4.51
9/9/2015	258.17	305.76	47.54	21.66	4.55
9/10/2015	319.15	265.24	55.57	4.11	3.37
9/11/2015	270.33	192.65	46.16	5.54	5.68
9/12/2015	345.29	213.75	58.05	10.37	12.09
9/13/2015	345.29	213.75	58.05	58.24	5.05
9/14/2015	345.29	213.75	58.05	72.42	2.13
9/15/2015	280.05	235.37	48.84	23.56	1.41
9/16/2015	184.89	325.05	37.05	39.12	1.65

Date	Red Wine Started Fermentation, 7 Day Running Total (tons)	White Wine Started Fermentation, 15 Day Running Total (tons)	Uncontrolled Fermentation Emissions (lb/day)	NoMoVo Controlled Emissions (lb/day)	EcoPAS Controlled Emissions (lb/day)
9/17/2015	123.91	320.04	27.73	35.35	1.13
9/18/2015	192.36	339.29	38.58	30.54	0.79
9/19/2015	135.54	351.27	30.36	25.00	0.71
9/20/2015	135.54	351.27	30.36	12.51	0.89
9/21/2015	158.82	351.27	33.87	16.86	0.92
9/22/2015	158.82	422.96	35.90	16.77	0.51
9/23/2015	145.26	504.87	36.18	16.56	1.34
9/24/2015	145.26	504.87	36.18	15.64	2.90
9/25/2015	101.38	476.51	28.77	13.92	4.89
9/26/2015	54.64	558.55	24.05	11.30	1.44
9/27/2015	54.64	537.45	23.45	10.48	2.24
9/28/2015	31.36	537.45	19.95	8.65	1.92
9/29/2015	31.36	537.45	19.95	5.41	1.60
9/30/2015	39.25	515.83	20.53	5.26	0.95
10/1/2015	39.25	426.15	17.98	4.10	0.91
10/2/2015	14.68	338.35	11.80	2.94	1.52
10/3/2015	14.68	247.62	9.23	2.04	1.55
10/4/2015	14.68	235.64	8.89	2.16	2.29
10/5/2015	14.68	235.64	8.89	2.60	3.81
10/6/2015	14.68	235.64	8.89	3.10	3.73
10/7/2015	0.00	214.54	6.08	5.27	3.61
10/8/2015	0.00	132.63	3.76	4.99	5.95
10/9/2015	0.00	132.63	3.76	5.38	7.43
10/10/2015	0.00	132.63	3.76	0.00	0.00
10/11/2015	0.00	50.59	1.43	0.00	0.00
10/12/2015	0.00	50.59	1.43	10.04	7.45
10/13/2015	0.00	50.59	1.43	2.61	0.62
10/14/2015	0.00	50.59	1.43	0.65	0.08
10/15/2015	0.00	50.59	1.43	2.57	0.00
10/16/2015	0.00	50.59	1.43	0.00	0.00
10/17/2015	0.00	50.59	1.43	0.00	0.00
10/18/2015	0.00	50.59	1.43	0.00	0.00
10/19/2015	0.00	50.59	1.43	0.00	0.00
10/20/2015	0.00	50.59	1.43	0.00	0.00

Date	Red Wine Started Fermentation, 7 Day Running Total (tons)	White Wine Started Fermentation, 15 Day Running Total (tons)	Uncontrolled Fermentation Emissions (lb/day)	NoMoVo Controlled Emissions (lb/day)	EcoPAS Controlled Emissions (lb/day)
10/21/2015	0.00	50.59	1.43	0.00	0.00
Totals			1839.30	948.35	139.21

Total days of fermentation season	66
Total days of fermentation season after initial operations of NoMoVo	53
Total days of fermentation season after initial operations of EcoPAS	47
Total days of NoMoVo Operation	51
Total days of NoMoVo Operation after initial operations of controls	51
Maximum Consecutive days of NoMoVo Operatation	47
Total days of EcoPAS Operation	43
Total days of EcoPAS Operation after initial operations of controls	43
Maximum Consecutive days of EcoPAS Operatation	34

2016 Fermentation Data- Combined NoMoVo and EcoPAS

Date	Red Wine Started Fermentation, 7 Day Running Total (tons)	White Wine Started Fermentation, 15 Day Running Total (tons)	Uncontrolled Fermentation Emissions (lb/day)	NoMoVo Controlled Emissions (lb/day)	EcoPAS Controlled Emissions (lb/day)
8/15/2016	0.00	113.95	3.23	0.00	0.00
8/16/2016	0.00	113.95	3.23	0.00	0.00
8/17/2016	0.00	161.74	4.58	0.00	0.00
8/18/2016	0.00	304.00	8.61	0.00	0.00
8/19/2016	0.00	350.97	9.94	0.00	0.00
8/20/2016	41.94	483.95	20.03	0.00	0.00
8/21/2016	41.94	483.95	20.03	0.00	0.00
8/22/2016	50.71	669.36	26.60	0.00	0.00
8/23/2016	50.71	855.29	31.87	0.00	0.00
8/24/2016	50.71	1020.72	36.56	0.00	0.09
8/25/2016	50.71	1184.09	41.18	0.00	0.16
8/26/2016	50.71	1380.74	46.76	0.00	1.01
8/27/2016	8.77	1380.74	40.44	0.00	0.00
8/28/2016	8.77	1380.74	40.44	0.00	0.00
8/29/2016	0.00	1380.74	39.12	0.00	8.36
8/30/2016	0.00	1266.79	35.89	0.00	5.69
8/31/2016	0.00	1266.79	35.89	0.00	1.87
9/1/2016	0.00	1241.72	35.18	0.00	2.58
9/2/2016	67.30	1119.83	41.86	0.00	3.92
9/3/2016	67.30	1189.71	43.84	0.00	4.02
9/4/2016	67.30	1056.73	40.07	0.00	0.00
9/5/2016	85.45	1056.73	42.81	0.00	7.49
9/6/2016	132.11	904.50	45.52	0.00	4.59
9/7/2016	178.78	762.57	48.53	0.00	4.82
9/8/2016	225.27	667.29	52.83	0.00	5.50
9/9/2016	157.97	503.92	38.06	0.00	5.28
9/10/2016	191.45	307.27	37.53	0.00	4.75
9/11/2016	261.45	307.27	48.07	0.00	0.00
9/12/2016	314.10	307.27	56.00	0.00	11.71
9/13/2016	329.84	343.25	59.39	4.29	5.86
9/14/2016	334.40	365.35	60.70	6.11	10.02

Date	Red Wine Started Fermentation, 7 Day Running Total (tons)	White Wine Started Fermentation, 15 Day Running Total (tons)	Uncontrolled Fermentation Emissions (lb/day)	NoMoVo Controlled Emissions (lb/day)	EcoPAS Controlled Emisions (lb/day)
9/15/2016	334.28	365.35	60.68	17.01	10.90
9/16/2016	429.39	342.63	74.36	52.76	4.74
9/17/2016	446.44	345.54	77.01	29.30	4.16
9/18/2016	376.44	228.69	63.16	7.84	7.68
9/19/2016	359.28	247.92	61.12	7.84	7.61
9/20/2016	296.88	247.92	51.73	14.33	4.67
9/21/2016	245.65	382.57	47.83	56.95	4.84
9/22/2016	266.75	543.81	55.57	58.08	1.19
9/23/2016	240.50	508.40	50.62	38.80	0.52
9/24/2016	233.48	508.40	49.56	21.60	0.13
9/25/2016	233.48	508.40	49.56	0.00	0.00
9/26/2016	275.72	508.40	55.92	12.31	0.03
9/27/2016	370.59	532.23	70.88	4.55	0.30
9/28/2016	437.89	496.25	79.99	5.86	4.17
9/29/2016	384.45	474.15	71.32	38.43	8.25
9/30/2016	405.48	474.15	74.49	47.01	8.14
10/1/2016	450.04	585.26	84.35	96.30	7.84
10/2/2016	450.04	561.98	83.69	40.31	2.73
10/3/2016	443.31	561.98	82.67	40.34	2.73
10/4/2016	348.44	542.75	74.78	35.02	7.39
10/5/2016	281.14	542.75	70.04	22.89	7.37
10/6/2016	267.11	374.92	69.83	23.09	6.15
10/7/2016	271.01	202.28	68.70	32.98	5.40
10/8/2016	182.94	167.54	54.45	29.73	4.36
10/9/2016	182.94	167.54	54.45	51.09	7.56
10/10/2016	141.71	167.54	48.25	51.09	7.55
10/11/2016	234.60	167.54	55.30	63.25	6.60
10/12/2016	269.83	143.71	54.53	46.44	5.68
10/13/2016	351.81	143.71	63.98	32.23	4.07
10/14/2016	416.79	143.71	70.59	22.24	2.10
10/15/2016	487.92	143.71	81.30	24.88	2.97
10/16/2016	487.92	32.60	78.15	27.05	10.02
10/17/2016	534.68	32.60	85.20	27.11	9.95
10/18/2016	477.28	32.60	76.55	53.54	5.90

3 Year Total days of Fermentation	223			
3 Year Total days of fermentation season exluding first 2 weeks and last week	160			
3 Year Total days of fermentation season after initial operation of NoMoVo	151			
3 Year Total fermentation emissions	8,197			
Total days of NoMoVo Operation	147		66%	
Total days of NoMoVo Operation after initial operations of NoMoVo	147		97%	
Total NoMoVo Ethanol Captured and Controlled	3,849		26.2	lb/day
2 Year Total days of Fermentation	145			
2 Year Total days of fermentation season after initial operation of EcoPAS	117			
2 Year Total fermentation emissions	5,612			
Total days of EcoPAS Operation	108		74%	
Total days of EcoPAS Operation after initial operations of EcoPAS	108		92%	
Total EcoPAS Ethanol Captured and Controlled	501		4.6	lb/day