New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST - March 15, 2021

Run 7

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX.PPM		RS_931AIC1111C.CCO		RS_931AIC1111B.O2		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		921FIC1173_MV		921-2015.DWATT	
15-Mar-21 12:45:00	10.59	15-Mar-21 12:45:00	13.56	15-Mar-21 12:45:00	15.26	15-Mar-21 12:45:00	0.05	15-Mar-21 12:45:00	250.98	15-Mar-21 12:45:00	1.90	15-Mar-21 12:45:00	24.29	15-Mar-21 12:45:00	23.68
15-Mar-21 12:46:00	10.57	15-Mar-21 12:46:00	13.56	15-Mar-21 12:46:00	15.26	15-Mar-21 12:46:00	0.05	15-Mar-21 12:46:00	250.98	15-Mar-21 12:46:00	1.89	15-Mar-21 12:46:00	24.31	15-Mar-21 12:46:00	23.62
15-Mar-21 12:47:00	10.59	15-Mar-21 12:47:00	13.56	15-Mar-21 12:47:00	15.26	15-Mar-21 12:47:00	0.05	15-Mar-21 12:47:00	250.98	15-Mar-21 12:47:00	1.88	15-Mar-21 12:47:00	24.33	15-Mar-21 12:47:00	23.63
15-Mar-21 12:48:00	10.63	15-Mar-21 12:48:00	13.56	15-Mar-21 12:48:00	15.26	15-Mar-21 12:48:00	0.05	15-Mar-21 12:48:00	250.98	15-Mar-21 12:48:00	1.91	15-Mar-21 12:48:00	24.34	15-Mar-21 12:48:00	23.63
15-Mar-21 12:49:00	10.72	15-Mar-21 12:49:00	13.56	15-Mar-21 12:49:00	15.26	15-Mar-21 12:49:00	0.05	15-Mar-21 12:49:00	250.98	15-Mar-21 12:49:00	1.90	15-Mar-21 12:49:00	24.38	15-Mar-21 12:49:00	23.66
15-Mar-21 12:50:00	10.78	15-Mar-21 12:50:00	13.56	15-Mar-21 12:50:00	15.26	15-Mar-21 12:50:00	0.05	15-Mar-21 12:50:00	250.98	15-Mar-21 12:50:00	1.91	15-Mar-21 12:50:00	24.37	15-Mar-21 12:50:00	23.68
15-Mar-21 12:51:00	10.65	15-Mar-21 12:51:00	13.56	15-Mar-21 12:51:00	15.26	15-Mar-21 12:51:00	0.05	15-Mar-21 12:51:00	250.98	15-Mar-21 12:51:00	1.90	15-Mar-21 12:51:00	24.40	15-Mar-21 12:51:00	23.57
15-Mar-21 12:52:00	10.52	15-Mar-21 12:52:00	13.56	15-Mar-21 12:52:00	15.26	15-Mar-21 12:52:00	0.05	15-Mar-21 12:52:00	250.98	15-Mar-21 12:52:00	1.92	15-Mar-21 12:52:00	24.29	15-Mar-21 12:52:00	23.64
15-Mar-21 12:53:00	10.59	15-Mar-21 12:53:00	13.56	15-Mar-21 12:53:00	15.26	15-Mar-21 12:53:00	0.05	15-Mar-21 12:53:00	250.98	15-Mar-21 12:53:00	1.90	15-Mar-21 12:53:00	24.30	15-Mar-21 12:53:00	23.71
15-Mar-21 12:54:00	10.68	15-Mar-21 12:54:00	13.56	15-Mar-21 12:54:00	15.26	15-Mar-21 12:54:00	0.05	15-Mar-21 12:54:00	250.98	15-Mar-21 12:54:00	1.89	15-Mar-21 12:54:00	24.35	15-Mar-21 12:54:00	23.68
15-Mar-21 12:55:00	10.57	15-Mar-21 12:55:00	13.56	15-Mar-21 12:55:00	15.26	15-Mar-21 12:55:00	0.05	15-Mar-21 12:55:00	250.98	15-Mar-21 12:55:00	1.90	15-Mar-21 12:55:00	24.45	15-Mar-21 12:55:00	23.63
15-Mar-21 12:56:00	10.49	15-Mar-21 12:56:00	13.56	15-Mar-21 12:56:00	15.26	15-Mar-21 12:56:00	0.05	15-Mar-21 12:56:00	250.98	15-Mar-21 12:56:00	1.90	15-Mar-21 12:56:00	24.35	15-Mar-21 12:56:00	23.70
15-Mar-21 12:57:00	10.58	15-Mar-21 12:57:00	13.56	15-Mar-21 12:57:00	15.26	15-Mar-21 12:57:00	0.05	15-Mar-21 12:57:00	250.98	15-Mar-21 12:57:00	1.92	15-Mar-21 12:57:00	24.42	15-Mar-21 12:57:00	23.73
15-Mar-21 12:58:00	10.69	15-Mar-21 12:58:00	13.56	15-Mar-21 12:58:00	15.26	15-Mar-21 12:58:00	0.05	15-Mar-21 12:58:00	250.98	15-Mar-21 12:58:00	1.91	15-Mar-21 12:58:00	24.55	15-Mar-21 12:58:00	23.69
15-Mar-21 12:59:00	10.79	15-Mar-21 12:59:00	13.56	15-Mar-21 12:59:00	15.26	15-Mar-21 12:59:00	0.05	15-Mar-21 12:59:00	250.98	15-Mar-21 12:59:00	1.89	15-Mar-21 12:59:00	24.62	15-Mar-21 12:59:00	23.73
15-Mar-21 13:00:00	10.85	15-Mar-21 13:00:00	13.56	15-Mar-21 13:00:00	15.26	15-Mar-21 13:00:00	0.05	15-Mar-21 13:00:00	250.98	15-Mar-21 13:00:00	1.90	15-Mar-21 13:00:00	24.68	15-Mar-21 13:00:00	23.66
15-Mar-21 13:01:00	10.68	15-Mar-21 13:01:00	13.56	15-Mar-21 13:01:00	15.26	15-Mar-21 13:01:00	0.05	15-Mar-21 13:01:00	250.98	15-Mar-21 13:01:00	1.90	15-Mar-21 13:01:00	24.64	15-Mar-21 13:01:00	23.63
15-Mar-21 13:02:00	10.51	15-Mar-21 13:02:00	13.56	15-Mar-21 13:02:00	15.26	15-Mar-21 13:02:00	0.05	15-Mar-21 13:02:00	250.98	15-Mar-21 13:02:00	1.91	15-Mar-21 13:02:00	24.59	15-Mar-21 13:02:00	23.58
15-Mar-21 13:03:00	10.44	15-Mar-21 13:03:00	13.56	15-Mar-21 13:03:00	15.26	15-Mar-21 13:03:00	0.05	15-Mar-21 13:03:00	250.98	15-Mar-21 13:03:00	1.89	15-Mar-21 13:03:00	24.54	15-Mar-21 13:03:00	23.58
15-Mar-21 13:04:00	10.42	15-Mar-21 13:04:00	13.56	15-Mar-21 13:04:00	15.26	15-Mar-21 13:04:00	0.05	15-Mar-21 13:04:00	250.98	15-Mar-21 13:04:00	1.91	15-Mar-21 13:04:00	24.58	15-Mar-21 13:04:00	23.61
15-Mar-21 13:05:00	10.55	15-Mar-21 13:05:00	13.56	15-Mar-21 13:05:00	15.26	15-Mar-21 13:05:00	0.05	15-Mar-21 13:05:00	250.98	15-Mar-21 13:05:00	1.90	15-Mar-21 13:05:00	24.59	15-Mar-21 13:05:00	23.50
15-Mar-21 13:06:00	10.68	15-Mar-21 13:06:00	13.56	15-Mar-21 13:06:00	15.26	15-Mar-21 13:06:00	0.05	15-Mar-21 13:06:00	250.98	15-Mar-21 13:06:00	1.91	15-Mar-21 13:06:00	24.53	15-Mar-21 13:06:00	23.58
15-Mar-21 13:07:00	10.77	15-Mar-21 13:07:00	13.56	15-Mar-21 13:07:00	15.26	15-Mar-21 13:07:00	0.05	15-Mar-21 13:07:00	250.98	15-Mar-21 13:07:00	1.91	15-Mar-21 13:07:00	24.60	15-Mar-21 13:07:00	23.61
15-Mar-21 13:08:00	10.82	15-Mar-21 13:08:00	13.56	15-Mar-21 13:08:00	15.26	15-Mar-21 13:08:00	0.05	15-Mar-21 13:08:00	250.98	15-Mar-21 13:08:00	1.90	15-Mar-21 13:08:00	24.51	15-Mar-21 13:08:00	23.62
15-Mar-21 13:09:00	10.67	15-Mar-21 13:09:00	13.56	15-Mar-21 13:09:00	15.26	15-Mar-21 13:09:00	0.05	15-Mar-21 13:09:00	250.98	15-Mar-21 13:09:00	1.92	15-Mar-21 13:09:00	24.57	15-Mar-21 13:09:00	23.62
15-Mar-21 13:10:00	10.51	15-Mar-21 13:10:00	13.56	15-Mar-21 13:10:00	15.26	15-Mar-21 13:10:00	0.05	15-Mar-21 13:10:00	250.98	15-Mar-21 13:10:00	1.90	15-Mar-21 13:10:00	24.57	15-Mar-21 13:10:00	23.73
15-Mar-21 13:11:00	10.48	15-Mar-21 13:11:00	13.56	15-Mar-21 13:11:00	15.26	15-Mar-21 13:11:00	0.05	15-Mar-21 13:11:00	250.98	15-Mar-21 13:11:00	1.90	15-Mar-21 13:11:00	24.51	15-Mar-21 13:11:00	23.61
15-Mar-21 13:12:00	10.44	15-Mar-21 13:12:00	13.56	15-Mar-21 13:12:00	15.26	15-Mar-21 13:12:00	0.05	15-Mar-21 13:12:00	250.98	15-Mar-21 13:12:00	1.92	15-Mar-21 13:12:00	24.53	15-Mar-21 13:12:00	23.66
15-Mar-21 13:13:00	10.49	15-Mar-21 13:13:00	13.56	15-Mar-21 13:13:00	15.26	15-Mar-21 13:13:00	0.05	15-Mar-21 13:13:00	250.98	15-Mar-21 13:13:00	1.91	15-Mar-21 13:13:00	24.56	15-Mar-21 13:13:00	23.61
15-Mar-21 13:14:00	10.53	15-Mar-21 13:14:00	13.56	15-Mar-21 13:14:00	15.26	15-Mar-21 13:14:00	0.05	15-Mar-21 13:14:00	250.98	15-Mar-21 13:14:00	1.89	15-Mar-21 13:14:00	24.52	15-Mar-21 13:14:00	23.59
15-Mar-21 13:15:00	10.39	15-Mar-21 13:15:00	13.56	15-Mar-21 13:15:00	15.26	15-Mar-21 13:15:00	0.05	15-Mar-21 13:15:00	250.98	15-Mar-21 13:15:00	1.91	15-Mar-21 13:15:00	24.50	15-Mar-21 13:15:00	23.58
15-Mar-21 13:16:00	10.28	15-Mar-21 13:16:00	13.56	15-Mar-21 13:16:00	15.26	15-Mar-21 13:16:00	0.05	15-Mar-21 13:16:00	250.98	15-Mar-21 13:16:00	1.91	15-Mar-21 13:16:00	24.54	15-Mar-21 13:16:00	23.55
15-Mar-21 13:17:00	10.35	15-Mar-21 13:17:00	13.56	15-Mar-21 13:17:00	15.26	15-Mar-21 13:17:00	0.05	15-Mar-21 13:17:00	250.98	15-Mar-21 13:17:00	1.90	15-Mar-21 13:17:00	24.54	15-Mar-21 13:17:00	23.68
Average Stack NOx, ppm (15% O2)	10.58	Average Stack CO, ppm (15% O2)	13.56	Average Stack O2 (%)	15.26	Average Duct Burner Gas Flow (MSCFH)	0.05	Average Turbine Gas Flow (MSCFH)	250.98	Ave. Steam Injection Rate (lb/s)	1.90	Ave. Ammonia Injection (lb/hr)	24.48	Ave. Turbine Load (MWh)	23.63

251.03 × 1000 / 60 = 4183.8 dscfm

Average Runs 7-8-9

4192.7 dscfm

Average 7-8-9
24.44

Average 7-8-9
23.58

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST - March 15, 2021

Rate 8

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RB_NOX PPM		RB_631AIC1111C.CCO		RB_631AIC1111B.O2		DBGASFLOW_A		GTGASFLOW		921-2015.WQ		931FIC1173_MV		921-2015.DWATT	
15-Mar-21 13:18:00	10.44	15-Mar-21 13:18:00	13.56	15-Mar-21 13:18:00	15.26	15-Mar-21 13:18:00	0.05	15-Mar-21 13:18:00	250.96	15-Mar-21 13:18:00	1.91	15-Mar-21 13:18:00	24.47	15-Mar-21 13:18:00	23.58
15-Mar-21 13:19:00	10.44	15-Mar-21 13:19:00	13.56	15-Mar-21 13:19:00	15.26	15-Mar-21 13:19:00	0.05	15-Mar-21 13:19:00	250.96	15-Mar-21 13:19:00	1.91	15-Mar-21 13:19:00	24.54	15-Mar-21 13:19:00	23.60
15-Mar-21 13:20:00	10.43	15-Mar-21 13:20:00	13.56	15-Mar-21 13:20:00	15.26	15-Mar-21 13:20:00	0.05	15-Mar-21 13:20:00	250.96	15-Mar-21 13:20:00	1.90	15-Mar-21 13:20:00	24.52	15-Mar-21 13:20:00	23.58
15-Mar-21 13:21:00	10.41	15-Mar-21 13:21:00	13.56	15-Mar-21 13:21:00	15.26	15-Mar-21 13:21:00	0.05	15-Mar-21 13:21:00	250.96	15-Mar-21 13:21:00	1.91	15-Mar-21 13:21:00	24.47	15-Mar-21 13:21:00	23.61
15-Mar-21 13:22:00	10.41	15-Mar-21 13:22:00	13.56	15-Mar-21 13:22:00	15.26	15-Mar-21 13:22:00	0.05	15-Mar-21 13:22:00	250.96	15-Mar-21 13:22:00	1.90	15-Mar-21 13:22:00	24.43	15-Mar-21 13:22:00	23.61
15-Mar-21 13:23:00	10.48	15-Mar-21 13:23:00	13.56	15-Mar-21 13:23:00	15.26	15-Mar-21 13:23:00	0.05	15-Mar-21 13:23:00	250.96	15-Mar-21 13:23:00	1.91	15-Mar-21 13:23:00	24.51	15-Mar-21 13:23:00	23.58
15-Mar-21 13:24:00	10.53	15-Mar-21 13:24:00	13.56	15-Mar-21 13:24:00	15.26	15-Mar-21 13:24:00	0.05	15-Mar-21 13:24:00	250.96	15-Mar-21 13:24:00	1.91	15-Mar-21 13:24:00	24.49	15-Mar-21 13:24:00	23.47
15-Mar-21 13:25:00	10.40	15-Mar-21 13:25:00	13.56	15-Mar-21 13:25:00	15.26	15-Mar-21 13:25:00	0.05	15-Mar-21 13:25:00	250.96	15-Mar-21 13:25:00	1.90	15-Mar-21 13:25:00	24.42	15-Mar-21 13:25:00	23.56
15-Mar-21 13:26:00	10.29	15-Mar-21 13:26:00	13.56	15-Mar-21 13:26:00	15.26	15-Mar-21 13:26:00	0.05	15-Mar-21 13:26:00	250.96	15-Mar-21 13:26:00	1.91	15-Mar-21 13:26:00	24.47	15-Mar-21 13:26:00	23.56
15-Mar-21 13:27:00	10.38	15-Mar-21 13:27:00	13.56	15-Mar-21 13:27:00	15.26	15-Mar-21 13:27:00	0.05	15-Mar-21 13:27:00	250.96	15-Mar-21 13:27:00	1.91	15-Mar-21 13:27:00	24.42	15-Mar-21 13:27:00	23.55
15-Mar-21 13:28:00	10.48	15-Mar-21 13:28:00	13.56	15-Mar-21 13:28:00	15.26	15-Mar-21 13:28:00	0.05	15-Mar-21 13:28:00	250.96	15-Mar-21 13:28:00	1.90	15-Mar-21 13:28:00	24.45	15-Mar-21 13:28:00	23.53
15-Mar-21 13:29:00	10.37	15-Mar-21 13:29:00	13.56	15-Mar-21 13:29:00	15.26	15-Mar-21 13:29:00	0.05	15-Mar-21 13:29:00	250.96	15-Mar-21 13:29:00	1.91	15-Mar-21 13:29:00	24.42	15-Mar-21 13:29:00	23.53
15-Mar-21 13:30:00	10.29	15-Mar-21 13:30:00	13.56	15-Mar-21 13:30:00	15.26	15-Mar-21 13:30:00	0.05	15-Mar-21 13:30:00	250.96	15-Mar-21 13:30:00	1.90	15-Mar-21 13:30:00	24.44	15-Mar-21 13:30:00	23.50
15-Mar-21 13:31:00	10.40	15-Mar-21 13:31:00	13.56	15-Mar-21 13:31:00	15.26	15-Mar-21 13:31:00	0.05	15-Mar-21 13:31:00	250.96	15-Mar-21 13:31:00	1.91	15-Mar-21 13:31:00	24.48	15-Mar-21 13:31:00	23.61
15-Mar-21 13:32:00	10.51	15-Mar-21 13:32:00	13.56	15-Mar-21 13:32:00	15.26	15-Mar-21 13:32:00	0.05	15-Mar-21 13:32:00	250.96	15-Mar-21 13:32:00	1.91	15-Mar-21 13:32:00	24.61	15-Mar-21 13:32:00	23.45
15-Mar-21 13:33:00	10.49	15-Mar-21 13:33:00	13.56	15-Mar-21 13:33:00	15.26	15-Mar-21 13:33:00	0.05	15-Mar-21 13:33:00	250.96	15-Mar-21 13:33:00	1.90	15-Mar-21 13:33:00	24.56	15-Mar-21 13:33:00	23.47
15-Mar-21 13:34:00	10.45	15-Mar-21 13:34:00	13.56	15-Mar-21 13:34:00	15.26	15-Mar-21 13:34:00	0.05	15-Mar-21 13:34:00	250.96	15-Mar-21 13:34:00	1.90	15-Mar-21 13:34:00	24.39	15-Mar-21 13:34:00	23.48
15-Mar-21 13:35:00	10.39	15-Mar-21 13:35:00	13.56	15-Mar-21 13:35:00	15.26	15-Mar-21 13:35:00	0.05	15-Mar-21 13:35:00	250.96	15-Mar-21 13:35:00	1.91	15-Mar-21 13:35:00	24.42	15-Mar-21 13:35:00	23.45
15-Mar-21 13:36:00	10.34	15-Mar-21 13:36:00	13.56	15-Mar-21 13:36:00	15.26	15-Mar-21 13:36:00	0.05	15-Mar-21 13:36:00	250.62	15-Mar-21 13:36:00	1.90	15-Mar-21 13:36:00	24.42	15-Mar-21 13:36:00	23.53
15-Mar-21 13:37:00	10.38	15-Mar-21 13:37:00	13.56	15-Mar-21 13:37:00	15.26	15-Mar-21 13:37:00	0.05	15-Mar-21 13:37:00	248.33	15-Mar-21 13:37:00	1.91	15-Mar-21 13:37:00	24.40	15-Mar-21 13:37:00	23.51
15-Mar-21 13:38:00	10.41	15-Mar-21 13:38:00	13.56	15-Mar-21 13:38:00	15.26	15-Mar-21 13:38:00	0.05	15-Mar-21 13:38:00	248.50	15-Mar-21 13:38:00	1.91	15-Mar-21 13:38:00	24.33	15-Mar-21 13:38:00	23.43
15-Mar-21 13:39:00	10.38	15-Mar-21 13:39:00	13.56	15-Mar-21 13:39:00	15.26	15-Mar-21 13:39:00	0.05	15-Mar-21 13:39:00	248.51	15-Mar-21 13:39:00	1.90	15-Mar-21 13:39:00	24.26	15-Mar-21 13:39:00	23.46
15-Mar-21 13:40:00	10.33	15-Mar-21 13:40:00	13.56	15-Mar-21 13:40:00	15.26	15-Mar-21 13:40:00	0.05	15-Mar-21 13:40:00	250.70	15-Mar-21 13:40:00	1.91	15-Mar-21 13:40:00	24.30	15-Mar-21 13:40:00	23.56
15-Mar-21 13:41:00	10.29	15-Mar-21 13:41:00	13.56	15-Mar-21 13:41:00	15.26	15-Mar-21 13:41:00	0.05	15-Mar-21 13:41:00	250.96	15-Mar-21 13:41:00	1.91	15-Mar-21 13:41:00	24.26	15-Mar-21 13:41:00	23.53
15-Mar-21 13:42:00	10.27	15-Mar-21 13:42:00	13.56	15-Mar-21 13:42:00	15.26	15-Mar-21 13:42:00	0.05	15-Mar-21 13:42:00	250.96	15-Mar-21 13:42:00	1.91	15-Mar-21 13:42:00	24.44	15-Mar-21 13:42:00	23.55
15-Mar-21 13:43:00	10.31	15-Mar-21 13:43:00	13.56	15-Mar-21 13:43:00	15.26	15-Mar-21 13:43:00	0.05	15-Mar-21 13:43:00	250.68	15-Mar-21 13:43:00	1.90	15-Mar-21 13:43:00	24.26	15-Mar-21 13:43:00	23.48
15-Mar-21 13:44:00	10.34	15-Mar-21 13:44:00	13.56	15-Mar-21 13:44:00	15.26	15-Mar-21 13:44:00	0.05	15-Mar-21 13:44:00	250.96	15-Mar-21 13:44:00	1.90	15-Mar-21 13:44:00	24.30	15-Mar-21 13:44:00	23.43
15-Mar-21 13:45:00	10.28	15-Mar-21 13:45:00	13.56	15-Mar-21 13:45:00	15.26	15-Mar-21 13:45:00	0.05	15-Mar-21 13:45:00	250.96	15-Mar-21 13:45:00	1.91	15-Mar-21 13:45:00	24.25	15-Mar-21 13:45:00	23.55
15-Mar-21 13:46:00	10.22	15-Mar-21 13:46:00	13.56	15-Mar-21 13:46:00	15.26	15-Mar-21 13:46:00	0.05	15-Mar-21 13:46:00	250.96	15-Mar-21 13:46:00	1.90	15-Mar-21 13:46:00	24.32	15-Mar-21 13:46:00	23.57
15-Mar-21 13:47:00	10.28	15-Mar-21 13:47:00	13.56	15-Mar-21 13:47:00	15.26	15-Mar-21 13:47:00	0.05	15-Mar-21 13:47:00	250.96	15-Mar-21 13:47:00	1.91	15-Mar-21 13:47:00	24.26	15-Mar-21 13:47:00	23.56
15-Mar-21 13:48:00	10.37	15-Mar-21 13:48:00	13.56	15-Mar-21 13:48:00	15.26	15-Mar-21 13:48:00	0.05	15-Mar-21 13:48:00	250.96	15-Mar-21 13:48:00	1.90	15-Mar-21 13:48:00	24.32	15-Mar-21 13:48:00	23.65
15-Mar-21 13:49:00	10.50	15-Mar-21 13:49:00	13.56	15-Mar-21 13:49:00	15.26	15-Mar-21 13:49:00	0.05	15-Mar-21 13:49:00	250.96	15-Mar-21 13:49:00	1.91	15-Mar-21 13:49:00	24.33	15-Mar-21 13:49:00	23.61
15-Mar-21 13:50:00	10.62	15-Mar-21 13:50:00	13.56	15-Mar-21 13:50:00	15.26	15-Mar-21 13:50:00	0.05	15-Mar-21 13:50:00	250.96	15-Mar-21 13:50:00	1.91	15-Mar-21 13:50:00	24.38	15-Mar-21 13:50:00	23.55
Average Stack NOx, ppm (15% O2)	10.39	Average Stack CO, ppm (15% O2)	13.56	Average Stack O2 (%)	15.26	Average Duct Burner Gas Flow (MSCFH)	0.05	Average Turbine Gas Flow (MSCFH)	250.67	Ave. Steam Injection Rate (lb/s)	1.91	Ave. Ammonia Injection (lb/hr)	24.40	Ave. Turbine Load (MWh)	23.54

250.72 x 1000 / 60 = 4178.7 dscfm

New-Indy Oxnard, LLC
ROSEMOUNT CEMS SOURCE TEST - March 15, 2021

Run 9

Stack NOx		Stack CO		Stack O2		Duct Burner Gas Flow		Turbine Gas Flow		Steam Injection		Ammonia Injection		Turbine Load	
RS_NOX PPM		RS_831AIC1111C.CCO		RS_831AIC1111B.O2		09GASFLOW_A		GTGASFLOW		921-2015.WQ		93*FIC1173_MV		921-2015.DWATT	
15-Mar-21 13:51:00	10.69	15-Mar-21 13:51:00	13.58	15-Mar-21 13:51:00	15.26	15-Mar-21 13:51:00	0.05	15-Mar-21 13:51:00	250.98	15-Mar-21 13:51:00	1.90	15-Mar-21 13:51:00	24.49	15-Mar-21 13:51:00	23.39
15-Mar-21 13:52:00	10.73	15-Mar-21 13:52:00	13.56	15-Mar-21 13:52:00	15.26	15-Mar-21 13:52:00	0.05	15-Mar-21 13:52:00	250.98	15-Mar-21 13:52:00	1.90	15-Mar-21 13:52:00	24.32	15-Mar-21 13:52:00	23.48
15-Mar-21 13:53:00	10.63	15-Mar-21 13:53:00	13.56	15-Mar-21 13:53:00	15.26	15-Mar-21 13:53:00	0.05	15-Mar-21 13:53:00	250.98	15-Mar-21 13:53:00	1.91	15-Mar-21 13:53:00	24.48	15-Mar-21 13:53:00	23.55
15-Mar-21 13:54:00	10.56	15-Mar-21 13:54:00	13.56	15-Mar-21 13:54:00	15.26	15-Mar-21 13:54:00	0.05	15-Mar-21 13:54:00	250.82	15-Mar-21 13:54:00	1.91	15-Mar-21 13:54:00	24.48	15-Mar-21 13:54:00	23.58
15-Mar-21 13:55:00	10.68	15-Mar-21 13:55:00	13.58	15-Mar-21 13:55:00	15.26	15-Mar-21 13:55:00	0.05	15-Mar-21 13:55:00	248.33	15-Mar-21 13:55:00	1.90	15-Mar-21 13:55:00	24.45	15-Mar-21 13:55:00	23.56
15-Mar-21 13:56:00	10.78	15-Mar-21 13:56:00	13.56	15-Mar-21 13:56:00	15.26	15-Mar-21 13:56:00	0.05	15-Mar-21 13:56:00	246.50	15-Mar-21 13:56:00	1.91	15-Mar-21 13:56:00	24.52	15-Mar-21 13:56:00	23.68
15-Mar-21 13:57:00	10.70	15-Mar-21 13:57:00	13.56	15-Mar-21 13:57:00	15.26	15-Mar-21 13:57:00	0.05	15-Mar-21 13:57:00	248.51	15-Mar-21 13:57:00	1.80	15-Mar-21 13:57:00	24.62	15-Mar-21 13:57:00	23.59
15-Mar-21 13:58:00	10.61	15-Mar-21 13:58:00	13.56	15-Mar-21 13:58:00	15.26	15-Mar-21 13:58:00	0.05	15-Mar-21 13:58:00	250.70	15-Mar-21 13:58:00	1.91	15-Mar-21 13:58:00	24.64	15-Mar-21 13:58:00	23.59
15-Mar-21 13:59:00	10.67	15-Mar-21 13:59:00	13.56	15-Mar-21 13:59:00	15.25	15-Mar-21 13:59:00	0.05	15-Mar-21 13:59:00	250.98	15-Mar-21 13:59:00	1.81	15-Mar-21 13:59:00	24.49	15-Mar-21 13:59:00	23.66
15-Mar-21 14:00:00	10.73	15-Mar-21 14:00:00	13.56	15-Mar-21 14:00:00	15.26	15-Mar-21 14:00:00	0.05	15-Mar-21 14:00:00	250.98	15-Mar-21 14:00:00	1.80	15-Mar-21 14:00:00	24.60	15-Mar-21 14:00:00	23.62
15-Mar-21 14:01:00	10.65	15-Mar-21 14:01:00	13.56	15-Mar-21 14:01:00	15.26	15-Mar-21 14:01:00	0.05	15-Mar-21 14:01:00	250.98	15-Mar-21 14:01:00	1.91	15-Mar-21 14:01:00	24.60	15-Mar-21 14:01:00	23.41
15-Mar-21 14:02:00	10.56	15-Mar-21 14:02:00	13.56	15-Mar-21 14:02:00	15.26	15-Mar-21 14:02:00	0.05	15-Mar-21 14:02:00	250.62	15-Mar-21 14:02:00	1.91	15-Mar-21 14:02:00	24.43	15-Mar-21 14:02:00	23.48
15-Mar-21 14:03:00	10.49	15-Mar-21 14:03:00	13.76	15-Mar-21 14:03:00	15.25	15-Mar-21 14:03:00	0.05	15-Mar-21 14:03:00	248.33	15-Mar-21 14:03:00	1.91	15-Mar-21 14:03:00	24.32	15-Mar-21 14:03:00	23.48
15-Mar-21 14:04:00	10.44	15-Mar-21 14:04:00	14.55	15-Mar-21 14:04:00	15.23	15-Mar-21 14:04:00	0.05	15-Mar-21 14:04:00	246.14	15-Mar-21 14:04:00	1.90	15-Mar-21 14:04:00	24.28	15-Mar-21 14:04:00	23.44
15-Mar-21 14:05:00	10.44	15-Mar-21 14:05:00	15.37	15-Mar-21 14:05:00	15.20	15-Mar-21 14:05:00	0.05	15-Mar-21 14:05:00	245.86	15-Mar-21 14:05:00	1.80	15-Mar-21 14:05:00	24.28	15-Mar-21 14:05:00	23.45
15-Mar-21 14:06:00	10.46	15-Mar-21 14:06:00	18.18	15-Mar-21 14:06:00	15.17	15-Mar-21 14:06:00	0.31	15-Mar-21 14:06:00	248.22	15-Mar-21 14:06:00	1.91	15-Mar-21 14:06:00	24.30	15-Mar-21 14:06:00	23.45
15-Mar-21 14:07:00	10.48	15-Mar-21 14:07:00	17.09	15-Mar-21 14:07:00	15.14	15-Mar-21 14:07:00	2.00	15-Mar-21 14:07:00	248.51	15-Mar-21 14:07:00	1.91	15-Mar-21 14:07:00	24.36	15-Mar-21 14:07:00	23.45
15-Mar-21 14:08:00	10.48	15-Mar-21 14:08:00	21.00	15-Mar-21 14:08:00	15.05	15-Mar-21 14:08:00	3.81	15-Mar-21 14:08:00	250.70	15-Mar-21 14:08:00	1.91	15-Mar-21 14:08:00	24.27	15-Mar-21 14:08:00	23.53
15-Mar-21 14:09:00	10.45	15-Mar-21 14:09:00	19.36	15-Mar-21 14:09:00	15.05	15-Mar-21 14:09:00	5.23	15-Mar-21 14:09:00	250.98	15-Mar-21 14:09:00	1.90	15-Mar-21 14:09:00	24.29	15-Mar-21 14:09:00	23.53
15-Mar-21 14:10:00	10.48	15-Mar-21 14:10:00	18.10	15-Mar-21 14:10:00	15.08	15-Mar-21 14:10:00	6.37	15-Mar-21 14:10:00	250.86	15-Mar-21 14:10:00	1.92	15-Mar-21 14:10:00	24.35	15-Mar-21 14:10:00	23.61
15-Mar-21 14:11:00	10.69	15-Mar-21 14:11:00	17.53	15-Mar-21 14:11:00	15.08	15-Mar-21 14:11:00	8.34	15-Mar-21 14:11:00	250.86	15-Mar-21 14:11:00	1.90	15-Mar-21 14:11:00	24.36	15-Mar-21 14:11:00	23.61
15-Mar-21 14:12:00	10.89	15-Mar-21 14:12:00	17.11	15-Mar-21 14:12:00	15.06	15-Mar-21 14:12:00	8.18	15-Mar-21 14:12:00	250.98	15-Mar-21 14:12:00	1.90	15-Mar-21 14:12:00	24.41	15-Mar-21 14:12:00	23.59
15-Mar-21 14:13:00	10.92	15-Mar-21 14:13:00	17.07	15-Mar-21 14:13:00	15.06	15-Mar-21 14:13:00	8.31	15-Mar-21 14:13:00	250.98	15-Mar-21 14:13:00	1.92	15-Mar-21 14:13:00	24.42	15-Mar-21 14:13:00	23.66
15-Mar-21 14:14:00	10.89	15-Mar-21 14:14:00	17.07	15-Mar-21 14:14:00	15.06	15-Mar-21 14:14:00	8.48	15-Mar-21 14:14:00	250.62	15-Mar-21 14:14:00	1.89	15-Mar-21 14:14:00	24.51	15-Mar-21 14:14:00	23.60
15-Mar-21 14:15:00	10.74	15-Mar-21 14:15:00	17.07	15-Mar-21 14:15:00	15.06	15-Mar-21 14:15:00	6.78	15-Mar-21 14:15:00	248.33	15-Mar-21 14:15:00	1.91	15-Mar-21 14:15:00	24.48	15-Mar-21 14:15:00	23.60
15-Mar-21 14:16:00	10.59	15-Mar-21 14:16:00	17.07	15-Mar-21 14:16:00	15.06	15-Mar-21 14:16:00	7.01	15-Mar-21 14:16:00	248.50	15-Mar-21 14:16:00	1.90	15-Mar-21 14:16:00	24.46	15-Mar-21 14:16:00	23.70
15-Mar-21 14:17:00	10.57	15-Mar-21 14:17:00	17.07	15-Mar-21 14:17:00	15.06	15-Mar-21 14:17:00	6.75	15-Mar-21 14:17:00	248.51	15-Mar-21 14:17:00	1.93	15-Mar-21 14:17:00	24.42	15-Mar-21 14:17:00	23.67
15-Mar-21 14:18:00	10.57	15-Mar-21 14:18:00	17.07	15-Mar-21 14:18:00	15.06	15-Mar-21 14:18:00	8.49	15-Mar-21 14:18:00	250.70	15-Mar-21 14:18:00	1.92	15-Mar-21 14:18:00	24.54	15-Mar-21 14:18:00	23.62
15-Mar-21 14:19:00	10.55	15-Mar-21 14:19:00	17.07	15-Mar-21 14:19:00	15.06	15-Mar-21 14:19:00	6.57	15-Mar-21 14:19:00	250.98	15-Mar-21 14:19:00	1.91	15-Mar-21 14:19:00	24.59	15-Mar-21 14:19:00	23.57
15-Mar-21 14:20:00	10.55	15-Mar-21 14:20:00	17.07	15-Mar-21 14:20:00	15.06	15-Mar-21 14:20:00	8.75	15-Mar-21 14:20:00	250.98	15-Mar-21 14:20:00	1.90	15-Mar-21 14:20:00	24.63	15-Mar-21 14:20:00	23.64
15-Mar-21 14:21:00	10.60	15-Mar-21 14:21:00	17.07	15-Mar-21 14:21:00	15.06	15-Mar-21 14:21:00	7.18	15-Mar-21 14:21:00	250.98	15-Mar-21 14:21:00	1.89	15-Mar-21 14:21:00	24.68	15-Mar-21 14:21:00	23.65
15-Mar-21 14:22:00	10.64	15-Mar-21 14:22:00	17.07	15-Mar-21 14:22:00	15.06	15-Mar-21 14:22:00	7.49	15-Mar-21 14:22:00	250.98	15-Mar-21 14:22:00	1.90	15-Mar-21 14:22:00	24.65	15-Mar-21 14:22:00	23.65
15-Mar-21 14:23:00	10.55	15-Mar-21 14:23:00	17.07	15-Mar-21 14:23:00	15.06	15-Mar-21 14:23:00	6.92	15-Mar-21 14:23:00	250.86	15-Mar-21 14:23:00	1.90	15-Mar-21 14:23:00	24.61	15-Mar-21 14:23:00	23.56
Average Stack NOx, ppm (15% O2)	10.62	Average Stack CO, ppm (15% O2)	15.77	Average Stack O2 (%)	15.15	Average Duct Burner Gas Flow (MSCFH)	3.20	Average Turbine Gas Flow (MSCFH)	249.74	Ave. Steam Injection Rate (lb/s)	1.91	Ave. Ammonia Injection (lb/hr)	24.46	Ave. Turbine Load (MWh)	23.57

252,94 x 1000 / 60 = 4215.7 dscfm

EPA METHOD 20 MEASUREMENT
SYSTEM PERFORMANCE TIME

RESPONSE TIME

DATE OF TEST: 3-15-21

PROBE LOCATION: Stack

ANALYZER TYPE & MODEL #

NOx: API 200 EM

CO: API 300 EM

O2: Servomex 1400

Span Gas Concentration/Analyzer Full Scale Setting:

NOx; Gas, ppmv: 20.2 — Full Scale setting, ppmv 25

CO; Gas, ppmv: 40.0 — Full Scale setting, ppmv 50

O2; Gas, %: 20.13 — Full Scale setting, % 25

UPSCALE TIME - Analyzer + Sampling System:

Trial #	Nox	CO	O2
1	58	55	47 seconds
2	59	55	47 seconds
3	58	54	47 seconds
Average Response	59	55	47 seconds

DOWNSCALE - Analyzer + Sampling System:

Trial #	Nox	CO	O2
1	57	53	45 seconds
2	58	54	45 seconds
3	58	53	45 seconds
Average Response	58	54	45 seconds

Slower Average	59	55	47 seconds

DESCRIPTION OF METHOD(S) USED

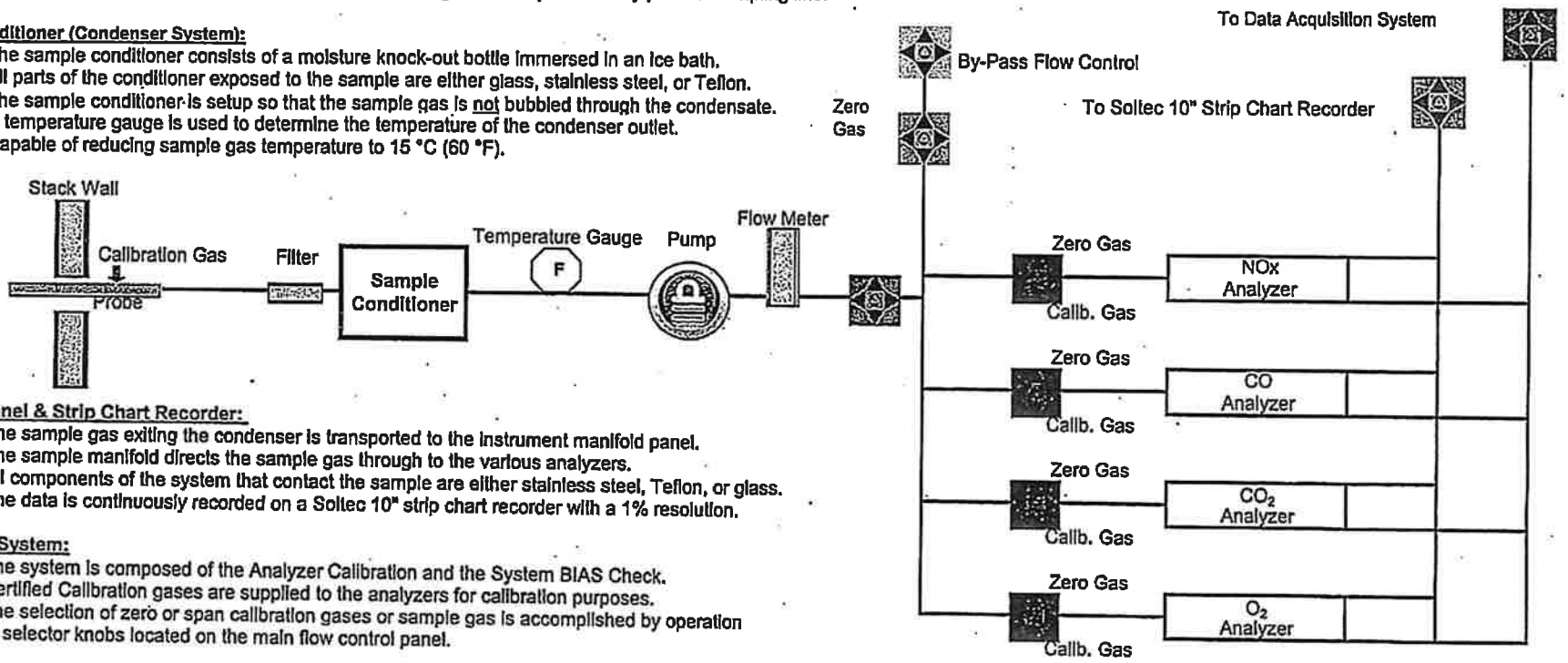
CARB Method 100 – Sample Train Assembly

Probe:

1. AIRx Testing Services, Inc. uses a stainless steel sampling probe.
2. The probe is connected to the sample conditioner using a heated (if necessary) Teflon sampling line.

Sample Conditioner (Condenser System):

1. The sample conditioner consists of a moisture knock-out bottle immersed in an ice bath.
2. All parts of the conditioner exposed to the sample are either glass, stainless steel, or Teflon.
3. The sample conditioner is setup so that the sample gas is <u>not</u> bubbled through the condensate.
4. A temperature gauge is used to determine the temperature of the condenser outlet.
5. Capable of reducing sample gas temperature to 15 °C (60 °F).



Manifold Panel & Strip Chart Recorder:

1. The sample gas exiting the condenser is transported to the instrument manifold panel.
2. The sample manifold directs the sample gas through to the various analyzers.
3. All components of the system that contact the sample are either stainless steel, Teflon, or glass.
4. The data is continuously recorded on a Soltec 10" strip chart recorder with a 1% resolution.

Calibration System:

1. The system is composed of the Analyzer Calibration and the System BIAS Check.
2. Certified Calibration gases are supplied to the analyzers for calibration purposes.
3. The selection of zero or span calibration gases or sample gas is accomplished by operation of selector knobs located on the main flow control panel.

<u>Nitrogen Oxides – Chemiluminescent Analyzer:</u> Based on the chemiluminescent reaction of NO and ozone to form NO_2 in an excited state. Light emission is monitored through an optical filter by a high sensitivity photomultiplier tube, the output of which is electronically processed so it is linearly proportional to the NO concentration. The output is in units of ppmv.

<u>Carbon Monoxide – Non-Dispersive Infrared (NDIR) Analyzer:</u> Radiation from an infrared source is passed through a narrow band-pass filter and a multiple optical pass sample cell where absorption by the sample gas occurs. The infrared radiation exits the sample cell and falls on a solid state infrared detector. The output is in units of ppmv.

<u>Oxygen – Electrochemical Analyzer:</u> Oxygen in the flue gas sample diffuses through a Teflon membrane and is reduced on the surface of the cathode. A corresponding oxidation occurs at the anode and an electric current proportional to the concentration of oxygen is produced. The output is in units of percent O_2 by volume.

<u>Carbon Dioxide – Non Dispersive Infrared (NDIR) Analyzer:</u> The instrument measures the differential in infrared energy absorbed from energy beams passed through a reference cell (containing a gas selected to have minimal absorption of infrared energy in the wavelength absorbed by CO_2) and a sample cell through which the sample gas flows continuously. The output is in units of percent CO_2 by volume.

EPA Method 20

NOx, SO_2, and Diluent (O_2 or CO_2) Emissions from Stationary Gas Turbines

Principle: A sample of an exhaust gas stream is continuously extracted, conditioned, and conveyed to instrumental analyzers for the determination of NOx and diluent content. During each NOx and diluent determination, a separate measurement of SO_2 emissions is made, using Method 6 or its equivalent. The diluent determination is used to adjust the NOx and SO_2 concentration to a reference condition.

Measurement System: Performance Test Procedures

Calibration check: The difference between the known concentration of the CalGas and the gas concentration exhibited by the gas analyzer when the CalGas is introduced directly to the analyzer.

1) Calibrate the analyzer with zero and mid-level (45-55% of range) CalGas
2) Introduce low-level (20-30% of range) and high-level (80-90% of range) CalGas

Performance Spec: The linear curve determined from the zero and mid-level CalGas responses must predict the actual response of the low-level (NOx only) and high-level (NOx and O_2/CO_2) gases within **2%** of the range.

Sampling system BIAS: The difference between the gas concentrations exhibited by the measurement system when CalGas is introduced at the sampling probe tip filter and when the same CalGas is introduced directly to the analyzer. *Performance Spec:* less than 5% of the range for the zero, mid-range, and high-range CalGas.

Zero Drift: The difference in the measurement system responses at a zero concentration level during the initial calibration, and final calibration check after a test. No adjustment to the measurement system is allowed at that point. *Performance Spec:* less than **2%** of the range

Calibration Drift: The difference in the measurement system responses at a mid-range concentration level during the initial calibration, and final calibration check after a test. No adjustment t is allowed at that point. *Performance Spec:* less than **2%** of the range

Response time: Time required by data recorder to display 95% of a step change in gas concentration.

1) Introduce zero gas into the system until all readings are stable.
2) Switch to monitor stack effluent until a stable reading can be obtained. Record upscale response time.
3) Introduce high-level CalGas into the system until all readings are stable.
4) Switch to monitor stack effluent until a stable reading can be obtained. Record downscale response time.
5) Repeat the previous 4 steps three times

Performance Spec: No greater than **30 seconds** (or change of < 5% of the measured average concentration for 2 min)

Interference response: The output response of the measurement system to a component in the sample gas, other than the gas component being measured. Introduce the following gases, 500±50 ppm CO, 200±20 ppm SO_2, 10±1 ppm CO_2, 20.9±1 ppm O_2, and determine the total interference output response of the system to these components. Conduct the interference response check on each analyzer prior to its first use in the field. *Performance Spec:* less than **2%** of the range

Emission Measurement Test Procedures

- Select sampling site as follows:
  1. Upstream of the point of introduction of dilution air into the duct;
  2. At least 2 stack diameters (or 5 feet whichever is less) upstream of stack outlet.

- Conduct preliminary O_2/CO_2 traverse to determine the sampling points of lowest O_2 or highest CO_2 concentration. Conduct this test at the turbine's lowest operating load mentioned in the test protocol.

- Select minimum # of points:
  1. 8 for stacks with cross-sectional areas < 1.5 m^2 (16.1 ft^2)
  2. 8 + 1 additional sample point per each 0.2m^2 (2.2ft^2) of areas for stacks whose areas 16.1f^2 < A < 107.6ft^2
  3. 49 (48 if circular stacks) for stacks whose cross-sectional areas are > 10.0 m^2 (107.6 ft^2)
  4. Use Method 1 to locate the traverse points

- Conduct preliminary diluent measurement while the turbine is operating at the lowest percent of peak load:
  1. Position probe at first traverse point and begin sampling for at least 1 minute + response time
  2. Do the same for each traverse point, recording the diluent concentration each time
  3. Select the 8 points at which the lowest O_2 (or highest CO_2) concentrations were obtained
  4. Sample at each of these selected points during each run at the different turbine load conditions

- **Three test runs at each load condition specified in the test protocol constitutes a complete test**

- *Cleaning of sample train:* Flush probe, lines and sample conditioner with DW, than acetone. Dry with filtered dry air.

- *Allow Continuous Analyzers to warm up*

- *Sampling system preparation:* assemble sample train as shown in Fig 100.1-1, 100.1-2 and 100.1-3. Leak check the vacuum side of the assembly to a minimum of 20" of Hg (gauge). The sampling system should hold 20" of Hg vacuum for 5 minutes with less than 1" Hg loss. Check the pressure side of the system with liquid soap solution and correct any leaks.

- *Allowable modifications:* probe heating element can be eliminated if stack is at or below ambient temperature and condensation is not observed. Pitot tube can be eliminated if only concentration measurements are required.

- *Calibrate analyzers and data recorders:* introduce CalGases directly to the instruments and make all necessary adjustments to calibrate the analyzer and data recorder. Adjust system components to achieve manufacturer's recommended sampling rates.

- *Instrument response time:* establish during semi-annual certification

- *Sampling system BIAS check:* **Mandatory**

1. Backflash gas through the probe as necessary to prevent particulate buildup
2. Zero, and either mid-range or high-range (whichever is closest to effluent concentration)
3. Introduce upscale CalGas and record concentration on a form similar to 100.1-5
4. Introduce zero CalGas and record concentration
5. Make no adjustments to the system except those necessary to achieve the correct flow rate.
6. If invalid calibration is exhibited (> 5% of the range), take corrective action and repeat check.
7. If adjustment to the analyzer is required, first repeat the analyzer calibration error check, then repeat the sampling system BIAS check.

- *NO2 to NO conversion check:* EPA Method 20 or gas mixture of NO2 in air

Emission Test Procedure:

- Traverse stack to determine presence of stratification

- Single-point gas sampling is acceptable if gas composition is homogenous (<10% variation)

- Determine moisture content and velocity pressures **or** Mass flow rate may be obtained by stochiometric and gas composition relations

- *Chart recorder label:* turn on strip chart recorder and label the chart as to pollutant, source, range, calibration cylinder ID number, certified expiration date, zero and upper range calibration settings, chart speeds, date, time, operator.

- *Sample probe traverse and minimum sampling time:*

1. Insert probe in stack
2. determine if single point sampling is acceptable
3. if traverse is required, leave the probe at each traverse point for at least the system response time + 1 minute.
4. minimum sampling time of 60 minute is recommended. See District Rules and Regulations and permit conditions for special requirements.
5. When test duration exceeds one hour, conduct zero and span checks every 2 hours. Adjust settings as necessary, mark strip charts and record in log books.

- *Zero and Calibration DRIFT Tests:*

1. Immediately preceding and following each run, or if adjustments are necessary during the run, repeat the sampling system BIAS procedure. Make no adjustments to the system until after the DRIFT checks are completed Record the information on a form similar to Figure 100.1-5.
2. If run is invalid (sampling system BIAS specs exceeded), repeat entire procedure before repeating run.
3. If both the zero and upscale calibration values are within the sampling system BIAS specs, then use the average of the initial and final BIAS check values to calculate the gas concentration for the run.
4. If the zero or upscale calibration DRIFT exceeds the DRIFT limits, repeat entire procedure before conducting additional runs.

- *Post Run Leak Check:*

INSTRUMENT INFORMATION

SOURCE EMISSION INSTRUMENTATION LIST

OXIDES OF NITROGEN

Unit No. - 1: Manufacturer: API Model No.: 200 EH Serial No.: 233 Method: Chemiluminescence Range (ppmv) 0-5000	**Unit No. - 6:** Manufacturer: API Model No.: 200 A Serial No.: 1013 Method: Chemiluminescence Range (ppmv) 0-50
Unit No. - 2: Manufacturer: API Model No.: 200 EH Serial No.: 234 Method: Chemiluminescence Range (ppmv) 0-5000	**Unit No. - 7:** Manufacturer: Thermo Environmental (TECO) Model No.: 10AR Serial No.: 25559-221 Method: Chemiluminescence Range (ppmv) 0-2.5, 10, 25, 100, 250, 1000, 2500, 10000
Unit No. - 3: Manufacturer: API Model No.: 200 EH Serial No.: 109 Method: Chemiluminescence Range (ppmv) 0-5000	**Unit No. - 8:** Manufacturer: Thermo Environmental (TECO) Model No.: 10AR Serial No.: 38586-258 Method: Chemiluminescence Range (ppmv) 0-2.5, 10, 25, 100, 250, 1000, 2500, 10000
Unit No. - 4: Manufacturer: API Model No.: 200 EH Serial No.: 442 Method: Chemiluminescence Range (ppmv) 0-5000	
Unit No. - 5: Manufacturer: API Model No.: 200 EH Serial No.: 441 Method: Chemiluminescence Range (ppmv) 0-5000	

AIR X TESTING

SOURCE EMISSION INSTRUMENTATION LIST

OXYGEN

Unit No. - 5:	
Manufacturer:	California Analytical Instruments
Model No.:	110P
Serial No.:	T02034
Method:	Paramagnetic
Range (%)	0-5, 10, 25

Unit No. - 7:	
Manufacturer:	Teledyne
Model No.:	320-AX
Serial No.:	108742
Method:	Electrochemical
Range (%)	0-5, 10, 25

Unit No. - 9:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B701/730
Method:	Paramagnetic
Range (%)	0-25, 100

Unit No. - 10:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B308
Method:	Paramagnetic
Range (%)	0-25

Unit No. - 11:	
Manufacturer:	Teledyne
Model No.:	320-A
Serial No.:	111211
Method:	Electrochemical
Range (%)	0-5, 10, 25

Unit No. - 12:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B7103
Method:	Paramagnetic
Range (%)	0-25, 100

Unit No. - 13:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	X1420/B707
Method:	Paramagnetic
Range (%)	0-25

AIR TESTING

SOURCE EMISSION INSTRUMENTATION LIST

CARBON MONOXIDE

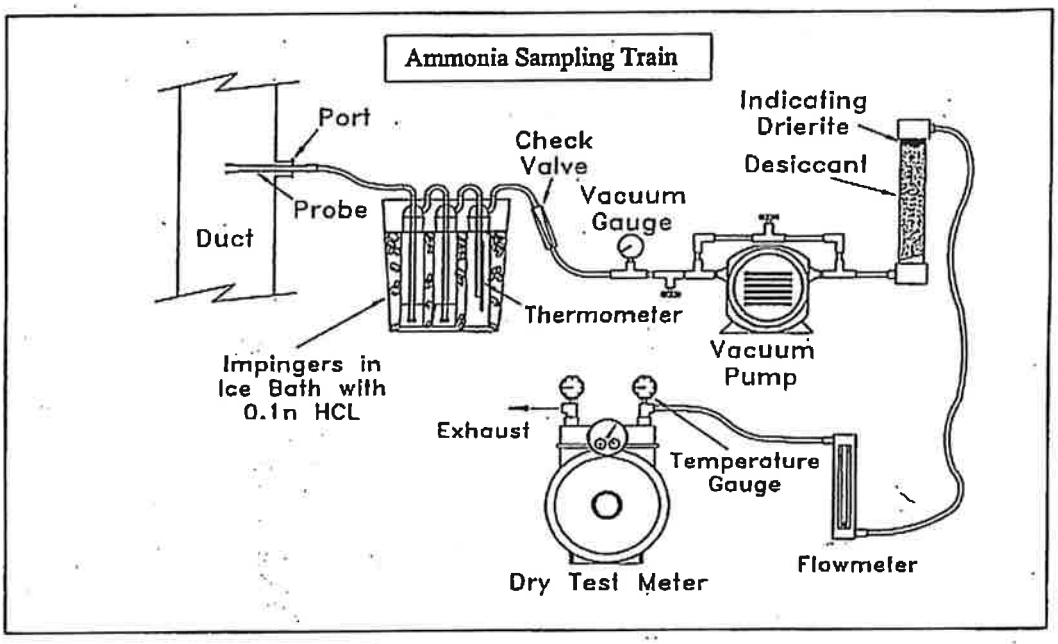
Unit No. - 1: Manufacturer: Model No.: Serial No.: Method: Range (ppmv	 API 300 EM 239 NDIR/GFC 0-5, 10, 25, 50, 100, 250, 500, 1000, 2500, 5000	**Unit No. - 2:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv	 API 300 EM 240 NDIR/GFC 0-5, 10, 25, 50, 100, 250, 500, 1000, 2500, 5000
Unit No. - 3: Manufacturer: Model No.: Serial No.: Method: Range (ppmv	 API 300 EM 104 NDIR/GFC 0-5, 10, 25, 50, 100, 250, 500, 1000, 2500, 5000	**Unit No - 5:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48H 25184-219 NDIR/GFC 0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000
Unit No. - 6: Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48H 29031-233 NDIR/GFC 0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000	**Unit No. - 7:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Siemens Ultramat 21p AO4-254 NDIR 0-300
Unit No. - 10: Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48H 38391-257 NDIR/GFC 0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000	**Unit No. - 11:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48H 35226-249 NDIR/GFC 0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000
Unit No - 13: Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48 48-15970-159 NDIR/GFC 0-1, 2, 5, 10, 20, 50, 100, 200, 500, 1000	**Unit No - 14:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48 48-23925-213 NDIR/GFC 0-1, 2, 5, 10, 20, 50, 100, 200, 500, 1000

BAAQMD Method ST-1B / Ammonia Integrated Sampling

Principle: A gas sample is drawn through a solution of 0.1N hydrochloric acid which absorbs the ammonia.

Pre-Test Procedures:

- Add 100 ml of 0.1N to each of two impingers; retain 100 ml of the HCl to analyze as a blank
- Leak-test sampling train by starting the pump, plugging the probe, and adjusting the pump inlet vacuum to 10 inches Hg. The leak rate must not exceed 0.6 liter/min (0.02 CFM). Release plug, stop pump.
- Record initial "dry test meter" reading and barometric pressure.
- In the absence of stratification, sample at single point, otherwise select sampling traverse points.



Sampling Procedure:

- Each test run shall be of ***30 minute*** duration or 90% of the batch time, whichever is less
- Position probe at the sampling point and start the pump
- Sample at constant rate of ***14.3 liter/min (0.5 CFM),*** using rotameter to establish initial rate only
- Record "dry test meter" volume and temperature and "impinger outlet" temperature at 5-min intervals
- Maintain impinger temperature at 7°C (45°F) or less by adding ice as necessary
- At the conclusion of each run, stop pump, remove probe from stack and record final reading
- Point probe upward and purge sample train with ambient air

Analysis: Individually analyze the hydrochloric acid solutions and the blank for total ammonia content.

Calculations:

Standard sample volume	***Ammonia Concentration***
$Vo = (17.71)V_m P_b / T_m$ Where: Vo = Corrected sample volume to std conditions; T_m = Average run meter temperature (°R); V_m = Uncorrected meter volume (ft^3); P_b = Barometric pressure (inches Hg); 17.71 = Constant correcting to 70°F & 29.92 in.Hg.	$C = 5.02 \times 10^4 W / V_o$ Where: C = Ammonia concentration, ppmv on a dry basis; W = Total weight of ammonia in the impinger catch, for each run, (g); 5.02×10^4 = Constant derived from the MW and correcting to standard conditions.

QUALITY ASSURANCE

PRAXAIR
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DocNumber: 256463

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22019

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Certificate Issuance Date: 08/09/2019
Praxair Order Number: 71041947
Part Number: NI NO12ME-AS
Customer PO Number: 78026536

Fill Date: 07/24/2019
Lot Number: 70085920504
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert.

Expiration Date:	08/09/2022	NIST Traceable
Cylinder Number:	DT0011049	Expanded Uncertainty
11.95 ppm	Nitric oxide	± 0.8 %
Balance	Nitrogen	

For Reference Only: NOx 11.99 ppm

Certification Information: *Certification Date:* 08/09/2019 *Term:* 36 Months *Expiration Date:* 08/09/2022

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.
Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. *Component:* Nitric oxide

Requested Concentration: 12 ppm
Certified Concentration: 11.95 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 07/12/2019

Reference Standard: Type / Cylinder #: GMIS / CC457197
Concentration / Uncertainty: 19.91 ppm ±0.568%
Expiration Date: 03/26/2022
Traceable to: SRM # / Sample # / Cylinder #: APEX1161149 / N/A / APEX1161149
SRM Concentration / Uncertainty: 20.03 ppm / ± 0.10 ppm
SRM Expiration Date: 01/27/2020

First Analysis Data:					Date	08/02/2019
Z: 0	R: 19.91	C: 11.94	Conc: 11.94			
R: 19.9	Z: 0	C: 11.93	Conc: 11.93			
Z: 0	C: 11.94	R: 19.92	Conc: 11.94			
UOM: ppm		Mean Test Assay:	11.94 ppm			

Second Analysis Data:					Date	08/09/2019
Z: 0	R: 19.91	C: 11.96	Conc: 11.96			
R: 19.9	Z: 0	C: 11.98	Conc: 11.98			
Z: 0	C: 11.97	R: 19.92	Conc: 11.97			
UOM: ppm		Mean Test Assay:	11.97 ppm			

Analyzed By: Henry Koung

Certified By: Lecanna Flores

PRAXAIR
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DocNumber: 253580

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22019

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Certificate Issuance Date: 06/27/2019
Praxair Order Number: 70998288
Part Number: NI NO20ME-AS
Customer PO Number: 78981976

Fill Date: 06/07/2019
Lot Number: 70086915805
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Expiration Date:	06/27/2022	NIST Traceable
Cylinder Number:	CC724456	Expanded Uncertainty
20.1 ppm	Nitric oxide	± 0.5 %
Balance	Nitrogen	

ProSpec EZ Cert

For Reference Only: NOx 20.2 ppm

Certification Information: *Certification Date:* 06/27/2019 *Term:* 36 Months *Expiration Date:* 06/27/2022

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.
Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. *Component:* Nitric oxide

Requested Concentration: 20 ppm
Certified Concentration: 20.1 ppm
Instrument Used: Thermo Electron 42I-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 06/10/2019

First Analysis Data:				Date	06/20/2019
Z: 0	R: 19.9	C: 20	Conc:	20	
R: 19.88	Z: 0	C: 20.1	Conc:	20.1	
Z: 0	C: 20.1	R: 19.91	Conc:	20.1	
UOM: ppm		Mean Test Assay:		20.1	ppm

Reference Standard: Type / Cylinder #: GMIS / CC2919
Concentration / Uncertainty: 19.90 ppm ±0.504%
Expiration Date: 03/28/2022
Traceable to: SRM # / Sample # / Cylinder #: APEX1161149 / NA / APEX1161149
SRM Concentration / Uncertainty: 20.03 ppm / ±0.10 ppm
SRM Expiration Date: 01/27/2020

Second Analysis Data:				Date	06/27/2019
Z: 0	R: 19.9	C: 20.1	Conc:	20.1	
R: 19.89	Z: 0	C: 20.2	Conc:	20.2	
Z: 0	C: 20.1	R: 19.89	Conc:	20.1	
UOM: ppm		Mean Test Assay:		20.1	ppm

Analyzed By Henry Koung

Certified By Leeanna Flores

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Los Angeles, CA 90058
Tel: 323-585-2154
Fax: 714-542-6689

Customer & Order Information:

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD,
OXNARD, CA 93030-7224

Praxair Order Number: **71378203**
Customer PO Number: **79369772**

Certificate Issuance Date: **7/10/2020**

Certification Date: **7/10/2020**
Lot Number: **70086018201**
Part Number: **NI NX20MP-AS**
DocNumber: **232651**
Expiration Date: **7/10/2021**

CERTIFICATE OF ANALYSIS
Primary Standard

Component	Requested Concentration (Molar)	Certified Concentration (Molar)	Analytical Reference	Analytical Uncertainty
Nitrogen dioxide (as NOx)	**20 ppm**	**19.01 ppm**	**1**	**± 1%**
Nitrogen	**Balance**	**Balance**		

Cylinder Style: **AS**
Cylinder Pressure @ 70 F: **2000 psig**
Cylinder Volume: **142 ft3**
Valve Outlet Connection: **CGA 660**
Cylinder Number(s): **CC3240**

Fill Date: **6/30/2020**
Analysis Date: **7/10/2020**

Filling Method: **Gravimetric**

Comments: **This mixture contains 2% Oxygen.**

Analyst: **Leeanna Flores**

Approved Signer: **Henry Koung**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	MKS MG2031 - FTIR

The gas calibration cylinder standard prepared by Praxair Distribution, Inc. is considered a certified standard. It is prepared by gravimetric, volumetric, or partial pressure techniques. The calibration standard provided is certified against Praxair Distribution, Inc. Reference Materials which are traceable to the International System of Units (SI) through either weights traceable to the National Institute of Standards and Technology (NIST) or Measurement Canada, or through NIST Standard Reference Materials or equivalent where available.

Note: All expressions for concentration (e.g., % or ppm) are for gas phase, by volume (e.g., ppmv) unless otherwise noted. Analytical uncertainty is expressed as a Relative % unless otherwise noted.

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DocNumber: 229037

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22018

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Certificate Modification Date: 11/15/2018
Praxair Order Number: 70784160
Part Number: EV NICOOXE90-AS

Fill Date: 11/09/2018
Lot Number: 70085831305
Cylinder Style & Outlet: AS CGA 590
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

Expiration Date:	11/15/2026	NIST Traceable
Cylinder Number:	CC134279	Expanded Uncertainty
4.01 %	Carbon dioxide	± 0.4 %
11.97 %	Oxygen	± 0.1 %
Balance	Nitrogen	

ProSpec EZ Cert

Certification Information:

Certification Date: 11/15/2018 *Term:* 96 Months *Expiration Date:* 11/15/2026

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.

Do Not Use this Standard if Pressure is less than 100 PSIG.

CO2 responses have been corrected for Oxygen IR Broadening effect. O2 responses have been corrected for CO2 interference.

Analytical Data:

(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. *Component:* Carbon dioxide

Requested Concentration: 4 %
Certified Concentration: 4.01 %
Instrument Used: Horiba VIA-510 S/N 20C194WK
Analytical Method: NDIR
Last Multipoint Calibration: 10/23/2018

First Analysis Data:					Date	11/15/2018
Z: 0	R: 6.96	C: 4	Conc: 4			
R: 6.96	Z: 0	C: 4.01	Conc: 4.01			
Z: 0	C: 4.01	R: 6.96	Conc: 4.01			
UOM: %		Mean Test Assay:	4.01 %			

Reference Standard: Type / Cylinder #: GMIS / CC243762
Concentration / Uncertainty: 6.96 % ±0.208%
Expiration Date: 08/07/2023
Traceable to: SRM # / Sample # / Cylinder #: SRM 1674b / 7-H-07 / FF10631
SRM Concentration / Uncertainty: 6.944% / ± 0.013%
SRM Expiration Date: 06/17/2019

Second Analysis Data:					Date	
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: %		Mean Test Assay:	%			

2. *Component:* Oxygen

Requested Concentration: 12 %
Certified Concentration: 11.97 %
Instrument Used: OXYMAT 5E
Analytical Method: Paramagnetic
Last Multipoint Calibration: 11/05/2018

First Analysis Data:					Date	11/15/2018
Z: 0	R: 20.86	C: 11.96	Conc: 11.96			
R: 20.86	Z: 0	C: 11.97	Conc: 11.97			
Z: 0	C: 11.97	R: 20.86	Conc: 11.97			
UOM: %		Mean Test Assay:	11.97 %			

Reference Standard: Type / Cylinder #: GMIS / CC75874
Concentration / Uncertainty: 20.86 % ±0.111%
Expiration Date: 11/07/2025
Traceable to: SRM # / Sample # / Cylinder #: SRM 2659a / 71-E-19 / FF22331
SRM Concentration / Uncertainty: 20.863% / ±0.021%
SRM Expiration Date: 08/23/2021

Second Analysis Data:					Date	
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: %		Mean Test Assay:	%			

Analyzed By: Danielle Burns

Certified By: Jose Vasquez

PRAXAIR

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Tel: (323) 585-2154 Fax:(714) 542-6689
PGVPID: P22015

DocNumber: 000081223

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

PRAXAIR WHSE OXNARD CA
455 E WOOLEY RD
OXNARD CA 930300

Praxair Order Number: 31577381
Customer P. O. Number: 05587065
Customer Reference Number:

Fill Date: 6/19/2015
Part Number: EV NICD0XE98-AS
Lot Number: 109516909
Cylinder Style & Outlet: AS CGA 590
Cylinder Pressure & Volume: 2000 psig 140 cu ft

Certified Concentration:

Expiration Date:	6/23/2023	NIST Traceable
Cylinder Number:	CC144381	Analytical Uncertainty:
7.93 %	CARBON DIOXIDE	± 0.5 %
20.13 %	OXYGEN	± 0.1 %
Balance	NITROGEN	

Certifcation Information: *Certification Date:* 6/23/2015 *Term:* 96 Months *Expiration Date:* 6/23/2023

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Do Not Use this Standard if Pressure is less than 100 PSIG.

O2 responses have been corrected for CO2 interference.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. Component: CARBON DIOXIDE

Requested Concentration: 8 %
Certified Concentration: 7.93 %
Instrument Used: Horiba VIA-510 S/N 2807014
Analytical Method: NDIR
Last Multipoint Calibration: 6/15/2015

First Analysis Data: Date: 6/23/2015

Z: 0	R: 9.87	C: 7.93	Conc:	7.927	
R: 9.87	Z: 0	C: 7.93	Conc:	7.927	
Z: 0	C: 7.93	R: 9.88	Conc:	7.927	

UOM: % Mean Test Assay: 7.927 %

Reference Standard Type: GMIS
Ref. Std. Cylinder #: SA17695
Ref. Std. Conc: 9.87%
Ref. Std. Traceable to SRM #: 1674b
SRM Sample #: 7-H-07
SRM Cylinder #: FF10631

Second Analysis Data: Date:

Z: 0	R: 0	C: 0	Conc:	0	
R: 0	Z: 0	C: 0	Conc:	0	
Z: 0	C: 0	R: 0	Conc:	0	

UOM: % Mean Test Assay: 0 %

2. Component: OXYGEN

Requested Concentration: 20 %
Certified Concentration: 20.13 %
Instrument Used: OXYMAT 5E
Analytical Method: PARAMAGNETIC
Last Multipoint Calibration: 5/28/2015

First Analysis Data: Date: 6/23/2015

Z: 0	R: 19.88	C: 20.12	Conc:	20.127	
R: 19.9	Z: 0	C: 20.12	Conc:	20.127	
Z: 0	C: 20.12	R: 19.9	Conc:	20.127	

UOM: % Mean Test Assay: 20.127 %

Reference Standard Type: GMIS
Ref. Std. Cylinder #: SA16022
Ref. Std. Conc: 19.90%
Ref. Std. Traceable to SRM #: 2659a
SRM Sample #: 71-E-19
SRM Cylinder #: FF22331

Second Analysis Data: Date:

Z: 0	R: 0	C: 0	Conc:	0	
R: 0	Z: 0	C: 0	Conc:	0	
Z: 0	C: 0	R: 0	Conc:	0	

UOM: % Mean Test Assay: 0 %

Analyzed by: Ying Yu

Certified by: Jack Ru

PRAXAIR

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Tel: (323) 585-2154 Fax:(714) 542-6689
PGVPID: F22016

DocNumber: 000094146

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

PRAXAIR WHSE OXNARD CA
455 E WOOLEY RD
OXNARD CA 930300

Praxair Order Number: 34250102
Customer P. O. Number: 06017500
Customer Reference Number:

Fill Date: 5/5/2016
Part Number: NI CO20ME-AS
Lot Number: 109612606
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure & Volume: 2000 psig 140 cu. ft.

Certified Concentration:

Expiration Date:	5/13/2024	NIST Traceable
Cylinder Number:	DT0012296	Analytical Uncertainty:
20.5 ppm	CARBON MONOXIDE	± 0.4 %
Balance	NITROGEN	

Certification Information: *Certification Date:* 5/13/2016 *Term:* 96 Months *Expiration Date:* 5/13/2024

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. Component: CARBON MONOXIDE

Requested Concentration: 20 ppm
Certified Concentration: 20.5 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 5/3/2016

First Analysis Data:						Date: 5/13/2016
Z: 0	R: 25	C: 20.4	Conc: 20.351			
R: 25.1	Z: 0	C: 20.5	Conc: 20.451			
Z: 0	C: 20.6	R: 25.2	Conc: 20.551			
UOM: ppm		Mean Test Assay: 20.451 ppm				

Reference Standard Type: GMIS
Ref. Std. Cylinder # : CC341229
Ref. Std. Conc: 25.04 ppm
Ref. Std. Traceable to SRM # : 2635a
SRM Sample # : 58-E-34
SRM Cylinder # : FF10666

Second Analysis Data:						Date:
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: ppm		Mean Test Assay: 0 ppm				

Analyzed by: Ying Yu

Certified by: Maria Soberanis

PRAXAIR

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Tel: (323) 585-2154 Fax:(714) 542-6689
PGVPID: F22017

DocNumber: 000105446

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Praxair Order Number: 70207603
Customer P. O. Number:
Customer Reference Number:

Fill Date: 2/22/2017
Part Number: NI CO4DME-AS
Lot Number: 109705308
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure & Volume: 2000 psig 140 cu. ft.

Certified Concentration:

Expiration Date:	3/7/2025	
Cylinder Number:	CC272657	NIST Traceable Analytical Uncertainty:
40.0 ppm	CARBON MONOXIDE	± 0.5 %
Balance	NITROGEN	

Certifcation Information: *Certification Date:* 3/7/2017 *Term:* 96 Months *Expiration Date:* 3/7/2025
This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. Component: CARBON MONOXIDE

Requested Concentration: 40 ppm
Certified Concentration: 40.0 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 3/1/2017

First Analysis Data:						Date: 3/7/2017
Z: 0	R: 50.2	C: 39.8	Conc: 40.012			
R: 50	Z: 0	C: 39.8	Conc: 40.012			
Z: 0	C: 39.8	R: 49.9	Conc: 40.012			
UOM: ppm		Mean Test Assay:	40.012 ppm			

Reference Standard Type: GMIS
Ref. Std. Cylinder # : CC186877
Ref. Std. Conc: 50.3 ppm
Ref. Std. Traceable to SRM # : 1678c
SRM Sample # : 04-I-41
SRM Cylinder # : FF18402

Second Analysis Data:						Date:
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: ppm		Mean Test Assay:	0 ppm			

Analyzed by: Ying Yu

Certified by: Nassim Haddad

DRY GAS METER CALIBRATION

Standard Pressure	29.92	in. hg.	Unit Number J
Standard Temperature	60	F	Date: 1/4/2021
Ambient pressure	29.96	in. hg.	Leak Check: .004 @ 20"
Ambient temperature	65	F	

	WET GAS		DRY GAS	Temperature					
ΔH in. H20	TIME min.	VOL. cf	VOL. in/out cf	W.G. AVG F	D.G. IN F	D.G. OUT F	D.G. AVG. F	*Y	†ΔH@ in. H20
			818.537		62.0	61.0			
0.75	9.94	5.000	823.518	61.0	63.0	61.0	61.8	1.0034	1.6419
			823.518		61.0	61.0			
0.75	9.94	5.000	828.501	61.0	63.0	62.0	61.8	1.0030	1.6419
			828.501		62.0	62.0			
0.75	9.96	5.000	833.444	61.0	64.0	62.0	62.5	1.0126	1.6462
			833.512		63.0	62.0			
1.50	7.30	5.000	838.487	61.0	63.0	62.0	62.5	1.0042	1.7686
			838.487		63.0	63.0			
1.50	7.32	5.000	843.461	61.0	64.0	62.0	63.0	1.0054	1.7766
			843.461		63.0	63.0			
1.50	7.32	5.000	848.434	61.5	64.0	63.0	63.3	1.0051	1.7792
			848.513		64.0	63.0			
2.25	5.92	5.000	853.466	61.5	64.0	63.0	63.5	1.0078	1.7447
			853.466		64.0	63.0			
2.25	5.92	5.000	858.419	62.0	65.0	64.0	64.0	1.0078	1.7464
			858.419		65.0	64.0			
2.25	5.95	5.000	863.374	62.0	65.0	64.0	64.5	1.0083	1.7625
			863.444		65.0	64.0			
3.00	5.18	5.000	868.382	63.0	66.0	64.0	64.8	1.0085	1.7871
			868.382		65.0	64.0			
3.00	5.18	5.000	873.313	63.0	66.0	64.0	64.8	1.0099	1.7871
			873.313		66.0	64.0			
3.00	5.15	5.000	878.248	63.0	66.0	64.0	64.8	1.0091	1.7664
			878.275		66.0	64.0			
3.75	4.63	5.000	883.190	63.0	66.0	64.0	65.0	1.0119	1.7838
			883.190		65.0	64.0			
3.75	4.62	5.000	888.098	64.0	65.0	64.0	64.5	1.0104	1.7846
			888.098		65.0	64.0			
3.75	4.62	5.000	893.008	64.0	65.0	64.0	64.5	1.0100	1.7846
						AVERAGE		1.0078	1.7468

Validity checks:

Meter Factor: 1.0078

* Y(max - min) ≤.02 ? √

† | ΔH@ - ΔH@ avg. | ≤ .20 in. H20 ? √

ΔH@ : 1.7468

Calibration by: FT Reviewed by: KK

EQUATIONS USED:

Y= (VWG*PBAR*(TDGavg.+460))/((VDG*(PBAR+(ΔH/13.6))*(TWGavg.+460))

ΔH@ = ((0.0319*ΔH)/(PBAR*(TDGavg+460))*(((TWG+460)*T)/VWG)^2

AIRx Testing

CHAIN OF CUSTODY

INVOICE TO: X SAME

ATTN:

REPORT TO: PO#

AIRx Testing
2472 Eastman Avenue, Unit 34
Ventura, CA 93003
(805) 644-1099 Fax (805) 644-2672

Contact:

LAB # 221-014 PROJECT Name: New Indy

Samplers: (Signature)

Rush: 24hr. Normal: 10 Day

Sample Method:

Return or Dispose

Sample No.	Sample Date	Sample Time	Comp	Grab	Sample Description	Volume (g) (ml)	Fuel (ng) (oil)	ANALYSIS BARIUM ST-1B	REMARKS
1	3-15-21	9:00	X		Run1	405.1		X	
2	"	10:55	"		Run2	377.5		X	
3	"	12:45	"		Run3	409.5		X	

Relinquished by:

Date: 3-15-21 Time 15:30

Received by:

Date: 3-16-21 Time 6:00AM

Relinquished by:

Date: Time:

Received by:

Date: Time

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Attachment to 6.a. 74.15N1-0157 and PO0157PC2-Condition 4 (Nebraska Boiler)

Condition No.	Response
74.15 - 1 & 2	Required source test every 24 months will be conducted during next compliance year (Last test was on 9/22/2020).
74.15 - 3	Concentration limits do not apply during cold startup for period of three (3) hours.
74.15 - 4	Records of biennial source test reports will be maintained and submitted to District upon request.
PC2 - 4	Operate CEMS for NOx and oxygen including zero and span drift checks daily, reporting of breakdown, recording of operational parameters, reporting of violation, provision of CEMS data in an approved format.

Month-Year	Monthly		Rolling 12-Months			Emissions							
	Natrual Gas (scf)	Uptime (hours)	Natrual Gas (scf)	Uptime (hours)	Capacity Factor (%)	Nebraska Emissions NOx (tons)	Nebraska Emissions CO (tons)	Cogen Emissions NOx (tons)	Cogen Emissions CO(tons)	Total Emissions NOx (tons)	Total Emissions CO (tons)	Rolling 12 Months NOx (tons)	Rolling 12 Months CO (tons)
Apr-19	0	0				0.00	0.000	2.44	3.66	2.44	3.66	44.42	93.28
May-19	0	0				0.00	0.000	3.82	4.76	3.82	4.76	44.32	87.83
Jun-19	1,013,281	17.32				0.02	0.160	3.40	4.16	3.42	4.32	43.92	82.91
Jul-19	12,516,147	198.38				0.23	2.010	2.79	3.88	3.02	5.89	42.98	79.74
Aug-19	0	0				0.00	0.000	3.86	5.44	3.86	5.44		
Sep-19	0	0				0.00	0.000	3.77	5.14	3.77	5.14		
Oct-19	12,356,397	184.65				0.24	1.920	2.82	3.78	3.06	5.70		
Nov-19	12,236,751	183.26				0.20	1.900	2.60	3.45	2.80	5.35		
Dec-19	0	0				0.00	0.000	3.95	4.95	3.95	4.95		
Jan-20	0	0				0.00	0.000	3.98	5.69	3.98	5.69		
Feb-20	1,104,655	15.17				0.02	0.170	3.71	5.15	3.73	5.32		
Mar-20	0	0				0.00	0.000	4.18	5.66	4.18	5.66		
Apr-20	0	0	39,227,231	599	4.308%	0.00	0.000	3.95	5.44	3.95	5.44		
May-20	2,765,791	41.56	41,993,023	640	4.581%	0.05	0.426	3.79	5.05	3.84	5.47		
Jun-20	18,127,459	267.15	59,107,201	890	6.385%	0.33	2.816	2.16	3.30	2.49	6.11		
Jul-20	7,718,065	106.12	54,309,119	798	5.878%	0.10	0.876	3.38	5.02	3.48	5.90		
Aug-20	0	0	54,309,119	798	5.890%	0.00	0.000	3.89	5.88	3.89	5.88	43.11	66.61
Sep-20	0	0	54,309,119	798	5.924%	0.00	0.000	3.71	5.69	3.71	5.69	43.05	67.17
Oct-20	14,541,264	204.85	56,493,986	818	6.151%	0.28	2.258	2.32	3.65	2.60	5.90	42.58	67.37
Nov-20	10,870,382	148.57	55,127,616	783	6.060%	0.21	1.688	3.02	5.64	3.23	7.33	43.02	69.35
Dec-20	4,066,843	58.7	59,194,459	842	6.507%	0.07	0.632	3.58	6.05	3.65	6.69	42.72	71.09
Jan-21	12,953,060	180.98	72,147,519	1,023	7.923%	0.23	1.907	3.15	4.01	3.38	5.92	42.12	71.32
Feb-21	0	0	71,042,864	1,008	7.802%	0.00	0.000	3.37	3.83	3.37	3.83	41.76	69.83
Mar-21	2,707,362	42.09	73,750,226	1,050	8.084%	0.05	0.421	3.44	4.10	3.50	4.52	41.08	68.69
Max. Rolling 12 Months			**73,750,226**	**1,050**	**8.084%**	**0.329**	**2.816**	**3.95**	**6.05**	**3.95**	**7.33**	**43.55**	**71.32**
Permit Limit			-	-	-	-	-	-	-	-	-	**50.00**	**97.44**
Exceeds Permit Limit?			-	-	-	-	-	-	-	-	-	NO	NO
Excess Emissions (Max. Rolling 12 Months)			-	-	-	-	-	-	-	-	-	**-6.45**	**-26.12**
Excess Emissions (Compliance Year)			-	-	-	-	-	-	-	-	-	**-7.97**	**-35.56**

Sample Calculation:
Capacity Factor = Annual Fuel Usage * HHV natural gas /(Equipment rating * Hours/year)
Capacity Factor = (10 MMcf/yr) * (1,033 BTU/cf) / ((108 MMBtu/hr) * (8,760 hr/yr))
Capacity Factor = 1.09%

RATA Test on 9/22/2020.
Nebraska NOx and CO from CEMS.

New-Indy Oxnard
Nebraska Boiler Operation
Compliance Year: 4/1/2020 to 3/31/2021

Date	Time Online	Operating Hours	Fuel Usage (SCF)
May			
5/4/2020	12:44 PM - 4:59 AM	14.78	1,034,039
5/14/2020	7:26 AM - 12:20 PM, 7:12 PM - 7:00 AM	14.93	936,064
5/15/2020	7:00:00 AM - 18:51 PM	11.85	795,689
June			
6/17/2020	5:37 PM - 7:00 AM	8.3	340,247
6/18/2020	7:00 AM - 7:00 AM	23.02	1,527,273
6/19/2020	7:00 AM - 7:00 AM	24	1,694,141
6/20/2020	7:00 AM - 7:00 AM	24	1,810,080
6/21/2020	7:00 AM - 7:00 AM	24	1,804,827
6/22/2020	7:00 AM - 7:00 AM	24	1,614,900
6/23/2020	7:00 AM - 7:00 AM	24	1,623,879
6/24/2020	7:00 AM - 7:00 AM	24	1,611,216
6/25/2020	7:00 AM - 3:36 PM, 5:25 PM - 7:00 AM	22	1,524,102
6/26/2020	7:00 AM - 6:47 AM, 6:57 AM - 7:00AM	23.83	1,577,716
6/27/2020	7:00 AM - 7:00 AM	24	1,556,195
6/28/2020	7:00 AM - 11:14 PM	16.23	1,164,699
6/29/2020	10:13 AM - 3:59 AM	5.77	278,184
2Q2020	**Total**	**309**	**18,127,459**
July			
7/4/2020	4:15 PM - 7:00 AM	13.8	1,037,106
7/5/2020	7:00 AM - 8:00 PM	13	1,040,361
7/15/2020	4:01 AM -7:00 AM	2.42	143,218
7/15/2020	7:00 AM -7:00 AM	24	1,630,795
7/16/2020	7:00 AM -7:00 AM	24	1,679,286
7/17/2020	7:00 AM -7:00 AM	24	1,844,662
7/18/2020	7:00 AM - 11:54 AM	4.9	342,637
3Q2020	**Total**	**106**	**7,718,065**
Oct			
10/19/2020	1:12 PM - 7:00 AM	17.45	1,148,249
10/20/2020	7:00 AM - 7:00 AM	24	1,671,750
10/21/2020	7:00 AM - 7:00 AM	24	1,716,898
10/22/2020	7:00 AM - 7:00 AM	24	1,708,426
10/23/2020	7:00 AM - 7:00 AM	24	1,758,679
10/24/2020	7:00 AM - 7:00 AM	24	1,805,563
10/25/2020	7:00 AM - 3:42 AM	20.7	1,589,990
10/30/2020	8:18 AM - 7:00 AM	22.7	1,399,035
10/31/2020	7:00 AM - 7:00 AM	24	1,742,672
November			
11/1/2020	7:00 AM - 7:00 AM	24	1,691,660
11/2/2020	7:00 AM - 7:00 AM	24	1,752,246
11/3/2020	7:00 AM - 7:00 AM	24	1,760,755

11/4/2020	7:00 AM - 7:00 AM	24	1,792,929
11/5/2020	7:00 AM - 7:00 AM	24	1,770,931
11/6/2020	7:00 AM - 7:00 AM	24	1,795,404
11/7/2020	7:00 AM - 10:59 AM, 1:16 PM - 1:51 PM	4.57	306,457
December			
12/20/2020	1:34 PM - 7:00 AM	17.2	1,177,508
12/21/2020	7:00 AM - 7:00 AM	24	1,757,073
12/22/2020	7:00 AM - 3:16 PM	8.27	522,811
12/29/2020	9:45 AM - 7:19 PM	9.23	609,451
4Q2020	**Total**	**412.12**	**29,478,489**
January			
1/11/2021	6:38 PM - 7:00 PM, 7:14 PM - 7:19 PM	0.45	16,173
1/12/2021	12:56 PM - 1:03 PM, 2:25 PM -7:00 AM	16.7	895,741
1/13/2021	7:00 AM - 7:00 AM	24	1,810,298
1/14/2021	7:00 AM - 7:00 AM	24	1,751,611
1/15/2021	7:00 AM - 7:00 AM	24	1,782,639
1/16/2021	7:00 AM - 7:00 AM	24	1,816,438
1/17/2021	7:00 AM - 1:170 PM	6.28	433,461
1/20/2021	10:54 AM - 10:59 AM, 11:03 AM - 7:00 AM	20.03	1,523,416
1/21/2021	7:00 AM - 3:31 PM	8.52	673,410
1/24/2021	AM - 5:45 AM, 5:58 AM - 6:16 AM, 6:34 AM - 7:0(	1.13	26,852
1/24/2021	7:00 AM - 9:55 AM	2.92	175,535
1/25/2021	7:50 AM - 7:00 AM	23.17	1,675,476
1/26/2021	7:00 AM - 12:47 PM	5.78	372,009
March			
3/20/2021	9:40 AM - 11:55 AM, 12:07 PM - 7:00 AM	21.13	1,510,295
3/21/2021	7:00 AM - 5:51 PM	10.85	819,318
3/24/2021	7:44 AM - 8:11 AM, 8:28 AM - 4:57 PM	8.93	300,626
3/31/2021	7:51 AM - 8:11 AM, 8:37 AM - 10:28 AM	1.18	77,122
1Q2021	**Total**	**223.07**	**15,660,422**

AIRx Testing Services, Inc.

COMPLIANCE EMISSIONS TESTING
NEW INDY OXNARD
NEBRASKA BOILER - N8E95S1
VCAPCD PTO #0157-281
TESTED ON: OCTOBER 22, 2020

Prepared for:
NEW INDY OXNARD
5936 Perkins Road,
Oxnard, CA 93033

Attn: Robyn Lebrilla

Facility Location:
NEW INDY OXNARD
5936 Perkins Road,
Oxnard, CA 93033

Submitted to:
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, California 93003

Attn: Ed Swede

Prepared by:
AIRx Testing Services, Inc.
2472 Eastman Avenue #34
Ventura, CA 93003

Job No.: 23022

Lab No.: 220-113b

Ken Kennepohl; Senior Engineer

Tom Porter; Vice President of Testing Services

Submitted:
November 3, 2020

AIR TESTING SERVICES, INC.

Table of Contents

AIR Testing Services, Inc.

SUMMARY OF RESULTS
New Indy
Oxnard
Nebraska Boiler
10/22/2020

TABLE 1-1. TEST CONDITIONS

PARAMETER	UNITS	Run #1	Average	Method used
Stack Gas Flowrate	dscfm	12,581	**12,581**	On-Site Measurements
Fuel Usage	dscfm	1078.1	**1078.1**	Rated BTU
Heat Input during Test	MMBtu/hr	67.9	**Unit Description** **Nebraska Boiler** **108 MMBtu/hr.**	

TABLE 1-2. SOURCE TEST RESULTS

POLLUTANT	UNITS	EMISSIONS Run #1	Average	Allowable Limits	District Rule
Nitrogen Oxide ***Actual Mesured***	ppmv ppmv @ 3% O2 lb/hr lb/MMBtu	24.8 27.1 2.23 0.033	**24.8** **27.1** **2.23** **0.033**	- ***40*** - -	PTO
Carbon Monoxide ***10% of Full Scale***	ppmv ppmv @ 3% O2 lb/hr lb/MMBtu	< 5.0 < 5.5 < 0.45 < 0.0066	**< 5.0** **< 5.5** **< 0.45** **< 0.007**	- ***400*** - -	PTO
Carbon Monoxide ***Actual Measured***	ppmv ppmv @ 3% O2 lb/hr lb/MMBtu	0.2 0.2 0.0090 0.00013	**0.2** **0.2** **0.0090** **0.00013**	- ***400*** - -	PTO
Oxygen	%	4.5	**4.5**	-	-
FGR	Hz	**40.22**	**40.22**	-	-

INTRODUCTION

1.0 INTRODUCTION

fired 108 MMBTU Nebraska Boiler N8E95S1. The unit is located at the New Indy Plant at 5936 Perkins Road, in Oxnard. The boiler is used for the generation of steam for specific facility operations. The tests were required to satisfy requirements detailed in PTO #0157-281 and Rule 74.15.E.2.

PROCESS DETAILS: The Nebraska Boiler is rated for 108 MMBtu/hr heat input and exhausts into 44''exhaust stack. The sample ports are three (3) inch males with A and B distances of 84'' and 186'' respectively (1.9 diameters upstream and 4.0 diameters downstream).

CONTINUOUS MONITORS: NOX, CO & O2: Instrumental testing was performed in accordance with CARB Method 100 to determine the concentrations of NOx, CO and O2. A total of 60 minutes of data was obtained while the boiler was operating at a normal (auto) load. A continuous sample of the exhaust gas was taken from the oven stack exhaust through a refrigerated sample gas conditioner and transported under negative pressure through Teflon tubing to a distribution panel. The nitrogen oxides were checked using an API Model 200EH chemiluminescent analyzer. The carbon monoxide was checked with an API Model 300EH NDIR W/GFC analyzer and the oxygen was checked with a Servomex Model 1400 paramagnetic analyzer. Data was collected at one (1) minute intervals and also recorded on a 10" strip chart recorder.

During all tests, the NOx, CO and O2 analyzers were operated on the 50 ppmv (NOx), 50 ppmv (CO) and 10% (O2) scales, respectively.

There were no deviations from CARB Method 100 methodology during the test.

FLOWRATE: Stack flow calculations were performed using fuel consumption data obtained from a dedicated fuel meter and the stack oxygen, in accordance with EPA Method 19.

All reporting and calculations have been performed using VCAPCD standard conditions of 68°F and 29.92 inches of Hg. If you have any questions regarding this test program or report, please contact the undersigned at (805) 644-1099.

Respectfully Submitted
AIRx Testing Services, Inc.

Ken Kennepohl
Senior Engineer

Reviewed by

Tom Porter
Vice President of Testing Services

CC: Ventura County APCD
Attn: Ed Swede

CALCULATIONS

CONTINUOUS EMISSIONS MONITORING - CARB METHOD 1-100

Client : New Indy
Site : Oxnard
Unit : Nebraska Boiler

Date : 10/22/2020
Job# : 23022
Lab# : 220-113B

FIELD DATA

Standard Temperature: 68 ° *F*

Drift Corrected Emissions Data

Actual	NOx	24.81	ppmv
10% FS	CO	< 5.0	ppmv
Actual	CO	0.17	ppmv
	O2	4.52	%

Boiler and Flow Data

Rated Heat Input	108	MMBtu/hr
Fuel F-Factor	8,710	dscf/MM Btu
Q std	12581	dscfm

Equations used;
NOx or CO @ 3% O2 = [ppmv] * (17.9/(20.9-O2%))
Tfact = (10^-6*(29.92/(21.85*(460+Tstd)))*60
lb/hr = [ppmv] * Q * MW * (Tfact)
lb/MMBtu = [ppmv]*MW*F-Factor*(Tfact / 60)*(20.9/(20.9-O2%))
MW NOx = 46, MW CO = 28

CALCULATED EMISSIONS

Actual	NOx @ 3% O2, ppmv	**27.12**
	NOx, lb/hr	**2.23**
	NOx. lb/MMBtu	**0.033**
10% FS	CO @ 3% O2, ppmv	**< 5.5**
	CO, lb/hr	**< 0.45**
	CO lb/MMBtu	**< 0.0066**
Actual	CO @ 3% O2, ppmv	**0.18**
	CO, lb/hr	**0.0090**
	CO, lb/MMBtu	**0.00013**

CALIBRATION ERROR, SYSTEM BIAS, DRIFT CORRECTIONS

Client : New Indy
Site : Oxnard
Unit : Nebraska Boiler

Date : 10/22/2020
Job# : 23022
Lab# : 220-113B

	O2	CO	NOx	Allow.
	Values in ppm except O2 and CO2 in %			Er. (%)
Analyzer Calibration Error				
Instrument Span Range (Range)	10	50	50	
High Calibration Value from Cylinder	8.05	40.4	40.0	
Analyzer Reads (Ca)	8.0	40.5	40.0	
Analyzer Calibration Error (%) = ((Cylinder Value - Ca)/Range)x100	**0.2**	**-0.1**	**0.0**	2
Mid Calibration value from Cylinder	3.98	20.5	20.2	
Analyzer Reads (Ca)	4.0	20.3	20.2	
Analyzer Calibration Error (%) = ((Cylinder Value - Ca)/Range)x100	**-0.1**	**0.5**	**0.0**	2
Zero Calibration Value from Cylinder	0.0	0.0	0.0	
Analyzer Reads (Ca)	0.0	-0.1	0.0	
Analyzer Calibration Error (%) = ((Cylinder Value - Ca)/Range)x100	**-0.1**	**0.2**	**0.0**	2
Calibration Gas (Mid or High) used (Cma)	3.98	20.5	20.2	
Pre-Test Data				
Zero Gas Analyzer Response, (pre-test) (Ca)	0.0	-0.1	0.0	
Zero Gas System Response, (pre-test) (Cib)	0.0	-0.1	0.0	
Sampling System BIAS Check (%) = ((Ca - Cib) / Range) x 100	**0.0**	**-0.1**	**0.1**	5
Calibration Gas Analyzer Response, (pre-test) (Ca)	3.99	20.3	20.2	
Calibration Gas System Response, (pre-test) (Cib)	4.0	20.5	20.2	
Sampling System BIAS Check (%) = ((Ca - Cib) / Range) x 100	**0.1**	**-0.4**	**0.0**	5
Run 1 Data				
Zero Gas System Response, post-run (Cfb1)	0.0	-0.1	0.0	
Calibration Gas System Response, post-run (Cfb1)	4.0	20.4	20.2	
Source Test Average Value (Cavg)	**4.51**	**0.11**	**24.77**	
Zero Drift (%) = ((Cib - Cfb1)/Range)x100	-0.2	0.0	-0.1	3
Calibration Drift (%) = ((Cib - Cfb1)/Range)x100	0.1	0.0	0.1	3
Zero Sampling System BIAS (%) = ((Ca-Cfb1)/Range)x100	-0.2	-0.1	0.0	5
Calibration Sampling System BIAS (%) = ((Ca-Cfb1)/Range)x100	0.2	-0.4	0.1	5
Average Zero Response (Co) = (Cib+Cfb1)/2	0.0	-0.1	0.0	
Average Calibration Response (Cm) = (Cib+Cfb1)/2	4.0	20.4	20.2	
Bias/Drift Corrected Concentration (Cgas) = (Cavg-Co)xCma/(Cm-Co)	**4.52**	**0.17**	**24.8**	

"F" FACTOR EXHAUST GAS FLOWRATE CALCULATION

Client : New Indy
Site : Oxnard
Unit : Nebraska Boiler

Date : 10/22/2020
Job# : 23022
Lab# : 220-113B

"F" Factor, (Natural Gas):	8710	dscf/MMBTU @ 68°F
Standard Temperature, T std:	68	deg. F

	Run #1
Oxygen, %	4.52
Fuel Usage, dscfm	1078.1
MMBTU/min	1.132
Stack Gas Flowrate, dscfm	12581

Equations used:
Fuel Usage = (Final meter reading [cf] - Initial meter reading [cf]) / elapsed time [min]
If Natural Gas: MMBTU/min = (Fuel Usage [dscfm]* 1050 Btu/ft3)/10^6
Stack effluent = "F" Factor * MMBTU/min * (20.9/(20.9-O2))

AIRX Testing Services, Inc.

FIELD DATA & STRIP CHARTS

EMISSIONS TEST - CARB METHOD 1-100

Date: 10/22/2020

**** Test Information ****

Client: New Indy
Site: Oxnard
County VCAPCD
Unit: Nebraska Boiler
Fuel: Natural Gas
Stack: Circular

**** Personnel ****

AIRx: KK-WH
Client: Robyn Lebrilla
APCD: Ed Swede
Job #: 23022
Lab #: 220-113B
Flowrate: Fuel Usage

Run Length (min):	60	Inlet ( )	Outlet( )	Fuel ( )	HC's:	
No. Points:	1 per stack "t"	S.T.( )	E.I.( )	Data( )	H2S ( )	NH3 ( )

	Time	Baro.	Temp.	Weather.
Arrive:	6:30	29.85	65	Clear
Depart:	12:00	29.88	70	Clear

**** Instrument Information ****

Instrument	"On"	Unit#	Make/Model		
Outlet NOx:	1	3	API 200EH		
O2:	1	12	Servomex 1400		
CO:	1	3	API 300EM		
Recorders:			Soltec 6 pen	10	cm/hr

**** Calibration Information ****

	Units	Zero	Span	Range	Gas Cyl.#	Gas Flow
NOx: High	ppmv	0.00	40.0	50	DT0028765	1.0
NOx: Mid	ppmv	0.00	20.2	50	CC724456	1.0
NO2	ppmv	0.00	19.0	50	CC3240	1.0
O2: High	%	0.00	8.05	10	CC160530	0.6
O2: Mid	%	0.00	3.98	10	CC60235	0.6
CO: High	ppmv	0.00	40.4	50	CC111187	1.0
CO: Mid	ppmv	0.00	20.5	50	DT0012296	1.0

**** Recorder Information ****

		Chanl.	Pen Type	Color
Outlet NOx:	ppmv	1	Cont.	Black
O2:	%	2	Cont.	Green
CO:	ppmv	3	Cont.	Purple

EMISSIONS TEST - CARB Method 1-100

Date: 10/22/2020
Client: New Indy
Site: Oxnard

Unit: Nebraska Boiler
Run: 1

Start Calibrations @: 12:20
Finish Calibrations @: 13:29

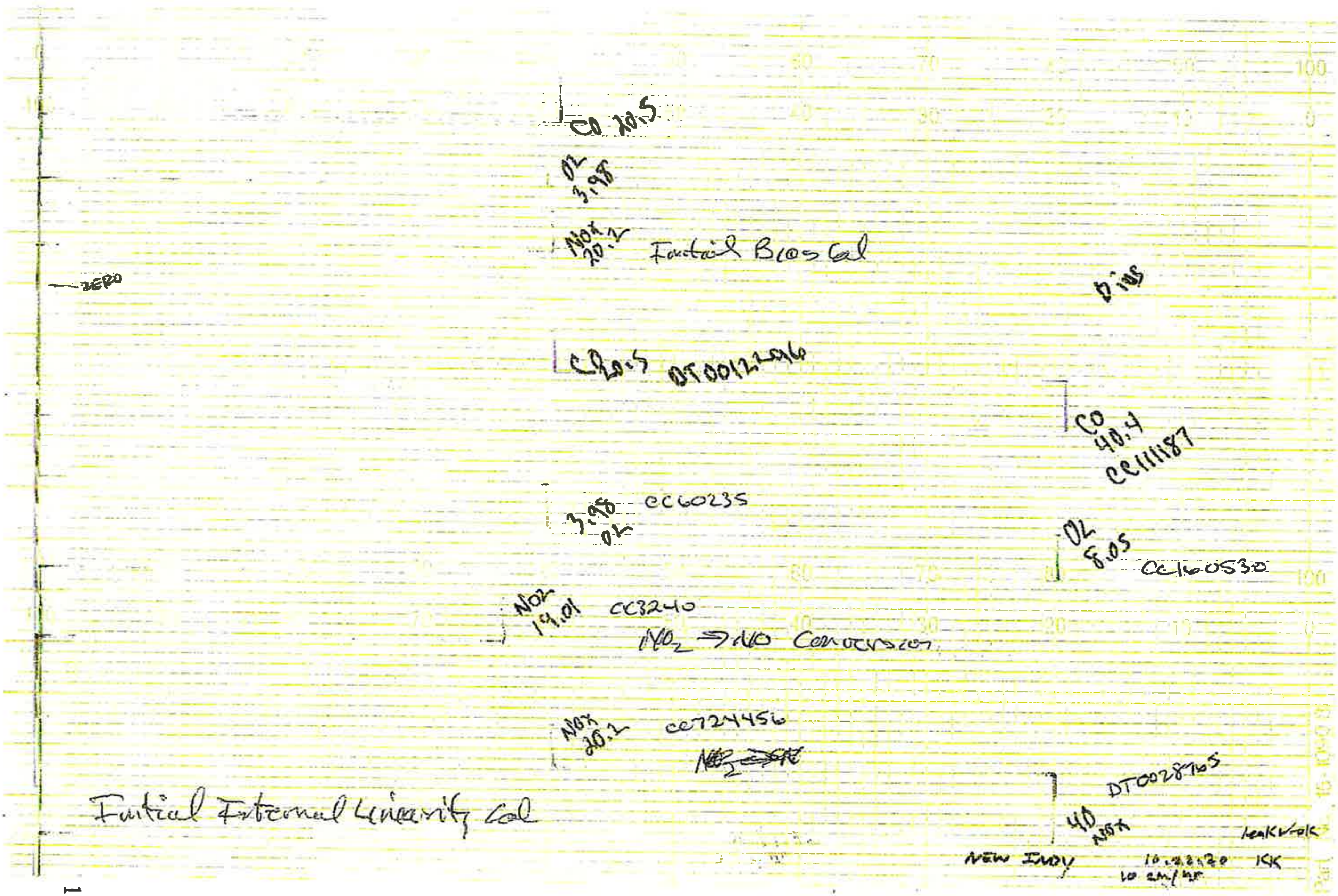
Start Run @: 12:25
End Run @: 13:25

NO2 Conversion

Gas Conc.	19.0
Instr. Resp.	18.3
NO2 Convers.	96.3%

**** Measured Emissions Components ****

Source:	Outlet	Outlet	Outlet			
Component:	NOx	CO	O2			
Units:	ppmv	ppmv	%		NOx, ppm @ 3% O	CO, ppm @ 3% O2
		**** Raw Emission Data ****				
12:25	24.68	0.11	4.63		27.2	0.1
12:26	24.85	0.11	4.46		27.1	0.1
12:27	24.82	0.11	4.45		27.0	0.1
12:28	24.76	0.11	4.44		26.9	0.1
12:29	24.85	0.11	4.60		27.3	0.1
12:30	24.82	0.11	4.77		27.5	0.1
12:31	24.71	0.11	4.29		26.6	0.1
12:32	24.63	0.11	4.49		26.9	0.1
12:33	24.59	0.11	4.49		26.8	0.1
12:34	24.55	0.11	4.49		26.8	0.1
12:35	24.56	0.11	4.31		26.5	0.1
12:36	24.57	0.11	4.47		26.8	0.1
12:37	24.85	0.11	4.60		27.3	0.1
12:38	24.82	0.11	4.77		27.5	0.1
12:39	24.71	0.11	4.29		26.6	0.1
12:40	24.88	0.11	4.25		26.8	0.1
12:41	25.01	0.11	4.68		27.6	0.1
12:42	25.05	0.11	4.42		27.2	0.1
12:43	25.14	0.11	3.98		26.6	0.1
12:44	25.41	0.11	4.53		27.8	0.1
12:45	25.40	0.11	4.59		27.9	0.1
12:46	25.26	0.11	4.55		27.7	0.1
12:47	25.15	0.11	4.48		27.4	0.1
12:48	25.19	0.11	3.95		26.6	0.1
12:49	25.35	0.11	4.41		27.5	0.1
12:50	25.35	0.11	4.56		27.8	0.1
12:51	25.11	0.11	4.55		27.5	0.1
12:52	24.93	0.11	4.52		27.3	0.1
12:53	24.89	0.11	4.24		26.8	0.1
12:54	24.92	0.11	4.41		27.1	0.1
12:55	24.77	0.11	4.82		27.6	0.1
12:56	24.57	0.11	5.44	Port Change:	28.5	0.1
12:57	23.91	0.11	4.49		26.1	0.1
12:58	24.14	0.11	4.77		26.8	0.1
12:59	24.68	0.11	4.63		27.2	0.1
13:00	24.85	0.11	4.46		27.1	0.1
13:01	24.82	0.11	4.45		27.0	0.1
13:02	24.76	0.11	4.44		26.9	0.1
13:03	24.60	0.11	4.44		26.8	0.1
13:04	24.65	0.11	4.49		26.9	0.1
13:05	24.74	0.11	4.95		27.8	0.1
13:06	24.74	0.11	4.49		27.0	0.1
13:07	24.79	0.11	4.27		26.7	0.1
13:08	24.91	0.11	4.77		27.6	0.1
13:09	24.75	0.11	4.57		27.1	0.1
13:10	24.63	0.11	4.49		26.9	0.1
13:11	24.59	0.11	4.49		26.8	0.1
13:12	24.55	0.11	4.49		26.8	0.1
13:13	24.62	0.11	4.66		27.1	0.1
13:14	24.58	0.11	4.79		27.3	0.1
13:15	24.44	0.11	4.31		26.4	0.1
13:16	24.50	0.11	4.49		26.7	0.1
13:17	24.59	0.11	4.76		27.3	0.1
13:18	24.50	0.11	4.32		26.5	0.1
13:19	24.50	0.11	4.31		26.4	0.1
13:20	24.56	0.11	4.31		26.5	0.1
13:21	24.57	0.11	4.47		26.8	0.1
13:22	24.69	0.11	4.83		27.5	0.1
13:23	24.67	0.11	4.30		26.6	0.1
13:24	24.63	0.11	4.28		26.5	0.1
13:25	24.73	0.11	4.81		27.5	0.1
Avg Meas Conc.	**24.77**	**0.11**	**4.51**		**27.1**	**0.1**


CO 20.5
O2 3.98
NOx 20.2
Initial Bias Cal
ZERO
0.105
CO 20.5
DT0012296
CO 40.4
CC111187
3.98 O2
CC60235
O2 8.05
CC160530
NO2 19.01
CC3240
NO2 ⇒ NO Conversion
NOx 20.2
CC724456
Initial Internal Linearity Cal
DT0028705
40 NOx
Leak Check
New Indy
10.28.20
10 cm/hr
KK


Start
Complete
12:25
70°
29.58
CO 0-50
NOx 0-50
O2 0-10
Post Bias Cal
CO 20.5
O2 3.84
NOx 70.2

New-Indy Oxnard, LLC
Nebraska Boiler CEMS Compliance TEST - November 22, 2 10/22/2020 12:25 10/22/2020 13:26 1 m Compliance

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI391.AT		931AI392.AT		931FI374B.ft	
22-Oct-20 12:25:00	28.38	22-Oct-20 12:25:00	26.54	22-Oct-20 12:25:00	4.16	22-Oct-20 12:25:00	69,924
22-Oct-20 12:26:00	27.78	22-Oct-20 12:26:00	25.82	22-Oct-20 12:26:00	4.41	22-Oct-20 12:26:00	70,134
22-Oct-20 12:27:00	27.70	22-Oct-20 12:27:00	25.96	22-Oct-20 12:27:00	4.13	22-Oct-20 12:27:00	71,260
22-Oct-20 12:28:00	28.14	22-Oct-20 12:28:00	26.36	22-Oct-20 12:28:00	4.13	22-Oct-20 12:28:00	71,270
22-Oct-20 12:29:00	28.23	22-Oct-20 12:29:00	26.47	22-Oct-20 12:29:00	4.10	22-Oct-20 12:29:00	71,226
22-Oct-20 12:30:00	28.27	22-Oct-20 12:30:00	26.29	22-Oct-20 12:30:00	4.25	22-Oct-20 12:30:00	69,191
22-Oct-20 12:31:00	28.23	22-Oct-20 12:31:00	26.01	22-Oct-20 12:31:00	4.40	22-Oct-20 12:31:00	70,930
22-Oct-20 12:32:00	28.01	22-Oct-20 12:32:00	26.52	22-Oct-20 12:32:00	3.95	22-Oct-20 12:32:00	71,205
22-Oct-20 12:33:00	28.18	22-Oct-20 12:33:00	25.98	22-Oct-20 12:33:00	4.40	22-Oct-20 12:33:00	68,984
22-Oct-20 12:34:00	28.13	22-Oct-20 12:34:00	25.97	22-Oct-20 12:34:00	4.37	22-Oct-20 12:34:00	70,426
22-Oct-20 12:35:00	28.09	22-Oct-20 12:35:00	26.58	22-Oct-20 12:35:00	3.97	22-Oct-20 12:35:00	72,872
22-Oct-20 12:36:00	28.60	22-Oct-20 12:36:00	26.76	22-Oct-20 12:36:00	4.11	22-Oct-20 12:36:00	70,153
22-Oct-20 12:37:00	28.49	22-Oct-20 12:37:00	26.43	22-Oct-20 12:37:00	4.28	22-Oct-20 12:37:00	70,471
22-Oct-20 12:38:00	28.32	22-Oct-20 12:38:00	26.64	22-Oct-20 12:38:00	4.05	22-Oct-20 12:38:00	72,606
22-Oct-20 12:39:00	28.31	22-Oct-20 12:39:00	27.07	22-Oct-20 12:39:00	3.79	22-Oct-20 12:39:00	71,998
22-Oct-20 12:40:00	28.42	22-Oct-20 12:40:00	26.53	22-Oct-20 12:40:00	4.19	22-Oct-20 12:40:00	70,062
22-Oct-20 12:41:00	28.57	22-Oct-20 12:41:00	26.56	22-Oct-20 12:41:00	4.23	22-Oct-20 12:41:00	70,033
22-Oct-20 12:42:00	28.35	22-Oct-20 12:42:00	26.49	22-Oct-20 12:42:00	4.17	22-Oct-20 12:42:00	70,093
22-Oct-20 12:43:00	28.09	22-Oct-20 12:43:00	26.36	22-Oct-20 12:43:00	4.10	22-Oct-20 12:43:00	71,386
22-Oct-20 12:44:00	28.12	22-Oct-20 12:44:00	26.99	22-Oct-20 12:44:00	3.72	22-Oct-20 12:44:00	72,437
22-Oct-20 12:45:00	28.58	22-Oct-20 12:45:00	26.73	22-Oct-20 12:45:00	4.16	22-Oct-20 12:45:00	70,149
22-Oct-20 12:46:00	28.83	22-Oct-20 12:46:00	26.67	22-Oct-20 12:46:00	4.22	22-Oct-20 12:46:00	70,142
22-Oct-20 12:47:00	28.66	22-Oct-20 12:47:00	26.67	22-Oct-20 12:47:00	4.24	22-Oct-20 12:47:00	70,097
22-Oct-20 12:48:00	28.39	22-Oct-20 12:48:00	26.45	22-Oct-20 12:48:00	4.22	22-Oct-20 12:48:00	70,889
22-Oct-20 12:49:00	28.61	22-Oct-20 12:49:00	26.92	22-Oct-20 12:49:00	4.00	22-Oct-20 12:49:00	71,827
22-Oct-20 12:50:00	28.70	22-Oct-20 12:50:00	26.90	22-Oct-20 12:50:00	4.12	22-Oct-20 12:50:00	69,554
22-Oct-20 12:51:00	28.61	22-Oct-20 12:51:00	26.33	22-Oct-20 12:51:00	4.42	22-Oct-20 12:51:00	69,505
22-Oct-20 12:52:00	28.78	22-Oct-20 12:52:00	26.74	22-Oct-20 12:52:00	4.23	22-Oct-20 12:52:00	71,282
22-Oct-20 12:53:00	28.57	22-Oct-20 12:53:00	26.91	22-Oct-20 12:53:00	4.04	22-Oct-20 12:53:00	70,871
22-Oct-20 12:54:00	29.00	22-Oct-20 12:54:00	26.71	22-Oct-20 12:54:00	4.42	22-Oct-20 12:54:00	69,515
22-Oct-20 12:55:00	28.83	22-Oct-20 12:55:00	26.87	22-Oct-20 12:55:00	4.34	22-Oct-20 12:55:00	70,712
22-Oct-20 12:56:00	28.88	22-Oct-20 12:56:00	26.99	22-Oct-20 12:56:00	4.17	22-Oct-20 12:56:00	70,872
22-Oct-20 12:57:00	28.56	22-Oct-20 12:57:00	26.76	22-Oct-20 12:57:00	4.13	22-Oct-20 12:57:00	70,855
22-Oct-20 12:58:00	28.09	22-Oct-20 12:58:00	26.34	22-Oct-20 12:58:00	4.11	22-Oct-20 12:58:00	70,833
22-Oct-20 12:59:00	28.43	22-Oct-20 12:59:00	26.63	22-Oct-20 12:59:00	4.14	22-Oct-20 12:59:00	70,870
22-Oct-20 13:00:00	28.66	22-Oct-20 13:00:00	26.77	22-Oct-20 13:00:00	4.16	22-Oct-20 13:00:00	69,833
22-Oct-20 13:01:00	28.97	22-Oct-20 13:01:00	26.45	22-Oct-20 13:01:00	4.55	22-Oct-20 13:01:00	68,648
22-Oct-20 13:02:00	28.44	22-Oct-20 13:02:00	26.47	22-Oct-20 13:02:00	4.24	22-Oct-20 13:02:00	71,107
22-Oct-20 13:03:00	28.28	22-Oct-20 13:03:00	26.65	22-Oct-20 13:03:00	4.03	22-Oct-20 13:03:00	71,380
22-Oct-20 13:04:00	28.78	22-Oct-20 13:04:00	26.53	22-Oct-20 13:04:00	4.34	22-Oct-20 13:04:00	68,736
22-Oct-20 13:05:00	28.84	22-Oct-20 13:05:00	26.79	22-Oct-20 13:05:00	4.28	22-Oct-20 13:05:00	70,386
22-Oct-20 13:06:00	28.12	22-Oct-20 13:06:00	26.26	22-Oct-20 13:06:00	4.18	22-Oct-20 13:06:00	70,448
22-Oct-20 13:07:00	28.37	22-Oct-20 13:07:00	26.45	22-Oct-20 13:07:00	4.21	22-Oct-20 13:07:00	70,502
22-Oct-20 13:08:00	27.93	22-Oct-20 13:08:00	26.04	22-Oct-20 13:08:00	4.21	22-Oct-20 13:08:00	70,498
22-Oct-20 13:09:00	28.76	22-Oct-20 13:09:00	26.83	22-Oct-20 13:09:00	4.20	22-Oct-20 13:09:00	69,133
22-Oct-20 13:10:00	28.45	22-Oct-20 13:10:00	26.20	22-Oct-20 13:10:00	4.42	22-Oct-20 13:10:00	69,247
22-Oct-20 13:11:00	27.90	22-Oct-20 13:11:00	26.25	22-Oct-20 13:11:00	4.06	22-Oct-20 13:11:00	71,059
22-Oct-20 13:12:00	28.04	22-Oct-20 13:12:00	26.40	22-Oct-20 13:12:00	4.04	22-Oct-20 13:12:00	69,782
22-Oct-20 13:13:00	28.88	22-Oct-20 13:13:00	26.59	22-Oct-20 13:13:00	4.42	22-Oct-20 13:13:00	69,300
22-Oct-20 13:14:00	28.60	22-Oct-20 13:14:00	26.67	22-Oct-20 13:14:00	4.08	22-Oct-20 13:14:00	71,124
22-Oct-20 13:15:00	28.08	22-Oct-20 13:15:00	26.50	22-Oct-20 13:15:00	4.01	22-Oct-20 13:15:00	71,180
22-Oct-20 13:16:00	27.96	22-Oct-20 13:16:00	26.33	22-Oct-20 13:16:00	4.04	22-Oct-20 13:16:00	71,216
22-Oct-20 13:17:00	28.14	22-Oct-20 13:17:00	26.48	22-Oct-20 13:17:00	4.04	22-Oct-20 13:17:00	70,167
22-Oct-20 13:18:00	28.41	22-Oct-20 13:18:00	26.11	22-Oct-20 13:18:00	4.45	22-Oct-20 13:18:00	68,753
22-Oct-20 13:19:00	28.27	22-Oct-20 13:19:00	26.47	22-Oct-20 13:19:00	4.14	22-Oct-20 13:19:00	71,093
22-Oct-20 13:20:00	28.40	22-Oct-20 13:20:00	26.83	22-Oct-20 13:20:00	3.99	22-Oct-20 13:20:00	71,065
22-Oct-20 13:21:00	28.32	22-Oct-20 13:21:00	26.34	22-Oct-20 13:21:00	4.25	22-Oct-20 13:21:00	68,352
22-Oct-20 13:22:00	28.53	22-Oct-20 13:22:00	26.47	22-Oct-20 13:22:00	4.29	22-Oct-20 13:22:00	69,984
22-Oct-20 13:23:00	28.26	22-Oct-20 13:23:00	26.68	22-Oct-20 13:23:00	4.00	22-Oct-20 13:23:00	71,900
22-Oct-20 13:24:00	27.95	22-Oct-20 13:24:00	26.55	22-Oct-20 13:24:00	3.90	22-Oct-20 13:24:00	70,520
22-Oct-20 13:25:00	28.86	22-Oct-20 13:25:00	26.64	22-Oct-20 13:25:00	4.38	22-Oct-20 13:25:00	69,001
Average Stack NOx, ppm (3% O2)	**28.26**	**Average Stack Raw NOx, ppm**	**26.43**	**Average Stack O2 (%)**	**4.15**	**Average Gas Flow (SCFH)**	**70,770**

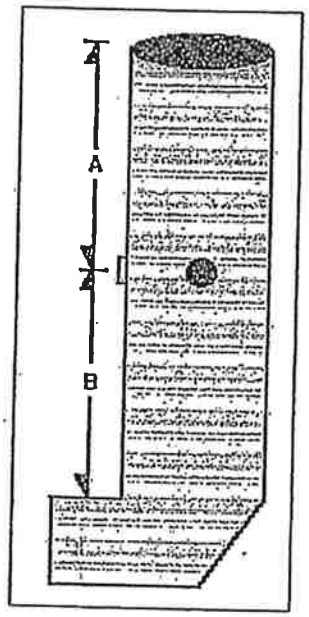
AIR Testing Inc.

BOILER DATA SHEET

Client: New Indy
Site: OXNARD
Unit: Nebraska Boiler

Date: 10.22.20
Job #: 23002
Lab #: 220-113

Make: Nebraska
S/N: 20-1983
Model NSE9551
BTU/hr Rating 108 MMBTU/hr
Fuel Type: NG
FGR Equipped: Yes



Stack Diameter: 44"
"A" Distance: 7'
"B" Distance: 15.5'
Port Size: 2.5"
M or F: F
Offset: 3"

Boiler Load: Run 1: Normal Run 2: Run 3: % of Rating

FGR Setting: Run 1: 40.2 Hz Run 2: Run 3:

Notes:

AIRX TESTING SERVICES Inc.

Fuel Meter Data Sheet

Client:	New Indy	Date:	10-22-20
Site:	Oxnard	Client #:	22030
Unit:	Nebraska Boiler	Lab #:	220-113

Serial #:	71187		
Manufacturer:	Rosemount		
Type of fuel:	Nat Gas (X)	Diesel ( )	Other ( )
Read out in units of:	ccf ( )	Gal ( )	Btu ( )
	mcf ( )	L ( )	Therm ( )
	m3 ( )	ft3 ( )	SCFH (X)
Temperature corrected:	Yes	( ) No ( )	Cor. Temp:
Pressure corrected:	Yes	( ) No ( )	Cor. Pres.:

Run #1 SCFH

Start Time:	12:25	Stop Time:	13:25
Meter Reading:	65368.2	Meter Reading:	63499.4
Fuel temp.:	____ °F	Elapsed Time:	60 mins
Fuel pres.:	____ psi	Fuel Usage:	Avg = 64683.8 SCFH / 60 = 1078.06 SCFM (AVG)

Run #2

Start Time:	____	Stop Time:	____
Meter Reading:	____	Meter Reading:	____
Fuel temp.:	____ °F	Elapsed Time:	____
Fuel pres.:	____ psi	Fuel Usage:	____

Run #3

Start Time:	____	Stop Time:	____
Meter Reading:	____	Meter Reading:	____
Fuel temp.:	____ °F	Elapsed Time:	____
Fuel pres.:	____ psi	Fuel Usage:	____

FGR 40.22 NZ

INSTRUMENT INFORMATION

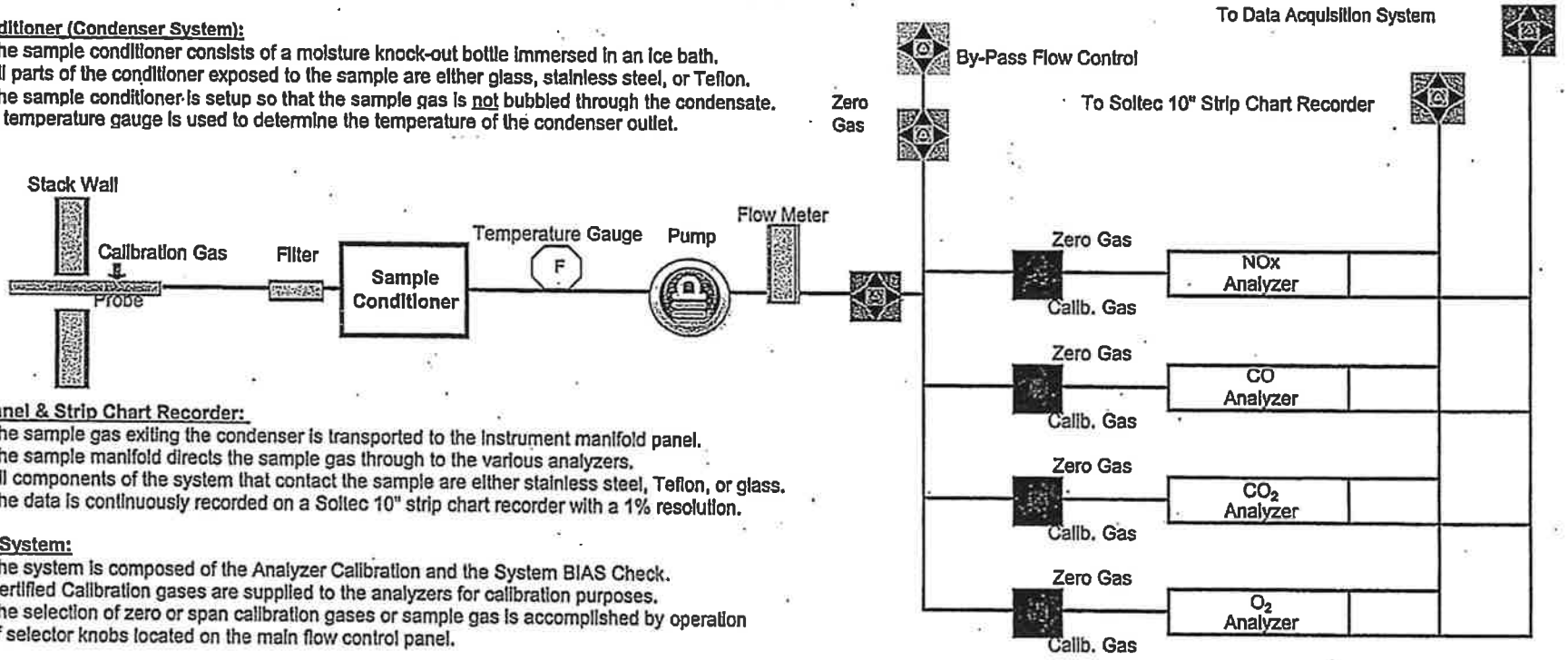
Method 100 – Sample Train Assembly

Probe:

1. AIRx Testing Services, Inc. uses a stainless steel sampling probe.
2. The probe is connected to the sample conditioner using a heated (if necessary) Teflon sampling line.

Sample Conditioner (Condenser System):

1. The sample conditioner consists of a moisture knock-out bottle immersed in an ice bath.
2. All parts of the conditioner exposed to the sample are either glass, stainless steel, or Teflon.
3. The sample conditioner is setup so that the sample gas is not bubbled through the condensate.
4. A temperature gauge is used to determine the temperature of the condenser outlet.



Manifold Panel & Strip Chart Recorder:

1. The sample gas exiting the condenser is transported to the instrument manifold panel.
2. The sample manifold directs the sample gas through to the various analyzers.
3. All components of the system that contact the sample are either stainless steel, Teflon, or glass.
4. The data is continuously recorded on a Soltec 10" strip chart recorder with a 1% resolution.

Calibration System:

1. The system is composed of the Analyzer Calibration and the System BIAS Check.
2. Certified Calibration gases are supplied to the analyzers for calibration purposes.
3. The selection of zero or span calibration gases or sample gas is accomplished by operation of selector knobs located on the main flow control panel.

Nitrogen Oxides: – Chemiluminescent Analyzer: Based on the chemiluminescent reaction of NO and ozone to form NO_2 in an excited state. Light emission is monitored through an optical filter by a high sensitivity photomultiplier tube, the output of which is electronically processed so it is linearly proportional to the NO concentration. The output is in units of ppmv.

Carbon Monoxide – Non-Dispersive Infrared (NDIR) Analyzer: Radiation from an infrared source is passed through a narrow band-pass filter and a multiple optical pass sample cell where absorption by the sample gas occurs. The infrared radiation exits the sample cell and falls on a solid state infrared detector. The output is in units of ppmv.

Oxygen – Electrochemical Analyzer: Oxygen in the flue gas sample diffuses through a Teflon membrane and is reduced on the surface of the cathode. A corresponding oxidation occurs at the anode and an electric current proportional to the concentration of oxygen is produced. The output is in units of percent O_2 by volume.

Carbon Dioxide – Non Dispersive Infrared (NDIR) Analyzer: The instrument measures the differential in infrared energy absorbed from energy beams passed through a reference cell (containing a gas selected to have minimal absorption of infrared energy in the wavelength absorbed by CO_2) and a sample cell through which the sample gas flows continuously. The output is in units of percent CO_2 by volume.

SOURCE EMISSION INSTRUMENTATION LIST

OXIDES OF NITROGEN

Unit No. - 1: Manufacturer: API Model No.: 200 EH Serial No.: 233 Method: Chemiluminescence Range (ppmv) 0-5000	**Unit No. - 6:** Manufacturer: API Model No.: 200 A Serial No.: 1013 Method: Chemiluminescence Range (ppmv) 0-50
Unit No. - 2: Manufacturer: API Model No.: 200 EH Serial No.: 234 Method: Chemiluminescence Range (ppmv) 0-5000	**Unit No. - 7:** Manufacturer: Thermo Environmental (TECO) Model No.: 10AR Serial No.: 25559-221 Method: Chemiluminescence Range (ppmv) 0-2.5, 10, 25, 100, 250, 1000, 2500, 10000
Unit No. - 3: Manufacturer: API Model No.: 200 EH Serial No.: 109 Method: Chemiluminescence Range (ppmv) 0-5000	**Unit No. - 8:** Manufacturer: Thermo Environmental (TECO) Model No.: 10AR Serial No.: 38586-258 Method: Chemiluminescence Range (ppmv) 0-2.5, 10, 25, 100, 250, 1000, 2500, 10000
Unit No. - 4: Manufacturer: API Model No.: 200 EH Serial No.: 442 Method: Chemiluminescence Range (ppmv) 0-5000	
Unit No. - 5: Manufacturer: API Model No.: 200 EH Serial No.: 441 Method: Chemiluminescence Range (ppmv) 0-5000	

AIR X TESTING

SOURCE EMISSION INSTRUMENTATION LIST

CARBON MONOXIDE

Unit No. - 1: Manufacturer: Model No.: Serial No.: Method: Range (ppmv	 API 300 EM 239 NDIR/GFC 0-5, 10, 25, 50, 100, 250, 500, 1000, 2500, 5000	**Unit No. - 2:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv	 API 300 EM 240 NDIR/GFC 0-5, 10, 25, 50, 100, 250, 500, 1000, 2500, 5000
Unit No. - 3: Manufacturer: Model No.: Serial No.: Method: Range (ppmv	 API 300 EM 104 NDIR/GFC 0-5, 10, 25, 50, 100, 250, 500, 1000, 2500, 5000	**Unit No - 5:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48H 25184-219 NDIR/GFC 0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000
Unit No. - 6: Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48H 29031-233 NDIR/GFC 0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000	**Unit No. - 7:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Siemens Ultramat 21p AO4-254 NDIR 0-300
Unit No. - 10: Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48H 38391-257 NDIR/GFC 0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000	**Unit No. - 11:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48H 35226-249 NDIR/GFC 0-50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000
Unit No - 13: Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48 48-15970-159 NDIR/GFC 0-1, 2, 5, 10, 20, 50, 100, 200, 500, 1000	**Unit No - 14:** Manufacturer: Model No.: Serial No.: Method: Range (ppmv)	 Thermo Environmental (TECO) 48 48-23925-213 NDIR/GFC 0-1, 2, 5, 10, 20, 50, 100, 200, 500, 1000

SOURCE EMISSION INSTRUMENTATION LIST

OXYGEN

Unit No. - 5:	
Manufacturer:	California Analytical Instruments
Model No.:	110P
Serial No.:	T02034
Method:	Paramagnetic
Range (%)	0-5, 10, 25

Unit No. - 7:	
Manufacturer:	Teledyne
Model No.:	320-AX
Serial No.:	108742
Method:	Electrochemical
Range (%)	0-5, 10, 25

Unit No. - 9:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B701/730
Method:	Paramagnetic
Range (%)	0-25, 100

Unit No. - 10:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B308
Method:	Paramagnetic
Range (%)	0-25

Unit No. - 11:	
Manufacturer:	Teledyne
Model No.:	320-A
Serial No.:	111211
Method:	Electrochemical
Range (%)	0-5, 10, 25

Unit No. - 12:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B7103
Method:	Paramagnetic
Range (%)	0-25, 100

Unit No. - 13:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	X1420/B707
Method:	Paramagnetic
Range (%)	0-25

AIR TESTING

QUALITY ASSURANCE

PRAXAIR
Making our planet more productive

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles, CA 90058
Tel: 323-585-2154
Fax: 714-542-6689

Customer & Order Information:

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD,
OXNARD, CA 93030-7224

Praxair Order Number: **71378203**
Customer PO Number: **79369772**

Certificate Issuance Date: **7/10/2020**
Certification Date: **7/10/2020**
Lot Number: **70086018201**
Part Number: **NI NX20MP-AS**
DocNumber: **232651**
Expiration Date: **7/10/2021**

CERTIFICATE OF ANALYSIS
Primary Standard

Component	Requested Concentration (Molar)	Certified Concentration (Molar)	Analytical Reference	Analytical Uncertainty
Nitrogen dioxide (as NOx)	**20 ppm**	**19.01 ppm**	**1**	**± 1%**
Nitrogen	**Balance**	**Balance**		

Cylinder Style: **AS**
Cylinder Pressure @ 70 F: **2000 psig**
Cylinder Volume: **142 ft3**
Valve Outlet Connection: **CGA 660**
Cylinder Number(s): **CC3240**

Fill Date: **6/30/2020**
Analysis Date: **7/10/2020**

Filling Method: **Gravimetric**

Comments: **This mixture contains 2% Oxygen.**

Analyst: **Leeanna Flores**

Approved Signer: **Henry Koung**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	MKS MG2031 - FTIR

The gas calibration cylinder standard prepared by Praxair Distribution, Inc. is considered a certified standard. It is prepared by gravimetric, volumetric, or partial pressure techniques. The calibration standard provided is certified against Praxair Distribution, Inc. Reference Materials which are traceable to the International System of Units (SI) through either weights traceable to the National Institute of Standards and Technology (NIST) or Measurement Canada, or through NIST Standard Reference Materials or equivalent where available.

Note: All expressions for concentration (e.g., % or ppm) are for gas phase, by volume (e.g., ppmv) unless otherwise noted. Analytical uncertainty is expressed as a Relative % unless otherwise noted.

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DocNumber: 253580

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-586-2154
Fax: 714-542-6689
PGVP ID: F22019

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Certificate Issuance Date: 06/27/2019
Praxair Order Number: 70998288
Part Number: NI NO2ME-AS
Customer PO Number: 78981976

Fill Date: 06/07/2019
Lot Number: 70086915805
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 lf3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	06/27/2022	NIST Traceable
Cylinder Number:	CC724456	Expanded Uncertainty
20.1 ppm	Nitric oxide	± 0.5 %
Balance	Nitrogen	

For Reference Only: *NOx 20.2 ppm*

Certification Information: *Certification Date:* 06/27/2019 *Term:* 36 Months *Expiration Date:* 06/27/2022

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.
Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. *Component:* Nitric oxide

Requested Concentration: 20 ppm
Certified Concentration: 20.1 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 06/10/2019

First Analysis Data:				Date	06/20/2019
Z: 0	R: 19.9	C: 20	Conc:	20	
R: 19.88	Z: 0	C: 20.1	Conc:	20.1	
Z: 0	C: 20.1	R: 19.91	Conc:	20.1	
UOM: ppm		Mean Test Assay:		20.1	ppm

Second Analysis Data:				Date	06/27/2019
Z: 0	R: 19.9	C: 20.1	Conc:	20.1	
R: 19.89	Z: 0	C: 20.2	Conc:	20.2	
Z: 0	C: 20.1	R: 19.89	Conc:	20.1	
UOM: ppm		Mean Test Assay:		20.1	ppm

Reference Standard: Type / Cylinder #: GMIS / CC2919
Concentration / Uncertainty: 19.90 ppm ±0.504%
Expiration Date: 03/28/2022
Traceable to: SRM # / Sample # / Cylinder #: APEX1161149 / NA / APEX1161149
SRM Concentration / Uncertainty: 20.03 ppm / ±0.10 ppm
SRM Expiration Date: 01/27/2020

Analyzed By Henry Koung

Certified By Leeanna Flores

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DocNumber: 224275

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-586-2154
Fax: 714-542-6689
PGVP ID: F22018

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Certificate Modification Date: 09/18/2018
Praxair Order Number: 70717073
Part Number: NI NO40ME-AS

Fill Date: 09/05/2018
Lot Number: 70086824602
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	09/18/2021	NIST Traceable
Cylinder Number:	DT0028765	Expanded Uncertainty
39.9 ppm	Nitric oxide	± 0.8 %
Balance	Nitrogen	

For Reference Only: *NOx 40.0 ppm*

Certification Information: *Certification Date:* 09/18/2018 *Term:* 36 Months *Expiration Date:* 09/18/2021

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.
Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. *Component:* Nitric oxide

Requested Concentration: 40 ppm
Certified Concentration: 39.9 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 09/10/2018

Reference Standard: Type / Cylinder #: GMIS / CC505947
Concentration / Uncertainty: 49.44 ppm ±0.714%
Expiration Date: 08/08/2021
Traceable to: SRM # / Sample # / Cylinder #: 1683b / 45.-V-37 / CAL017668
SRM Concentration / Uncertainty: 48.79 / ±0.34 ppm
SRM Expiration Date: 03/25/2019

First Analysis Data:					Date 09/11/2018
Z: 0	R: 49.4	C: 39.8	Conc: 39.8		
R: 49.4	Z: 0	C: 39.9	Conc: 39.9		
Z: 0	C: 39.9	R: 49.4	Conc: 39.9		
UOM: ppm		Mean Test Assay:	39.9	ppm	

Second Analysis Data:					Date 09/18/2018
Z: 0	R: 49.4	C: 39.7	Conc: 39.7		
R: 49.4	Z: 0	C: 39.9	Conc: 39.9		
Z: 0	C: 39.9	R: 49.4	Conc: 39.9		
UOM: ppm		Mean Test Assay:	39.9	ppm	

Analyzed By Henry Koung

Certified By Amelia Real

PRAXAIR

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Tel: (323) 585-2154 Fax:(714) 542-6689
PGVPID: F22017

DocNumber: 000105588

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Praxair Order Number: 70207599
Customer P. O. Number:
Customer Reference Number:

Fill Date: 2/27/2017
Part Number: NI CD8O3E-AS
Lot Number: 109705811
Cylinder Style & Outlet: AS CGA 580
Cylinder Pressure & Volume: 2000 psig 140 cu ft

Certified Concentration:

Expiration Date:	3/8/2025	NIST Traceable
Cylinder Number:	CC60235	Analytical Uncertainty:
7.98 %	CARBON DIOXIDE	± 0.4 %
3.98 %	OXYGEN	± 0.4 %
Balance	NITROGEN	

Certification Information: *Certification Date:* 3/8/2017 *Term:* 96 Months *Expiration Date:* 3/8/2025

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Do Not Use this Standard if Pressure is less than 100 PSIG.

CO2 responses have been corrected for Oxygen IR Broadening effect. O2 responses have been corrected for CO2 interference.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. Component: CARBON DIOXIDE

Requested Concentration: 8 %
Certified Concentration: 7.98 %
Instrument Used: Horiba VIA-510 S/N 574763031
Analytical Method: NDIR
Last Multipoint Calibration: 2/13/2017

First Analysis Data:						Date: 3/8/2017
Z: 0	R: 6.98	C: 7.97	Conc: 7.985			
R: 6.98	Z: 0	C: 7.97	Conc: 7.985			
Z: 0	C: 7.97	R: 7	Conc: 7.985			
UOM: %		Mean Test Assay: 7.985 %				

Reference Standard Type: GMIS
Ref. Std. Cylinder # : DT0008914
Ref. Std. Conc: 7.00 %
Ref. Std. Traceable to SRM # : 1674b
SRM Sample # : 7-H-07
SRM Cylinder # : FF10631

Second Analysis Data:						Date:
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: %		Mean Test Assay: 0 %				

2. Component: OXYGEN

Requested Concentration: 4 %
Certified Concentration: 3.98 %
Instrument Used: OXYMAT 5E
Analytical Method: PARAMAGNETIC
Last Multipoint Calibration: 3/3/2017

First Analysis Data:						Date: 3/8/2017
Z: 0	R: 5.01	C: 3.97	Conc: 3.975			
R: 5	Z: 0	C: 3.97	Conc: 3.975			
Z: 0	C: 3.97	R: 5	Conc: 3.975			
UOM: %		Mean Test Assay: 3.975 %				

Reference Standard Type: GMIS
Ref. Std. Cylinder # : CC244935
Ref. Std. Conc: 5.01%
Ref. Std. Traceable to SRM # : 2658a
SRM Sample # : 72-D-28
SRM Cylinder # : CAL016862

Second Analysis Data:						Date:
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: %		Mean Test Assay: 0 %				

Analyzed by:

Ying Yu

Ying Yu

Certified by:

Nassim Haddad

AIR LIQUIDE Air Liquide America Specialty Gases LLC

Intertek

RATA CLASS

Guaranteed +/- 1% Accuracy

8832 DICE ROAD, SANTA FE SPRINGS, CA 90670-2516 Phone: 800-323-2212 Fax: 562-464-5262

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory - PGVP Vendor ID: A52013

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
8832 DICE ROAD
SANTA FE SPRINGS, CA 90670-2515

Document # : 51261426-004
P.O. No.: AIRX

Customer

ALHC-HCF-FRESNO-MEDGAS (LOC 24337)
3703 BAGLEY AVENUE
TRANSFER ACCOUNT
FRESNO CA 93725
US

ANALYTICAL INFORMATION Gas Type : CO2,O2,BALN

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1.
EPA/600/R-12/531, May 2012. Do not use this standard if pressure is less than 100 psig.

Cylinder Number: CC160530
Cylinder Pressure: 2000 PSIG
Certification Date: 02Jul2013
Exp. Date: 03Jul2021
Batch No: SB0073261

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY ABSOLUTE / RELATIVE
CARBON DIOXIDE	20.1 %	.13 % / .6 %
OXYGEN	8.05 %	.06 % / .7 %
NITROGEN	BALANCE	

TRACEABILITY

REFERENCE STANDARD

COMPONENT	CONCENTRATION	UNCERTAINTY	CYLINDER	TYPE/SRM SAMPLE	EXP. DATE
CARBON DIOXIDE	17.87 %	0.110 %	K026459	NTRM 1800/	01Mar2019
OXYGEN	10.03 %	0.070 %	K027603	NTRM 2658/	01Feb2016

ANALYTICAL METHOD

1st Analysis: 02Jul2013

COMPONENT	INSTRUMENT	ANALYTICAL PRINCIPLE	CALIBRATED	CONCENTRATION
CARBON DIOXIDE	GC-TCD/HP 5890 II/3140A38374	GC	26Jun2013	20.11 %
OXYGEN	GC-TCD/HP 5890 II/3140A38374	GC	22Jun2013	8.051 %

APPROVED BY: DC

PRAXAIR

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Tel: (323) 585-2154 Fax:(714) 542-6689
PGVPID: F22016

DocNumber: 000094146

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

PRAXAIR WHSE OXNARD CA
455 E WOOLEY RD
OXNARD CA 930300

Praxair Order Number: 34250102
Customer P. O. Number: 06017500
Customer Reference Number:

Fill Date: 5/5/2016
Part Number: NI CO20ME-AS
Lot Number: 108612606
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure & Volume: 2000 psig 140 cu. ft.

Certified Concentration:

Expiration Date: 5/13/2024		Cylinder Number: DT0012296	NIST Traceable Analytical Uncertainty:
20.5	ppm	CARBON MONOXIDE	± 0.4 %
Balance		NITROGEN	

Certification Information: *Certification Date:* 5/13/2016 *Term:* 96 Months *Expiration Date:* 5/13/2024

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. Component: CARBON MONOXIDE

Requested Concentration: 20 ppm
Certified Concentration: 20.5 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 5/3/2016

First Analysis Data:						Date: 5/13/2016
Z: 0	R: 25	C: 20.4	Conc: 20.351			
R: 25.1	Z: 0	C: 20.5	Conc: 20.451			
Z: 0	C: 20.6	R: 25.2	Conc: 20.551			
UOM: ppm			Mean Test Assay: 20.451 ppm			

Reference Standard Type: GMIS
Ref. Std. Cylinder # : CC341229
Ref. Std. Conc: 25.04 ppm
Ref. Std. Traceable to SRM # : 2635a
SRM Sample # : 66-E-34
SRM Cylinder # : FF10666

Second Analysis Data:						Date:
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: ppm			Mean Test Assay: 0 ppm			

Analyzed by: Ying Yu

Certified by: Maria Soberanis

PRAXAIR

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Tel: (323) 585-2154 Fax:(714) 542-6689
PGVPID: F22016

DocNumber: 000094152

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

PRAXAIR WHSE OXNARD CA
455 E WOOLEY RD
OXNARD CA 930300

Praxair Order Number: 34250113
Customer P. O. Number: 06017502
Customer Reference Number:

Fill Date: 5/5/2016
Part Number: NI CO40ME-AS
Lot Number: 109612607
Cylinder Style & Outlet: AS CGA 350
Cylinder Pressure & Volume: 2000 psig 140 cu. ft.

Certified Concentration:

Expiration Date:	5/13/2024		NIST Traceable
Cylinder Number:	CC111187		Analytical Uncertainty:
40.4	ppm	CARBON MONOXIDE	± 0.8 %
Balance		NITROGEN	

Certification Information: *Certification Date:* 5/13/2016 *Term:* 96 Months *Expiration Date:* 5/13/2024

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. Component: CARBON MONOXIDE

Requested Concentration: 40 ppm
Certified Concentration: 40.4 ppm
Instrument Used: Horiba VIA-510 S/N 576876015
Analytical Method: NDIR
Last Multipoint Calibration: 5/13/2016

First Analysis Data:						Date: 5/13/2016
Z: 0	R: 25	C: 40.2	Conc: 40.589			
R: 24.7	Z: 0	C: 40	Conc: 40.387			
Z: 0	C: 39.9	R: 24.7	Conc: 40.266			
UOM: ppm		Mean Test Assay:	40.421 ppm			

Reference Standard Type: GMIS
Ref. Std. Cylinder # : CC341229
Ref. Std. Conc: 25.04 ppm
Ref. Std. Traceable to SRM # : 2635a
SRM Sample # : 58-E-34
SRM Cylinder # : FF10666

Second Analysis Data:						Date:
Z: 0	R: 0	C: 0	Conc: 0			
R: 0	Z: 0	C: 0	Conc: 0			
Z: 0	C: 0	R: 0	Conc: 0			
UOM: ppm		Mean Test Assay:	0 ppm			

Analyzed by: Maria Soberanis

Certified by: Ying Yu

AIRx Testing Services, Inc.

RATA EMISSIONS TESTING
NEW INDY OXNARD
N8E9551 – NEBRASKA BOILER
NOx Analyzer - Horiba VA-5000 (New)
VCAPCD PTO #0157-281
Test Date: October 21, 2020

Prepared for:
NEW INDY OXNARD
5936 Perkins Road,
Oxnard, CA 93033

Attn: Robyn Lebrilla

Submitted to:
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, California 93003

Attn: Ed Swede

Prepared by:
AIRx Testing Services, Inc.
2472 Eastman Avenue #34
Ventura, CA 93003

Job No.: 23022

Lab No.: 220-112

Ken Kennepohl; Senior Engineer

Tom Porter; Vice President of Testing Services

Submitted:
November 3, 2020

AIRX Testing Services, Inc.

Table of Contents

AIRx Testing Services, Inc.

New Indy
Nebraska Boiler New NOx
10/21/2020

CEMS RATA
Calculations

Run	AIRx Testing - Reference Method		
	NOx ppmv	O2 Dry %	NOx ppmv @ 3% O2
1	23.37	4.21	25.07
2	23.80	4.28	25.63
3	24.36	4.50	26.58
4	23.96	4.45	26.07
5	23.90	4.57	26.19
6	23.74	4.67	26.19
7	23.33	4.70	25.78
8	23.02	4.73	25.48
9	22.37	4.70	24.71

Run	New Indy	Nebraska	CEMS
	NOx ppmv	O2 Dry %	NOx ppmv @ 3%
1	24.11	4.73	26.69
2	24.11	4.78	26.78
3	24.19	4.82	26.94
4	23.98	4.89	26.81
5	24.27	4.92	27.18
6	24.40	4.94	27.37
7	24.26	4.83	27.03
8	24.33	4.77	27.01
9	24.21	4.82	26.95

Run	Reference Method - CEM, Difference		
	NOx ppmv	O2 Dry %	NOx ppmv @ 3%
1	-0.74	-0.52	-1.62
2	-0.31	-0.50	-1.15
3	0.17	-0.32	-0.36
4	-0.02	-0.44	-0.74
5	-0.37	-0.35	-0.99
6	-0.66	-0.27	-1.18
7	-0.93	-0.13	-1.25
8	-1.31	-0.04	-1.53
9	-1.84	-0.12	-2.24

Arithmetic Mean, d	-0.67	-0.30	-1.23
Standard Deviation, Sd	0.63	0.17	0.54
Confidence Coefficient, CC	0.49	0.13	0.41
Avg Reference Method, RM	23.54	4.53	25.74
Relative Accuracy, RA	**4.91**	**9.55**	**6.38**

NOTE: Calculations based on "Code of Federal Regulations 40", 1988, Part 60, Appendix B, Specification 2, p. 939.

INTRODUCTION

1.0 INTRODUCTION

On October 21, 2020 AIRx Testing Services conducted the RATA source test on a natural gas fired 108/MMBTU Nebraska Boiler N8E9551. The unit is located at the New Indy Plant at 5936 Perkins Road, in Oxnard. The boiler is used for the generation of steam for specific facility operations. The testing was required to satisfy requirements detailed in PTO #0157-281.

The objective of the testing was to determine the relative accuracy (RATA) of the facility's boiler CEM equipment. Operational data reported by New Indy personnel included NOx readings from their new Horiba VA-5000 analyzer and O2 readings from their Rosemont analyzer.

PROCESS DETAILS: The Nebraska Boiler is rated for 108 MMBtu/hr heat input and exhausts into 44''exhaust stack. The sample was taken off the existing facility CEM system NOx/O2 probe with it being located at A and B distances of 360'' and 26'' respectively (8.2 diameters upstream and 0.6 diameters downstream).

CEM DATA: CEM data was recorded by the Data Acquisition System (DAS) during the test program in the form of one (1) minute averages. The one (1) minute data readings were then printed out and averaged to obtain data for comparison to New Indy's CEM data. The facility CEM data was obtained by plant personnel during the test program and provided to the test team. The CEM data monitored NOx and O2 concentrations and also correcting the NOx to 3% oxygen.

CONTINUOUS MONITORS: NOx and O2 sampling utilized a stainless steel sampling probe connected with a Teflon sampling line to a sample conditioner. The dry gases were then transported through a Teflon line to the sample gas flow panel for distribution to the individual analyzers. Three (3) 63 minute sampling runs for NOx and O2 were performed in accordance with EPA Method 7e and CARB Method 100. NOx measurements were made utilizing an API 200EH chemiluminescent analyzer. Oxygen concentration was measured utilizing a Servomex Model 1400 paramagnetic analyzer. Initial three (3) point calibrations were performed on the analyzers. Subsequent calibrations were performed through the sample system probe tip (Bias checks). All initial bias checks correlated with the initial instrument calibrations to within 2% of analyzer range. Bias calibrations were performed before and after each test run and used to correct the emissions data for any analyzer drift. All monitor calibrations were performed with EPA Protocol 1 calibration gases.

During all tests, the NOx and O2 RM analyzers were operated on the 50 ppmv and 10% scales, respectively.

TEST DAY DISCUSSION: Initial certification of the facilities' new Horiba NOx analyzer was conducted on 10-20-2020 using EPA method 7e. It was determined that the analyzer met all % error limits required by the method. These results can be found in the "Calculations" section of the report. On 10-21-2020, three (3) 63 minute runs were performed and broken into three (3) 21 minute rata test runs. This is acceptable according to the test methodology and by Ed Swede with the VCAPCD. The three test runs were conducted while the boiler was operating under normal conditions.

1.0 INTRODUCTION (cont)

All monitored data was continuously recorded on a 10" analog chart recorder. Chart speed was maintained at 10 cm/hr. Analyzer output was also recorded with a PC based Data Acquisition System (DAS) and imported into spreadsheets for determination of average run concentrations.

All reporting and calculations have been performed using VCAPCD standard conditions of 68°F and 29.92 inches of Hg. If you have any questions regarding this test program or report, please contact the undersigned at (805) 644-1099.

Respectfully Submitted
AIRx Testing Services, Inc.

Ken Kennepohl
Senior Engineer

Reviewed by:

Tom Porter
Vice President of Testing Services

CC: Ventura County APCD
Attn: Ed Swede

CALCULATIONS

RATA Bias Adjustment

Facility: New Indy
Source: Nebraska Boiler New NOx
Date: 10/21/20

Run No. 1

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	23.37	20.2	0.0	0.0	0.0	20.3	20.2	20.2	**23.37**
O2	4.31	3.98	0.0	0.1	0.0	4.0	4.0	4.1	**4.21**

Run No. 2

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	23.80	20.2	0.0	0.0	0.0	20.3	20.2	20.2	**23.80**
O2	4.30	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.28**

Run No. 3

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	24.36	20.2	0.0	0.0	0.0	20.3	20.2	20.2	**24.36**
O2	4.51	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.50**

Run No. 4

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	23.93	20.2	0.0	0.0	0.0	20.2	20.2	20.2	**23.96**
O2	4.46	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.45**

Run No. 5

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	23.86	20.2	0.0	0.0	0.0	20.2	20.2	20.2	**23.90**
O2	4.58	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.57**

RATA Bias Adjustment

Facility: New Indy
Source: Nebraska Boiler New N
Date: 10/21/20

Run No. 6

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	23.71	20.2	0.0	0.0	0.0	20.2	20.2	20.2	**23.74**
O2	4.68	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.67**

Run No. 7

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	23.35	20.2	0.0	0.0	0.0	20.2	20.3	20.2	**23.33**
O2	4.70	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.70**

Run No. 8

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	23.05	20.2	0.0	0.0	0.0	20.2	20.3	20.2	**23.02**
O2	4.73	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.73**

Run No. 9

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	22.39	20.2	0.0	0.0	0.0	20.2	20.3	20.2	**22.37**
O2	4.70	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.70**

AIR Testing Inc.

C.E.M. CERTIFICATION (Nox)

Facility: New Indy

Date: 10/20/2020

Job No: 220-112

Analyzer: Nox

Source: Nebraska Boiler

Analyzer: Horiba VA-5000

Analyzer Range: 0-100

Nox

Cylinder #: DT0028766 Conc: 40.0

Cylinder #: CC105295 Conc: 81.43

NO2

Cylinder #: CC3240 Conc: 19.01

High	% Diff	Cal Gas	Analyzer Reading	Start	Stop
1	-0.074	81.43	81.37	8:50	8:55
2	1.01	81.43	82.25	9:07	9:09
3	0.442	81.43	81.79	9:23	9:25

Low	% Diff	Cal Gas	Analyzer Reading	Start	Stop
1	0.225	40.0	40.09	8:58	9:01
2	-0.375	40.0	39.85	9:11	9:12
3	0.00	40.0	40.00	9:26	9:32

Zero	% Diff	Cal Gas	Analyzer Reading	Start	Stop
1	-0.08	0.0	-0.08	8:43	8:45
2	-0.10	0.0	-0.10	9:04	9:06
3	-0.09	0.0	-0.09	9:15	9:16

NO2 to NO Converter Efficiency (%)

NO2	Cal Gas	Analyzer Reading	Efficiency (%)	Time
1	19.01	17.45	91.8	10:22
2	19.01	17.60	92.6	10:33
3	19.01	17.62	92.7	10:44

% Diff =((Cylinder - Analyzer Reading)/Cylinder)*100

NEBRASKA NEW ANALYZER CERTIFICATION

10/20/2020 8:30 10/20/2020 9:15 1 m

Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI393.AT		931AI392.AT		931FI374B.ft	
20-Oct-20 08:30:00	23.31	20-Oct-20 08:30:00	3.98	20-Oct-20 08:30:00	62,641
20-Oct-20 08:31:00	23.17	20-Oct-20 08:31:00	3.82	20-Oct-20 08:31:00	64,200
20-Oct-20 08:32:00	23.31	20-Oct-20 08:32:00	3.54	20-Oct-20 08:32:00	65,158
20-Oct-20 08:33:00	23.46	20-Oct-20 08:33:00	3.70	20-Oct-20 08:33:00	63,394
20-Oct-20 08:34:00	22.04	20-Oct-20 08:34:00	3.86	20-Oct-20 08:34:00	62,731
20-Oct-20 08:35:00	21.86	20-Oct-20 08:35:00	3.83	20-Oct-20 08:35:00	62,674
20-Oct-20 08:36:00	21.74	20-Oct-20 08:36:00	3.99	20-Oct-20 08:36:00	61,322
20-Oct-20 08:37:00	23.08	20-Oct-20 08:37:00	4.07	20-Oct-20 08:37:00	61,781
20-Oct-20 08:38:00	4.95	20-Oct-20 08:38:00	3.78	20-Oct-20 08:38:00	63,284
20-Oct-20 08:39:00	0.03	20-Oct-20 08:39:00	3.64	20-Oct-20 08:39:00	64,802
20-Oct-20 08:40:00	-0.03	20-Oct-20 08:40:00	3.54	20-Oct-20 08:40:00	64,419
20-Oct-20 08:41:00	-0.05	20-Oct-20 08:41:00	3.76	20-Oct-20 08:41:00	62,339
20-Oct-20 08:42:00	-0.05	20-Oct-20 08:42:00	3.81	20-Oct-20 08:42:00	62,264
20-Oct-20 08:43:00	-0.08	20-Oct-20 08:43:00	3.79	20-Oct-20 08:43:00	64,183
20-Oct-20 08:44:00	-0.04	20-Oct-20 08:44:00	4.15	20-Oct-20 08:44:00	65,035
20-Oct-20 08:45:00	-0.08	20-Oct-20 08:45:00	4.51	20-Oct-20 08:45:00	64,263
20-Oct-20 08:46:00	-0.07	20-Oct-20 08:46:00	4.72	20-Oct-20 08:46:00	62,803
20-Oct-20 08:47:00	16.74	20-Oct-20 08:47:00	4.95	20-Oct-20 08:47:00	62,001
20-Oct-20 08:48:00	79.87	20-Oct-20 08:48:00	4.97	20-Oct-20 08:48:00	62,448
20-Oct-20 08:49:00	81.27	20-Oct-20 08:49:00	4.73	20-Oct-20 08:49:00	64,135
20-Oct-20 08:50:00	81.37	20-Oct-20 08:50:00	4.54	20-Oct-20 08:50:00	63,977
20-Oct-20 08:51:00	81.34	20-Oct-20 08:51:00	4.66	20-Oct-20 08:51:00	62,811
20-Oct-20 08:52:00	59.08	20-Oct-20 08:52:00	4.90	20-Oct-20 08:52:00	61,672
20-Oct-20 08:53:00	23.67	20-Oct-20 08:53:00	4.78	20-Oct-20 08:53:00	63,464
20-Oct-20 08:54:00	32.48	20-Oct-20 08:54:00	4.52	20-Oct-20 08:54:00	65,285
20-Oct-20 08:55:00	40.62	20-Oct-20 08:55:00	4.48	20-Oct-20 08:55:00	64,433
20-Oct-20 08:56:00	39.60	20-Oct-20 08:56:00	4.76	20-Oct-20 08:56:00	62,541
20-Oct-20 08:57:00	39.52	20-Oct-20 08:57:00	4.88	20-Oct-20 08:57:00	62,728
20-Oct-20 08:58:00	40.13	20-Oct-20 08:58:00	4.72	20-Oct-20 08:58:00	64,616
20-Oct-20 08:59:00	40.11	20-Oct-20 08:59:00	4.48	20-Oct-20 08:59:00	64,976
20-Oct-20 09:00:00	40.08	20-Oct-20 09:00:00	4.71	20-Oct-20 09:00:00	63,214
20-Oct-20 09:01:00	40.09	20-Oct-20 09:01:00	4.91	20-Oct-20 09:01:00	62,519
20-Oct-20 09:02:00	21.12	20-Oct-20 09:02:00	4.79	20-Oct-20 09:02:00	64,097
20-Oct-20 09:03:00	0.08	20-Oct-20 09:03:00	4.50	20-Oct-20 09:03:00	65,255
20-Oct-20 09:04:00	-0.10	20-Oct-20 09:04:00	4.52	20-Oct-20 09:04:00	65,202
20-Oct-20 09:05:00	-0.13	20-Oct-20 09:05:00	4.55	20-Oct-20 09:05:00	65,225
20-Oct-20 09:06:00	57.61	20-Oct-20 09:06:00	4.57	20-Oct-20 09:06:00	65,263
20-Oct-20 09:07:00	82.57	20-Oct-20 09:07:00	4.67	20-Oct-20 09:07:00	64,984
20-Oct-20 09:08:00	82.54	20-Oct-20 09:08:00	4.79	20-Oct-20 09:08:00	64,248
20-Oct-20 09:09:00	82.62	20-Oct-20 09:09:00	4.80	20-Oct-20 09:09:00	63,740
20-Oct-20 09:10:00	63.08	20-Oct-20 09:10:00	4.93	20-Oct-20 09:10:00	63,040
20-Oct-20 09:11:00	39.72	20-Oct-20 09:11:00	4.72	20-Oct-20 09:11:00	65,088
20-Oct-20 09:12:00	39.85	20-Oct-20 09:12:00	4.73	20-Oct-20 09:12:00	62,463
20-Oct-20 09:13:00	19.95	20-Oct-20 09:13:00	5.24	20-Oct-20 09:13:00	55,338
20-Oct-20 09:14:00	0.07	20-Oct-20 09:14:00	5.80	20-Oct-20 09:14:00	52,911
Average Stack Raw NOx, ppm	**28.59**	**Average Stack O2 (%)**	**4.31**	**Average Gas Flow (SCFH)**	**63,394**

(1) Zero

(1) High

(1) Low

(2) Zero

(1) High

(2) Low

NEBRASKA NEW ANALYZER CERTIFICATION

10/20/2020 9:15 10/20/2020 10:00 1 m

Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI393.AT		931AI392.AT		931FI374B.ft	
20-Oct-20 09:15:00	-0.09	20-Oct-20 09:15:00	6.01	20-Oct-20 09:15:00	50,336
20-Oct-20 09:16:00	-0.15	20-Oct-20 09:16:00	6.30	20-Oct-20 09:16:00	48,820
20-Oct-20 09:17:00	-0.16	20-Oct-20 09:17:00	6.33	20-Oct-20 09:17:00	49,037
20-Oct-20 09:18:00	-0.15	20-Oct-20 09:18:00	5.71	20-Oct-20 09:18:00	52,449
20-Oct-20 09:19:00	50.28	20-Oct-20 09:19:00	5.11	20-Oct-20 09:19:00	53,573
20-Oct-20 09:20:00	82.89	20-Oct-20 09:20:00	4.85	20-Oct-20 09:20:00	55,897
20-Oct-20 09:21:00	83.15	20-Oct-20 09:21:00	4.45	20-Oct-20 09:21:00	56,398
20-Oct-20 09:22:00	81.86	20-Oct-20 09:22:00	4.78	20-Oct-20 09:22:00	53,791
20-Oct-20 09:23:00	81.79	20-Oct-20 09:23:00	5.62	20-Oct-20 09:23:00	50,532
20-Oct-20 09:24:00	81.78	20-Oct-20 09:24:00	5.88	20-Oct-20 09:24:00	51,562
20-Oct-20 09:25:00	80.46	20-Oct-20 09:25:00	5.20	20-Oct-20 09:25:00	54,819
20-Oct-20 09:26:00	40.22	20-Oct-20 09:26:00	4.81	20-Oct-20 09:26:00	55,260
20-Oct-20 09:27:00	39.42	20-Oct-20 09:27:00	4.83	20-Oct-20 09:27:00	55,221
20-Oct-20 09:28:00	39.64	20-Oct-20 09:28:00	4.98	20-Oct-20 09:28:00	53,818
20-Oct-20 09:29:00	40.14	20-Oct-20 09:29:00	5.35	20-Oct-20 09:29:00	51,608
20-Oct-20 09:30:00	40.00	20-Oct-20 09:30:00	5.99	20-Oct-20 09:30:00	49,074
20-Oct-20 09:31:00	40.00	20-Oct-20 09:31:00	6.22	20-Oct-20 09:31:00	48,488
20-Oct-20 09:32:00	39.84	20-Oct-20 09:32:00	6.26	20-Oct-20 09:32:00	48,034
20-Oct-20 09:33:00	22.37	20-Oct-20 09:33:00	6.24	20-Oct-20 09:33:00	48,682
20-Oct-20 09:34:00	0.12	20-Oct-20 09:34:00	5.41	20-Oct-20 09:34:00	53,954
20-Oct-20 09:35:00	18.11	20-Oct-20 09:35:00	4.33	20-Oct-20 09:35:00	56,848
20-Oct-20 09:36:00	81.22	20-Oct-20 09:36:00	4.16	20-Oct-20 09:36:00	56,866
20-Oct-20 09:37:00	81.72	20-Oct-20 09:37:00	4.27	20-Oct-20 09:37:00	56,537
20-Oct-20 09:38:00	48.55	20-Oct-20 09:38:00	4.44	20-Oct-20 09:38:00	55,668
20-Oct-20 09:39:00	0.35	20-Oct-20 09:39:00	4.63	20-Oct-20 09:39:00	55,089
20-Oct-20 09:40:00	0.33	20-Oct-20 09:40:00	4.76	20-Oct-20 09:40:00	54,360
20-Oct-20 09:41:00	19.69	20-Oct-20 09:41:00	4.72	20-Oct-20 09:41:00	55,287
20-Oct-20 09:42:00	79.86	20-Oct-20 09:42:00	4.38	20-Oct-20 09:42:00	58,414
20-Oct-20 09:43:00	81.41	20-Oct-20 09:43:00	4.24	20-Oct-20 09:43:00	58,785
20-Oct-20 09:44:00	80.19	20-Oct-20 09:44:00	4.26	20-Oct-20 09:44:00	58,704
20-Oct-20 09:45:00	10.66	20-Oct-20 09:45:00	4.49	20-Oct-20 09:45:00	56,337
20-Oct-20 09:46:00	0.03	20-Oct-20 09:46:00	5.09	20-Oct-20 09:46:00	53,465
20-Oct-20 09:47:00	-0.12	20-Oct-20 09:47:00	5.39	20-Oct-20 09:47:00	52,148
20-Oct-20 09:48:00	28.56	20-Oct-20 09:48:00	5.72	20-Oct-20 09:48:00	50,918
20-Oct-20 09:49:00	80.62	20-Oct-20 09:49:00	5.91	20-Oct-20 09:49:00	49,933
20-Oct-20 09:50:00	81.24	20-Oct-20 09:50:00	6.14	20-Oct-20 09:50:00	49,032
20-Oct-20 09:51:00	52.34	20-Oct-20 09:51:00	6.29	20-Oct-20 09:51:00	48,208
20-Oct-20 09:52:00	0.37	20-Oct-20 09:52:00	6.08	20-Oct-20 09:52:00	50,789
20-Oct-20 09:53:00	-0.10	20-Oct-20 09:53:00	4.86	20-Oct-20 09:53:00	56,116
20-Oct-20 09:54:00	-0.16	20-Oct-20 09:54:00	4.18	20-Oct-20 09:54:00	58,618
20-Oct-20 09:55:00	2.62	20-Oct-20 09:55:00	4.15	20-Oct-20 09:55:00	58,759
20-Oct-20 09:56:00	13.58	20-Oct-20 09:56:00	4.16	20-Oct-20 09:56:00	58,740
20-Oct-20 09:57:00	12.34	20-Oct-20 09:57:00	4.30	20-Oct-20 09:57:00	58,763
20-Oct-20 09:58:00	0.01	20-Oct-20 09:58:00	4.48	20-Oct-20 09:58:00	59,123
20-Oct-20 09:59:00	-0.27	20-Oct-20 09:59:00	4.40	20-Oct-20 09:59:00	60,969
Average Stack Raw NOx, ppm	**40.77**	**Average Stack O2 (%)**	**5.14**	**Average Gas Flow (SCFH)**	**53,626**

NEBRASKA NEW ANALYZER CERTIFICATION

10/20/2020 10:00 10/20/2020 10:45 1 m

Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI393.AT		931AI392.AT		931FI374B.ft	
20-Oct-20 10:00:00	-0.23	20-Oct-20 10:00:00	4.35	20-Oct-20 10:00:00	61,005
20-Oct-20 10:01:00	-0.22	20-Oct-20 10:01:00	4.38	20-Oct-20 10:01:00	61,011
20-Oct-20 10:02:00	-0.05	20-Oct-20 10:02:00	4.36	20-Oct-20 10:02:00	60,669
20-Oct-20 10:03:00	0.58	20-Oct-20 10:03:00	4.34	20-Oct-20 10:03:00	59,617
20-Oct-20 10:04:00	10.07	20-Oct-20 10:04:00	4.74	20-Oct-20 10:04:00	55,865
20-Oct-20 10:05:00	14.47	20-Oct-20 10:05:00	5.00	20-Oct-20 10:05:00	57,430
20-Oct-20 10:06:00	14.62	20-Oct-20 10:06:00	4.78	20-Oct-20 10:06:00	59,453
20-Oct-20 10:07:00	15.35	20-Oct-20 10:07:00	4.99	20-Oct-20 10:07:00	60,826
20-Oct-20 10:08:00	16.07	20-Oct-20 10:08:00	5.02	20-Oct-20 10:08:00	62,520
20-Oct-20 10:09:00	16.16	20-Oct-20 10:09:00	4.83	20-Oct-20 10:09:00	62,458
20-Oct-20 10:10:00	16.00	20-Oct-20 10:10:00	4.88	20-Oct-20 10:10:00	61,391
20-Oct-20 10:11:00	16.17	20-Oct-20 10:11:00	4.86	20-Oct-20 10:11:00	60,190
20-Oct-20 10:12:00	16.38	20-Oct-20 10:12:00	4.73	20-Oct-20 10:12:00	59,397
20-Oct-20 10:13:00	16.47	20-Oct-20 10:13:00	5.05	20-Oct-20 10:13:00	56,692
20-Oct-20 10:14:00	16.51	20-Oct-20 10:14:00	5.08	20-Oct-20 10:14:00	58,277
20-Oct-20 10:15:00	16.59	20-Oct-20 10:15:00	5.01	20-Oct-20 10:15:00	59,715
20-Oct-20 10:16:00	12.94	20-Oct-20 10:16:00	4.89	20-Oct-20 10:16:00	61,477
20-Oct-20 10:17:00	6.67	20-Oct-20 10:17:00	4.81	20-Oct-20 10:17:00	61,740
20-Oct-20 10:18:00	16.94	20-Oct-20 10:18:00	4.75	20-Oct-20 10:18:00	61,665
20-Oct-20 10:19:00	17.25	20-Oct-20 10:19:00	4.76	20-Oct-20 10:19:00	60,762
20-Oct-20 10:20:00	17.40	20-Oct-20 10:20:00	4.78	20-Oct-20 10:20:00	58,957
20-Oct-20 10:21:00	17.49	20-Oct-20 10:21:00	5.03	20-Oct-20 10:21:00	56,327
20-Oct-20 10:22:00	17.45	20-Oct-20 10:22:00	5.46	20-Oct-20 10:22:00	54,423
20-Oct-20 10:23:00	17.40	20-Oct-20 10:23:00	5.47	20-Oct-20 10:23:00	54,791
20-Oct-20 10:24:00	14.18	20-Oct-20 10:24:00	5.21	20-Oct-20 10:24:00	55,958
20-Oct-20 10:25:00	1.51	20-Oct-20 10:25:00	5.09	20-Oct-20 10:25:00	56,045
20-Oct-20 10:26:00	0.69	20-Oct-20 10:26:00	5.09	20-Oct-20 10:26:00	56,070
20-Oct-20 10:27:00	6.43	20-Oct-20 10:27:00	5.10	20-Oct-20 10:27:00	56,030
20-Oct-20 10:28:00	16.89	20-Oct-20 10:28:00	5.08	20-Oct-20 10:28:00	56,086
20-Oct-20 10:29:00	17.18	20-Oct-20 10:29:00	5.05	20-Oct-20 10:29:00	56,062
20-Oct-20 10:30:00	17.29	20-Oct-20 10:30:00	5.04	20-Oct-20 10:30:00	56,110
20-Oct-20 10:31:00	17.36	20-Oct-20 10:31:00	4.92	20-Oct-20 10:31:00	57,389
20-Oct-20 10:32:00	17.39	20-Oct-20 10:32:00	4.80	20-Oct-20 10:32:00	58,563
20-Oct-20 10:33:00	17.60	20-Oct-20 10:33:00	4.62	20-Oct-20 10:33:00	59,493
20-Oct-20 10:34:00	13.75	20-Oct-20 10:34:00	4.68	20-Oct-20 10:34:00	60,280
20-Oct-20 10:35:00	1.18	20-Oct-20 10:35:00	4.56	20-Oct-20 10:35:00	60,899
20-Oct-20 10:36:00	0.61	20-Oct-20 10:36:00	4.56	20-Oct-20 10:36:00	60,921
20-Oct-20 10:37:00	7.30	20-Oct-20 10:37:00	4.61	20-Oct-20 10:37:00	61,040
20-Oct-20 10:38:00	16.98	20-Oct-20 10:38:00	4.58	20-Oct-20 10:38:00	61,000
20-Oct-20 10:39:00	17.30	20-Oct-20 10:39:00	4.48	20-Oct-20 10:39:00	60,722
20-Oct-20 10:40:00	17.45	20-Oct-20 10:40:00	4.53	20-Oct-20 10:40:00	60,107
20-Oct-20 10:41:00	17.53	20-Oct-20 10:41:00	4.47	20-Oct-20 10:41:00	59,259
20-Oct-20 10:42:00	17.53	20-Oct-20 10:42:00	4.75	20-Oct-20 10:42:00	57,286
20-Oct-20 10:43:00	17.60	20-Oct-20 10:43:00	4.81	20-Oct-20 10:43:00	58,668
20-Oct-20 10:44:00	17.62	20-Oct-20 10:44:00	4.71	20-Oct-20 10:44:00	60,607
Average Stack Raw NOx, ppm	12.65	Average Stack O2 (%)	4.89	Average Gas Flow (SCFH)	58,635

NO2 converter check

(1) (2) (3)

FIELD DATA & STRIP CHARTS

EMISSIONS TEST - SCAQMD Method 100.1

Date: 10/21/20

Job #: 220-112
Client #: 23022

**** Test Information ****

Client: New Indy
County: Ventura
Site(s): Oxnard, CA
Unit(s): Nebraska Boiler New NOx

**** Personnel ****

AIRx: KK/WH
Client: RL
APCD: ES

Run Length:	32	Inlet ( )	Outlet(X)	Fuel ( )	HC's( )	
No. Points:	Single	S.T.(X)	E.I.( )	Data( )	H2S ( )	NH3 ( )

	Time	Baro.	Temp.	Weather.
Arrive:	6:30 AM	29.81	66	Clear
Depart:	12:30 PM	29.84	70	Clear

**** Instrument Information ****

Instrument	"On"	Unit#	Make/Model		
Outlet NOx:	1	3	API 200EH		
O2:	1	12	Servomex 1400		
Recorders:			Soltec 6 pin	10	cm/hr

**** Calibration Information ****

	Units	Zero	Span	Range	Gas Cyl.#	Gas Flow
NOx:	ppmv	0.0	20.2	50	CC724456	1.0
NOx:	ppmv	0.0	40.0	50	DT0028766	1.0
NO2:	ppmv	0.0	19.0	50	CC3240	1.0
O2:	%	0.0	3.98	10	CC60235	0.6
O2:	%	0.0	8.05	10	CC160530	0.6

**** Recorder Information ****

		Chanl.	Pen Type	Color
Outlet NOx:	ppmv	1	Cont.	Black
O2:	%	2	Cont.	Green

CLIENT:	New Indy	JOB#	220-112
PLANT:	Oxnard, CA	RUN#	RATA 1
DATE:	10/21/2020	UNIT ID:	Nebraska Boiler New NOx
ENGINEER:	KK/WH	RUN START:	8:15 AM
NOx, ppm	O2, %	NOx, ppm @ 3% O2	TIME
22.57	2.98	22.54	8:15
22.73	3.92	23.96	8:16
23.35	4.07	24.83	8:17
23.70	4.20	25.40	8:18
23.75	4.33	25.66	8:19
23.72	3.51	24.42	8:20
23.69	5.21	27.03	8:21
23.19	5.35	26.69	8:22
22.44	5.26	25.68	8:23
22.14	4.25	23.80	8:24
22.58	4.66	24.89	8:25
23.19	4.63	25.51	8:26
23.61	4.66	26.02	8:27
23.74	4.04	25.20	8:28
23.67	4.09	25.20	8:29
23.58	4.21	25.29	8:30
23.69	4.84	26.40	8:31
23.76	4.45	25.85	8:32
23.61	3.95	24.93	8:33
23.57	3.90	24.82	8:34
23.93	3.98	25.32	8:35
23.98	4.43	26.06	8:36
23.37	**4.31**	**25.25**	**Averages**

CLIENT:	New Indy	JOB#	220-112
PLANT:	Oxnard, CA	RUN#	RATA 2
DATE:	10/21/2020	UNIT ID:	Nebraska Boiler New NOx
ENGINEER:	KK/WH	RUN START:	8:37 AM

NOx, ppm	O2, %	NOx, ppm @ 3% O2	TIME
23.80	4.32	25.69	8:37
23.74	4.42	25.79	8:38
23.90	4.25	25.69	8:39
24.11	4.23	25.89	8:40
24.05	4.26	25.87	8:41
23.96	4.17	25.64	8:42
23.83	4.15	25.47	8:43
23.74	4.17	25.40	8:44
23.81	4.24	25.58	8:45
23.73	4.53	25.95	8:46
23.60	4.25	25.37	8:47
23.78	4.27	25.60	8:48
24.02	4.26	25.84	8:49
23.96	4.38	25.96	8:50
23.64	4.29	25.48	8:51
23.64	4.45	25.72	8:52
23.81	4.65	26.23	8:53
23.61	4.21	25.32	8:54
23.43	4.26	25.20	8:55
23.70	4.22	25.43	8:56
23.70	4.32	25.59	8:57
24.00	4.20	25.72	8:58
23.80	**4.30**	**25.66**	**Averages**

CLIENT:	New Indy	JOB#	220-112
PLANT:	Oxnard, CA	RUN#	RATA 3
DATE:	10/21/2020	UNIT ID:	Nebraska Boiler New NOx
ENGINEER:	KK/WH	RUN START:	8:59 AM

NOx, ppm	O2, %	NOx, ppm @ 3% O2	Time
24.16	4.42	26.24	8:59
24.02	4.32	25.93	9:00
23.96	4.44	26.06	9:01
24.34	4.52	26.60	9:02
24.47	4.63	26.92	9:03
24.47	4.63	26.92	9:04
24.06	4.53	26.31	9:05
24.19	4.45	26.32	9:06
24.50	4.69	27.05	9:07
24.50	4.58	26.87	9:08
24.18	4.25	26.00	9:09
24.23	4.26	26.06	9:10
24.60	4.21	26.38	9:11
24.56	4.86	27.41	9:12
24.33	4.68	26.85	9:13
24.36	4.46	26.52	9:14
24.64	4.34	26.63	9:15
24.56	4.61	26.99	9:16
24.39	4.40	26.46	9:17
24.31	4.34	26.28	9:18
24.52	4.79	27.24	9:19
24.48	4.91	27.40	9:20
24.36	**4.51**	**26.61**	**Averages**

CLIENT:	New Indy	JOB#	220-112
PLANT:	Oxnard, CA	RUN#	RATA 4
DATE:	10/21/2020	UNIT ID:	Nebraska Boiler New NOx
ENGINEER:	KK/WH	RUN START:	9:32 AM

NOx, ppm	O2, %	NOx, ppm @ 3% O2	TIME
24.15	4.49	26.34	9:32
24.16	4.61	26.55	9:33
23.95	4.60	26.30	9:34
23.87	4.51	26.07	9:35
23.90	4.44	25.99	9:36
23.94	4.42	26.01	9:37
23.94	4.42	26.01	9:38
23.89	4.42	25.95	9:39
23.88	4.44	25.97	9:40
23.83	4.70	26.33	9:41
23.73	4.54	25.96	9:42
23.94	4.53	26.18	9:43
24.07	4.60	26.43	9:44
23.85	4.33	25.76	9:45
23.81	3.94	25.13	9:46
24.13	4.50	26.34	9:47
24.06	4.72	26.62	9:48
23.84	4.34	25.77	9:49
23.90	4.46	26.02	9:50
23.91	4.70	26.42	9:51
23.80	4.20	25.51	9:52
23.86	4.11	25.44	9:53
23.93	**4.46**	**26.05**	**Averages**

CLIENT:	New Indy	JOB#	220-112
PLANT:	Oxnard, CA	RUN#	RATA 5
DATE:	10/21/2020	UNIT ID:	Nebraska Boiler New NOx
ENGINEER:	KK/WH	RUN START:	9:54 AM

NOx, ppm	O2, %	NOx, ppm @ 3% O2	TIME
24.03	4.14	25.66	9:54
24.03	4.63	26.44	9:55
23.87	4.80	26.54	9:56
23.66	4.67	26.09	9:57
23.71	4.61	26.05	9:58
23.84	4.22	25.58	9:59
23.95	4.61	26.32	10:00
24.06	4.69	26.57	10:01
24.06	4.68	26.55	10:02
24.00	4.69	26.50	10:03
23.96	4.67	26.43	10:04
23.95	4.65	26.38	10:05
23.92	4.64	26.33	10:06
23.90	4.40	25.93	10:07
23.93	4.22	25.68	10:08
23.90	4.71	26.42	10:09
23.85	4.74	26.42	10:10
23.62	4.75	26.18	10:11
23.53	4.54	25.74	10:12
23.63	4.33	25.53	10:13
23.79	4.51	25.98	10:14
23.81	4.76	26.41	10:15
23.86	**4.58**	**26.17**	**Averages**

CLIENT:	New Indy	JOB#	220-112
PLANT:	Oxnard, CA	RUN#	RATA 6
DATE:	10/21/2020	UNIT ID:	Nebraska Boiler New NOx
ENGINEER:	KK/WH	RUN START:	10:17 AM

NOx, ppm	O2, %	NOx, ppm @ 3% O2	TIME
23.69	4.40	25.70	10:17
23.85	4.56	26.13	10:18
23.89	4.25	25.68	10:19
24.12	3.91	25.41	10:20
24.36	4.88	27.22	10:21
24.06	5.42	27.82	10:22
23.33	4.77	25.89	10:24
23.23	4.69	25.65	10:25
23.51	5.12	26.67	10:26
23.46	4.66	25.86	10:27
23.49	4.42	25.51	10:28
23.76	4.76	26.35	10:29
23.82	4.81	26.50	10:30
23.78	4.25	25.57	10:31
23.86	4.62	26.23	10:32
23.85	5.35	27.45	10:33
23.55	4.65	25.94	10:34
23.41	4.58	25.68	10:35
23.50	4.60	25.81	10:36
23.62	4.59	25.92	10:37
23.71	4.61	26.05	10:38
23.81	5.02	26.84	10:39
23.71	**4.68**	**26.18**	**Averages**

CLIENT:	New Indy	JOB#	220-112
PLANT:	Oxnard, CA	RUN#	RATA 7
DATE:	10/21/2020	UNIT ID:	Nebraska Boiler New NOx
ENGINEER:	KK/WH	RUN START:	10:50 AM

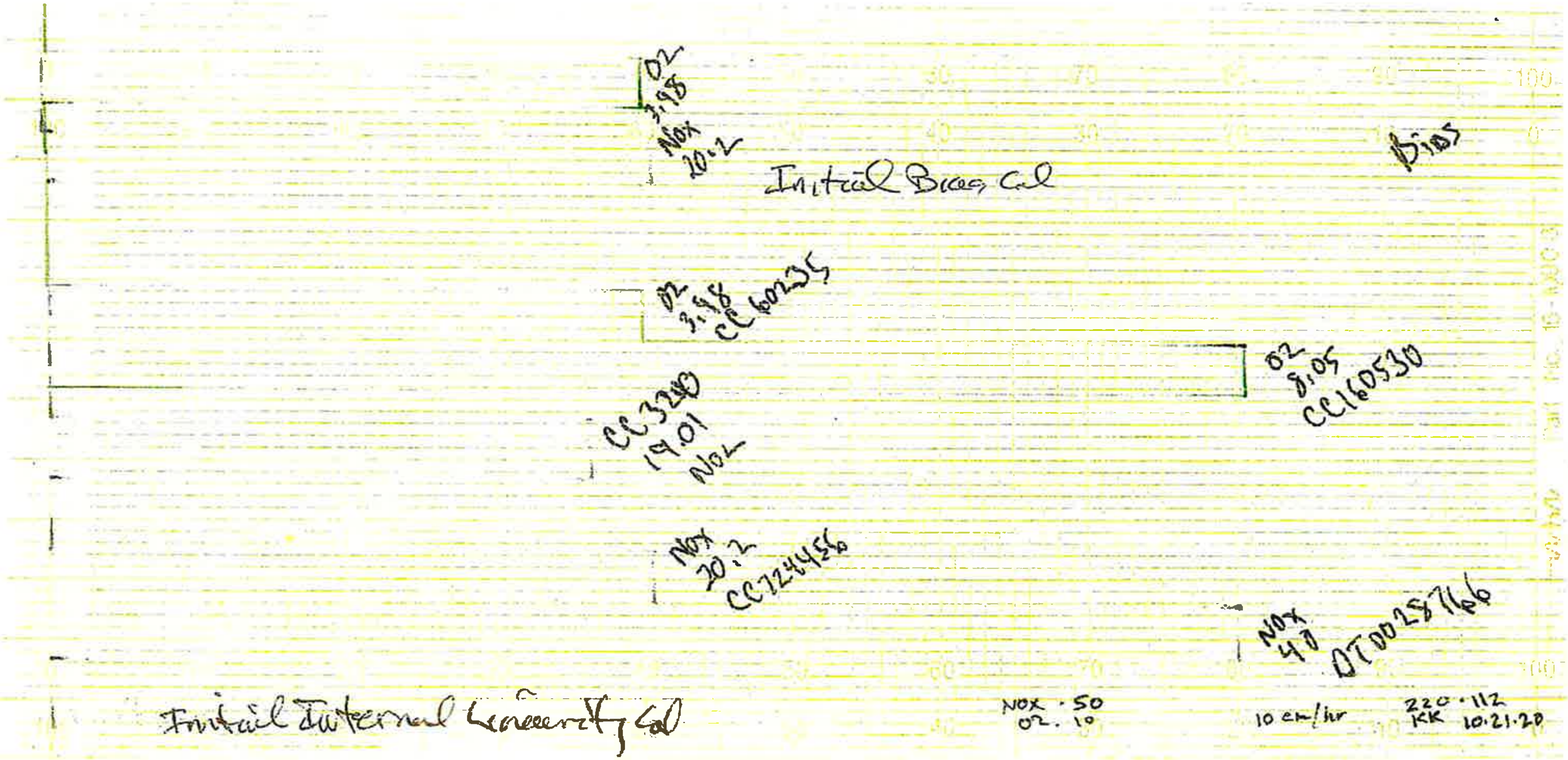
NOx, ppm	O2, %	NOx, ppm @ 3% O2	TIME
23.67	4.80	26.32	10:50
23.59	5.11	26.74	10:51
23.45	4.57	25.70	10:52
23.48	4.58	25.75	10:53
23.49	4.60	25.80	10:54
23.43	4.61	25.75	10:55
23.37	4.66	25.76	10:56
23.34	4.70	25.79	10:57
23.28	4.68	25.69	10:58
23.21	4.71	25.66	10:59
23.28	5.14	26.44	11:00
23.24	4.82	25.87	11:01
23.23	4.28	25.02	11:02
23.43	4.51	25.59	11:03
23.51	4.90	26.30	11:04
23.29	4.89	26.04	11:05
23.08	4.64	25.41	11:06
23.10	4.60	25.37	11:07
23.23	4.60	25.51	11:08
23.31	4.60	25.60	11:09
23.43	4.94	26.28	11:10
23.35	4.50	25.49	11:11
23.35	**4.70**	**25.81**	**Averages**

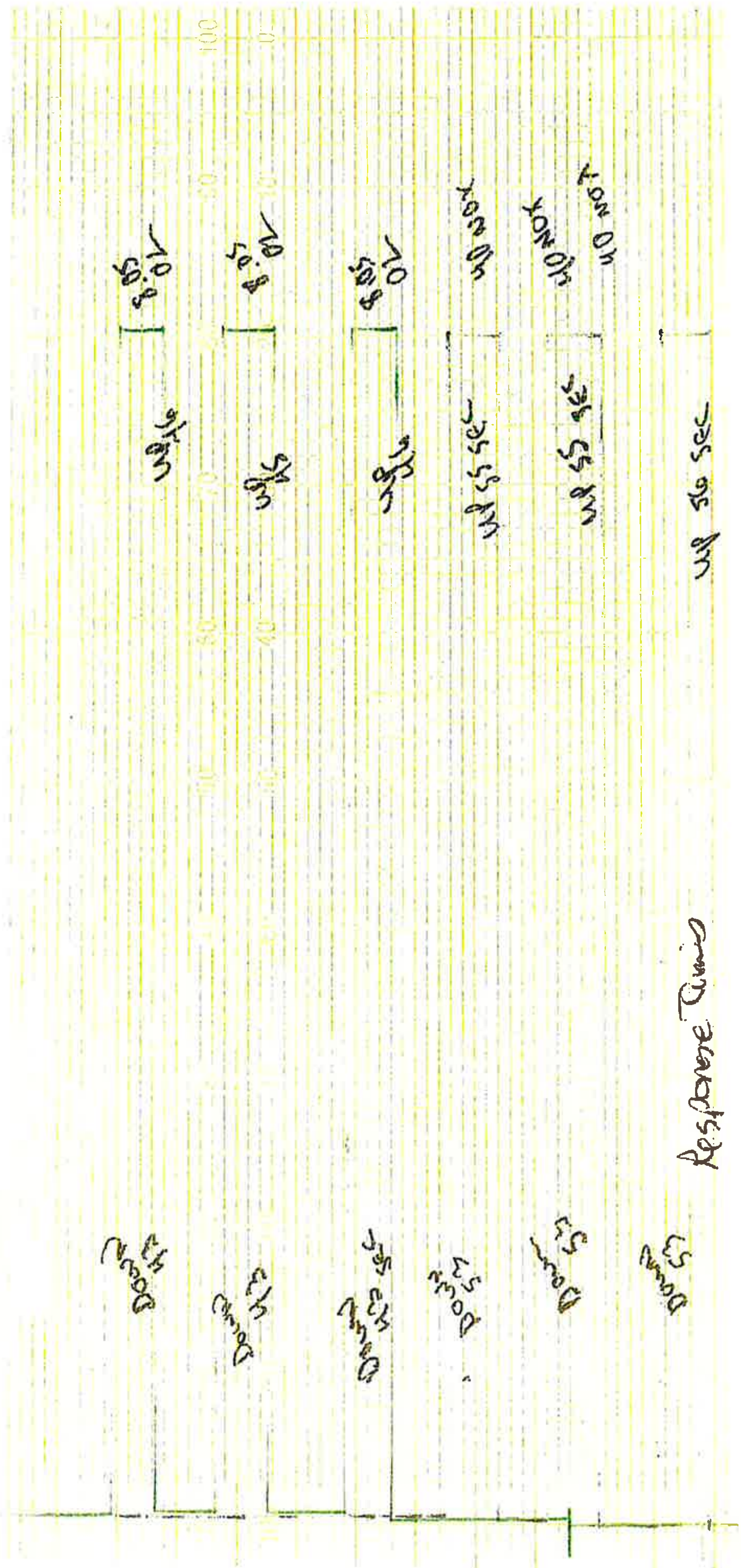
CLIENT:	New Indy	JOB#	220-112
PLANT:	Oxnard, CA	RUN#	RATA 8
DATE:	10/21/2020	UNIT ID:	Nebraska Boiler New NOx
ENGINEER:	KK/WH	RUN START:	11:12 AM

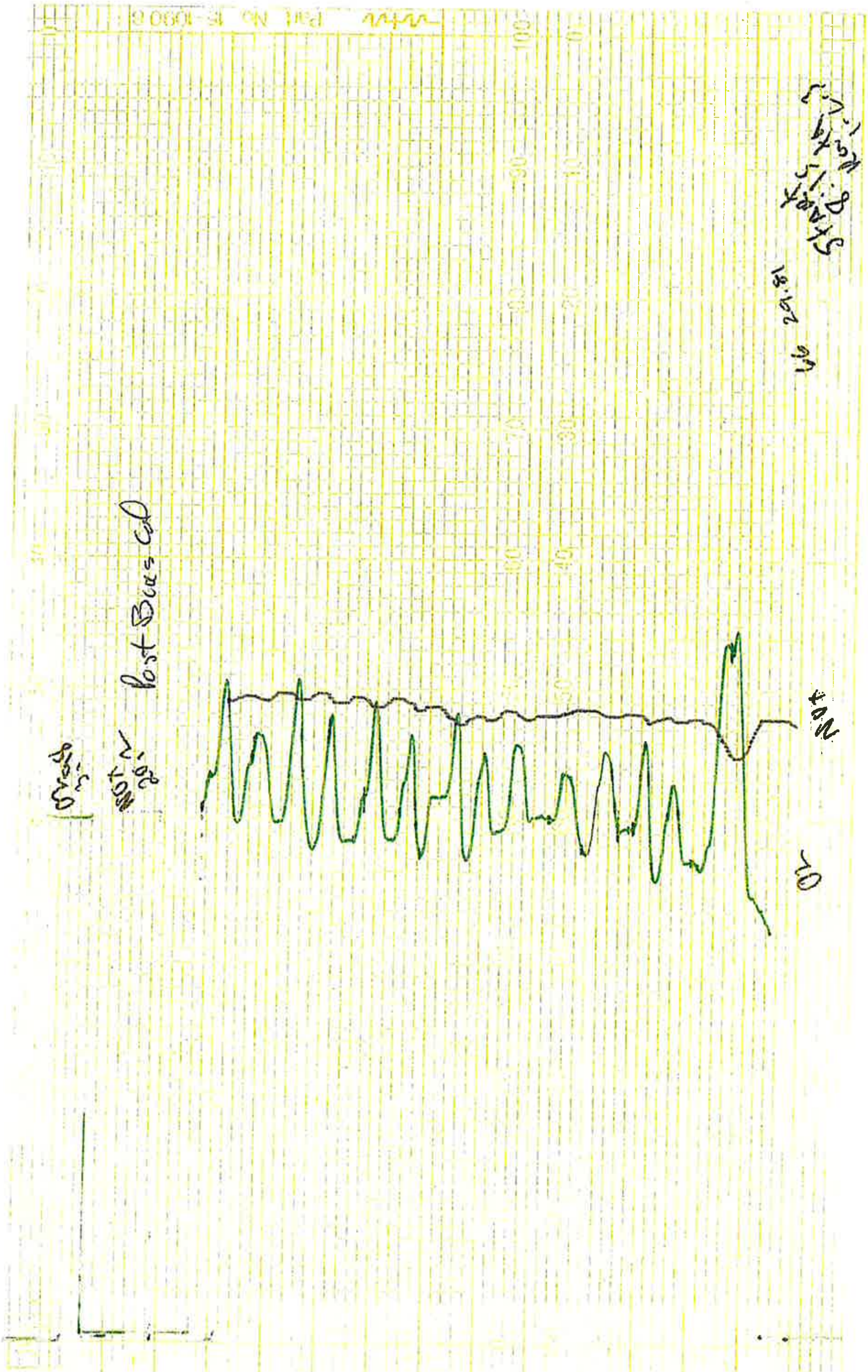
NOx, ppm	O2, %	NOx, ppm @ 3% O2	TIME
23.36	5.14	26.53	11:12
23.11	4.98	25.98	11:13
22.85	4.46	24.88	11:14
23.02	4.25	24.75	11:15
23.28	4.55	25.49	11:16
23.32	4.91	26.11	11:17
23.23	4.91	26.00	11:18
23.10	4.72	25.56	11:19
23.00	4.64	25.32	11:20
22.95	4.65	25.28	11:21
23.02	4.65	25.36	11:22
23.07	4.72	25.52	11:23
23.06	5.01	25.98	11:24
22.89	4.48	24.95	11:25
22.93	4.35	24.80	11:26
23.14	5.10	26.22	11:27
22.93	4.92	25.69	11:28
22.65	4.31	24.44	11:29
22.82	4.31	24.62	11:30
23.17	4.98	26.05	11:31
22.97	5.09	26.01	11:32
23.17	4.98	26.05	11:33
23.05	**4.73**	**25.53**	**Averages**

CLIENT:	New Indy	JOB#	220-112
PLANT:	Oxnard, CA	RUN#	RATA 9
DATE:	10/21/2020	UNIT ID:	Nebraska Boiler New NOx
ENGINEER:	KK/WH	RUN START:	11:34 AM

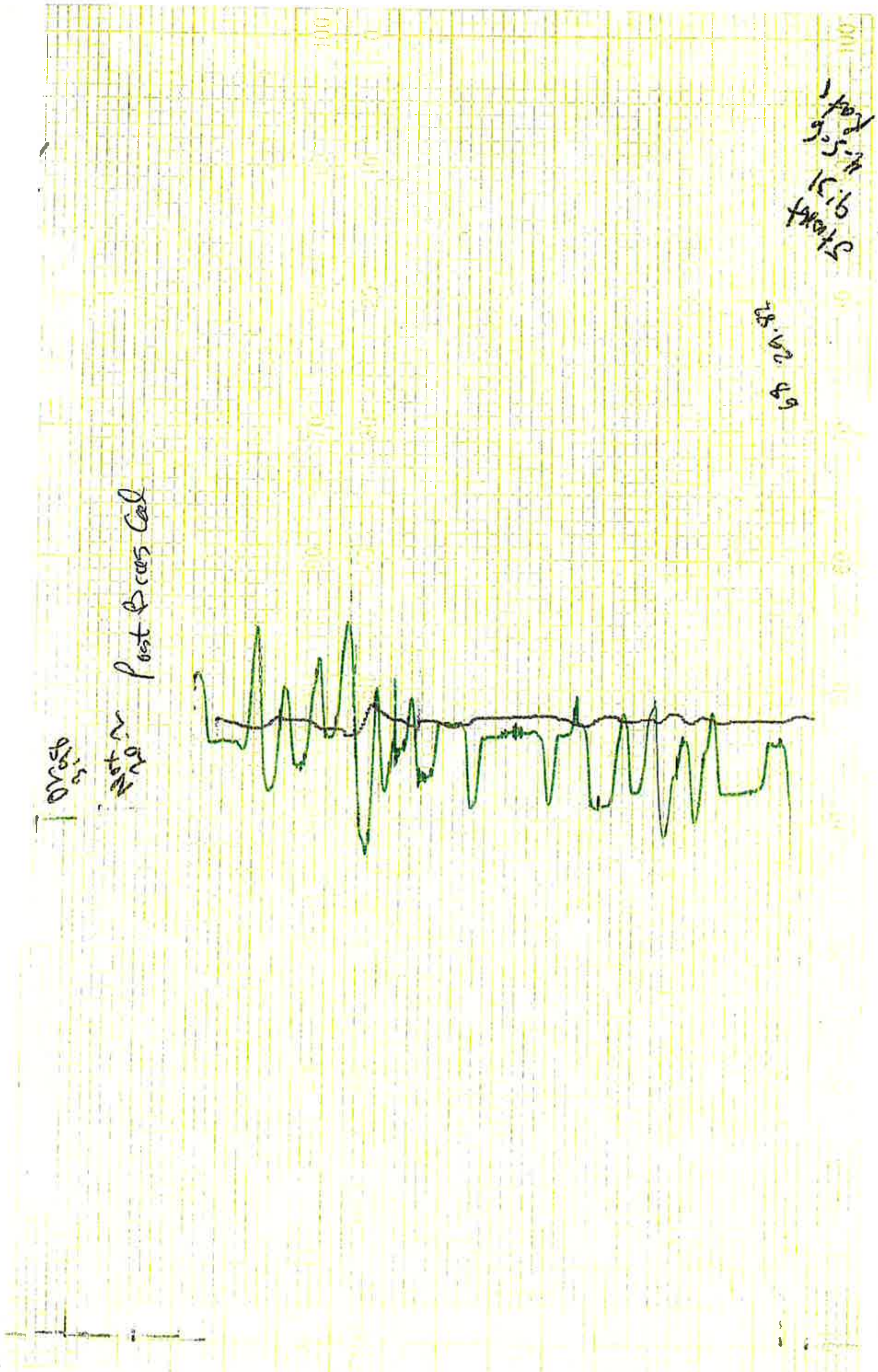
NOx, ppm	O2, %	NOx, ppm @ 3% O2	TIME
22.97	5.09	26.01	11:34
22.57	4.37	24.44	11:35
22.67	4.50	24.74	11:36
22.74	5.17	25.88	11:37
22.48	4.60	24.69	11:38
22.38	4.27	24.09	11:39
22.62	4.55	24.76	11:40
22.69	4.98	25.51	11:41
22.51	5.01	25.36	11:42
22.26	4.74	24.66	11:43
22.21	4.64	24.45	11:44
22.20	4.63	24.42	11:45
22.15	4.64	24.38	11:46
22.22	4.63	24.45	11:47
22.29	4.61	24.49	11:48
22.29	4.59	24.46	11:49
22.33	4.82	24.86	11:50
22.26	5.07	25.17	11:51
22.13	4.57	24.26	11:52
22.21	4.38	24.07	11:53
22.33	4.90	24.98	11:54
22.16	4.60	24.34	11:55
22.39	**4.70**	**24.75**	**Averages**


O2 3.98 NOx 20.2
Initial Bias Cal
Bias
O2 3.98 CC60235
O2 8.05 CC160530
CC3240 19.01 NOx
NOx 20.2 CC724456
NOx 40 DT0028766
Initial Internal Linearity Cal
NOx .50
O2 .10
10 cm/hr
220 · 112
KK 10.21.20

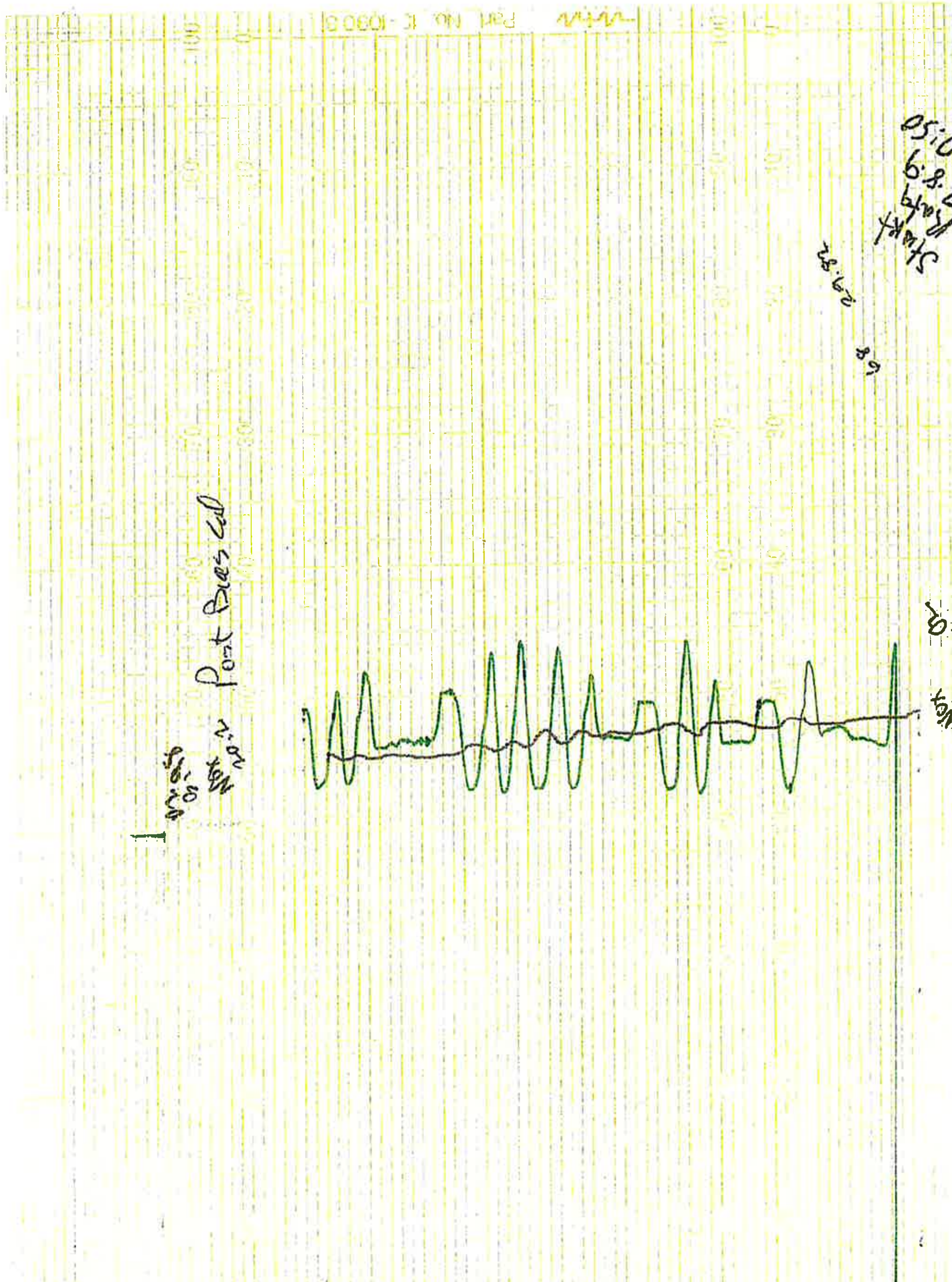

Response Time
up 55 sec
up 55 sec
up 56 sec
40 NOx
40 NOx
40 NOx



Post Bias Cal
NOx
O2



68 29.82


Post Bias Cal
Start Data
NOx
O2

New-Indy Oxnard, LLC
Nebraska Boiler CEMS RATA TEST - November 21, 2020 10/21/2020 8:15 10/21/2020 8:37 1 m K-1

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI393.AT		931AI392.AT		931FI374B.ft	
21-Oct-20 08:15:00	26.60	21-Oct-20 08:15:00	24.70	21-Oct-20 08:15:00	4.28	21-Oct-20 08:15:00	83,564
21-Oct-20 08:16:00	27.11	21-Oct-20 08:16:00	24.90	21-Oct-20 08:16:00	4.46	21-Oct-20 08:16:00	77,223
21-Oct-20 08:17:00	27.79	21-Oct-20 08:17:00	24.12	21-Oct-20 08:17:00	5.36	21-Oct-20 08:17:00	65,197
21-Oct-20 08:18:00	27.12	21-Oct-20 08:18:00	23.21	21-Oct-20 08:18:00	5.58	21-Oct-20 08:18:00	61,133
21-Oct-20 08:19:00	26.84	21-Oct-20 08:19:00	23.16	21-Oct-20 08:19:00	5.44	21-Oct-20 08:19:00	63,215
21-Oct-20 08:20:00	25.55	21-Oct-20 08:20:00	23.24	21-Oct-20 08:20:00	4.62	21-Oct-20 08:20:00	70,946
21-Oct-20 08:21:00	25.61	21-Oct-20 08:21:00	23.68	21-Oct-20 08:21:00	4.36	21-Oct-20 08:21:00	73,917
21-Oct-20 08:22:00	26.26	21-Oct-20 08:22:00	24.24	21-Oct-20 08:22:00	4.39	21-Oct-20 08:22:00	74,145
21-Oct-20 08:23:00	26.40	21-Oct-20 08:23:00	24.36	21-Oct-20 08:23:00	4.42	21-Oct-20 08:23:00	73,123
21-Oct-20 08:24:00	26.88	21-Oct-20 08:24:00	24.26	21-Oct-20 08:24:00	4.74	21-Oct-20 08:24:00	70,639
21-Oct-20 08:25:00	26.56	21-Oct-20 08:25:00	24.02	21-Oct-20 08:25:00	4.71	21-Oct-20 08:25:00	72,729
21-Oct-20 08:26:00	26.29	21-Oct-20 08:26:00	24.27	21-Oct-20 08:26:00	4.39	21-Oct-20 08:26:00	75,115
21-Oct-20 08:27:00	27.01	21-Oct-20 08:27:00	24.60	21-Oct-20 08:27:00	4.60	21-Oct-20 08:27:00	70,527
21-Oct-20 08:28:00	26.96	21-Oct-20 08:28:00	23.95	21-Oct-20 08:28:00	5.00	21-Oct-20 08:28:00	71,267
21-Oct-20 08:29:00	26.61	21-Oct-20 08:29:00	24.17	21-Oct-20 08:29:00	4.64	21-Oct-20 08:29:00	72,728
21-Oct-20 08:30:00	26.62	21-Oct-20 08:30:00	24.24	21-Oct-20 08:30:00	4.60	21-Oct-20 08:30:00	72,779
21-Oct-20 08:31:00	26.92	21-Oct-20 08:31:00	24.41	21-Oct-20 08:31:00	4.67	21-Oct-20 08:31:00	71,126
21-Oct-20 08:32:00	27.13	21-Oct-20 08:32:00	24.09	21-Oct-20 08:32:00	5.00	21-Oct-20 08:32:00	69,784
21-Oct-20 08:33:00	26.73	21-Oct-20 08:33:00	23.93	21-Oct-20 08:33:00	4.88	21-Oct-20 08:33:00	71,768
21-Oct-20 08:34:00	26.42	21-Oct-20 08:34:00	24.17	21-Oct-20 08:34:00	4.53	21-Oct-20 08:34:00	73,917
21-Oct-20 08:35:00	26.72	21-Oct-20 08:35:00	24.41	21-Oct-20 08:35:00	4.55	21-Oct-20 08:35:00	72,089
21-Oct-20 08:36:00	27.07	21-Oct-20 08:36:00	24.26	21-Oct-20 08:36:00	4.84	21-Oct-20 08:36:00	70,340
Average Stack NOx, ppm (3% O2)	**26.69**	**Average Stack Raw NOx, ppm**	**24.11**	**Average Stack O2 (%)**	**4.73**	**Average Gas Flow (SCFH)**	**71,694**

New-Indy Oxnard, LLC
Nebraska Boiler CEMS RATA TEST - November 21, 2020 10/21/2020 8:37 10/21/2020 8:59 1 m K-2

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI393.AT		931AI392.AT		931FI374B.ft	
21-Oct-20 08:37:00	26.87	21-Oct-20 08:37:00	24.08	21-Oct-20 08:37:00	4.86	21-Oct-20 08:37:00	71,348
21-Oct-20 08:38:00	26.67	21-Oct-20 08:38:00	24.12	21-Oct-20 08:38:00	4.65	21-Oct-20 08:38:00	72,488
21-Oct-20 08:39:00	26.73	21-Oct-20 08:39:00	24.22	21-Oct-20 08:39:00	4.68	21-Oct-20 08:39:00	72,472
21-Oct-20 08:40:00	26.84	21-Oct-20 08:40:00	24.29	21-Oct-20 08:40:00	4.69	21-Oct-20 08:40:00	72,420
21-Oct-20 08:41:00	27.15	21-Oct-20 08:41:00	24.38	21-Oct-20 08:41:00	4.83	21-Oct-20 08:41:00	70,226
21-Oct-20 08:42:00	27.11	21-Oct-20 08:42:00	23.99	21-Oct-20 08:42:00	5.06	21-Oct-20 08:42:00	69,869
21-Oct-20 08:43:00	26.55	21-Oct-20 08:43:00	23.94	21-Oct-20 08:43:00	4.76	21-Oct-20 08:43:00	72,767
21-Oct-20 08:44:00	26.51	21-Oct-20 08:44:00	24.17	21-Oct-20 08:44:00	4.58	21-Oct-20 08:44:00	73,025
21-Oct-20 08:45:00	26.72	21-Oct-20 08:45:00	24.26	21-Oct-20 08:45:00	4.64	21-Oct-20 08:45:00	71,512
21-Oct-20 08:46:00	26.90	21-Oct-20 08:46:00	23.94	21-Oct-20 08:46:00	4.97	21-Oct-20 08:46:00	70,499
21-Oct-20 08:47:00	26.38	21-Oct-20 08:47:00	23.93	21-Oct-20 08:47:00	4.68	21-Oct-20 08:47:00	74,015
21-Oct-20 08:48:00	26.56	21-Oct-20 08:48:00	24.37	21-Oct-20 08:48:00	4.48	21-Oct-20 08:48:00	72,766
21-Oct-20 08:49:00	27.39	21-Oct-20 08:49:00	24.14	21-Oct-20 08:49:00	5.12	21-Oct-20 08:49:00	68,594
21-Oct-20 08:50:00	26.60	21-Oct-20 08:50:00	23.80	21-Oct-20 08:50:00	4.89	21-Oct-20 08:50:00	71,406
21-Oct-20 08:51:00	26.68	21-Oct-20 08:51:00	23.99	21-Oct-20 08:51:00	4.80	21-Oct-20 08:51:00	71,451
21-Oct-20 08:52:00	26.55	21-Oct-20 08:52:00	23.91	21-Oct-20 08:52:00	4.78	21-Oct-20 08:52:00	72,493
21-Oct-20 08:53:00	26.37	21-Oct-20 08:53:00	24.16	21-Oct-20 08:53:00	4.50	21-Oct-20 08:53:00	73,587
21-Oct-20 08:54:00	27.20	21-Oct-20 08:54:00	24.26	21-Oct-20 08:54:00	4.91	21-Oct-20 08:54:00	69,450
21-Oct-20 08:55:00	26.71	21-Oct-20 08:55:00	23.76	21-Oct-20 08:55:00	4.98	21-Oct-20 08:55:00	71,853
21-Oct-20 08:56:00	26.54	21-Oct-20 08:56:00	24.06	21-Oct-20 08:56:00	4.67	21-Oct-20 08:56:00	73,602
21-Oct-20 08:57:00	26.69	21-Oct-20 08:57:00	24.30	21-Oct-20 08:57:00	4.60	21-Oct-20 08:57:00	72,835
21-Oct-20 08:58:00	27.41	21-Oct-20 08:58:00	24.31	21-Oct-20 08:58:00	5.02	21-Oct-20 08:58:00	68,023
Average Stack NOx, ppm (3% O2)	**26.78**	**Average Stack Raw NOx, ppm**	**24.11**	**Average Stack O2 (%)**	**4.78**	**Average Gas Flow (SCFH)**	**71,668**

New-Indy Oxnard, LLC
Nebraska Boiler CEMS RATA TEST - November 21, 2020 10/21/2020 8:59 10/21/2020 9:21 1 m K-3

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI393.AT		931AI392.AT		931FI374B.ft	
21-Oct-20 08:59:00	26.90	21-Oct-20 08:59:00	23.70	21-Oct-20 08:59:00	5.14	21-Oct-20 08:59:00	70,522
21-Oct-20 09:00:00	26.56	21-Oct-20 09:00:00	23.94	21-Oct-20 09:00:00	4.77	21-Oct-20 09:00:00	72,649
21-Oct-20 09:01:00	26.56	21-Oct-20 09:01:00	24.14	21-Oct-20 09:01:00	4.63	21-Oct-20 09:01:00	73,570
21-Oct-20 09:02:00	26.70	21-Oct-20 09:02:00	24.30	21-Oct-20 09:02:00	4.61	21-Oct-20 09:02:00	72,830
21-Oct-20 09:03:00	27.36	21-Oct-20 09:03:00	24.31	21-Oct-20 09:03:00	4.99	21-Oct-20 09:03:00	68,778
21-Oct-20 09:04:00	26.85	21-Oct-20 09:04:00	23.75	21-Oct-20 09:04:00	5.06	21-Oct-20 09:04:00	71,722
21-Oct-20 09:05:00	26.64	21-Oct-20 09:05:00	24.26	21-Oct-20 09:05:00	4.60	21-Oct-20 09:05:00	73,393
21-Oct-20 09:06:00	27.27	21-Oct-20 09:06:00	24.66	21-Oct-20 09:06:00	4.71	21-Oct-20 09:06:00	70,961
21-Oct-20 09:07:00	27.61	21-Oct-20 09:07:00	24.23	21-Oct-20 09:07:00	5.18	21-Oct-20 09:07:00	67,946
21-Oct-20 09:08:00	26.63	21-Oct-20 09:08:00	23.88	21-Oct-20 09:08:00	4.85	21-Oct-20 09:08:00	72,304
21-Oct-20 09:09:00	26.63	21-Oct-20 09:09:00	24.36	21-Oct-20 09:09:00	4.53	21-Oct-20 09:09:00	73,230
21-Oct-20 09:10:00	26.94	21-Oct-20 09:10:00	24.45	21-Oct-20 09:10:00	4.65	21-Oct-20 09:10:00	71,274
21-Oct-20 09:11:00	27.21	21-Oct-20 09:11:00	24.20	21-Oct-20 09:11:00	4.97	21-Oct-20 09:11:00	70,089
21-Oct-20 09:12:00	26.95	21-Oct-20 09:12:00	24.04	21-Oct-20 09:12:00	4.94	21-Oct-20 09:12:00	71,074
21-Oct-20 09:13:00	26.61	21-Oct-20 09:13:00	24.14	21-Oct-20 09:13:00	4.67	21-Oct-20 09:13:00	73,543
21-Oct-20 09:14:00	26.84	21-Oct-20 09:14:00	24.49	21-Oct-20 09:14:00	4.57	21-Oct-20 09:14:00	72,128
21-Oct-20 09:15:00	27.56	21-Oct-20 09:15:00	24.28	21-Oct-20 09:15:00	5.13	21-Oct-20 09:15:00	67,773
21-Oct-20 09:16:00	26.87	21-Oct-20 09:16:00	23.82	21-Oct-20 09:16:00	5.04	21-Oct-20 09:16:00	70,853
21-Oct-20 09:17:00	26.81	21-Oct-20 09:17:00	24.15	21-Oct-20 09:17:00	4.77	21-Oct-20 09:17:00	72,254
21-Oct-20 09:18:00	26.74	21-Oct-20 09:18:00	24.31	21-Oct-20 09:18:00	4.63	21-Oct-20 09:18:00	73,479
21-Oct-20 09:19:00	26.92	21-Oct-20 09:19:00	24.45	21-Oct-20 09:19:00	4.65	21-Oct-20 09:19:00	72,192
21-Oct-20 09:20:00	27.44	21-Oct-20 09:20:00	24.37	21-Oct-20 09:20:00	5.00	21-Oct-20 09:20:00	70,185
Average Stack NOx, ppm (3% O2)	**26.94**	**Average Stack Raw NOx, ppm**	**24.19**	**Average Stack O2 (%)**	**4.82**	**Average Gas Flow (SCFH)**	**71,489**

Rata 4

New-Indy Oxnard, LLC
Nebraska Boiler CEMS RATA TEST - November 21, 2020 10/21/2020 9:31 10/21/2020 9:53 1 m

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI393.AT		931AI392.AT		931FI374B.ft	
21-Oct-20 09:31:00	26.56	21-Oct-20 09:31:00	23.88	21-Oct-20 09:31:00	4.80	21-Oct-20 09:31:00	71,529
21-Oct-20 09:32:00	26.64	21-Oct-20 09:32:00	23.98	21-Oct-20 09:32:00	4.79	21-Oct-20 09:32:00	71,506
21-Oct-20 09:33:00	26.60	21-Oct-20 09:33:00	23.97	21-Oct-20 09:33:00	4.78	21-Oct-20 09:33:00	71,566
21-Oct-20 09:34:00	26.59	21-Oct-20 09:34:00	23.94	21-Oct-20 09:34:00	4.79	21-Oct-20 09:34:00	71,617
21-Oct-20 09:35:00	26.75	21-Oct-20 09:35:00	24.09	21-Oct-20 09:35:00	4.79	21-Oct-20 09:35:00	71,449
21-Oct-20 09:36:00	27.23	21-Oct-20 09:36:00	24.15	21-Oct-20 09:36:00	5.02	21-Oct-20 09:36:00	69,063
21-Oct-20 09:37:00	26.88	21-Oct-20 09:37:00	23.75	21-Oct-20 09:37:00	5.08	21-Oct-20 09:37:00	70,389
21-Oct-20 09:38:00	26.46	21-Oct-20 09:38:00	23.94	21-Oct-20 09:38:00	4.70	21-Oct-20 09:38:00	72,478
21-Oct-20 09:39:00	26.90	21-Oct-20 09:39:00	24.13	21-Oct-20 09:39:00	4.84	21-Oct-20 09:39:00	70,053
21-Oct-20 09:40:00	26.85	21-Oct-20 09:40:00	23.80	21-Oct-20 09:40:00	5.03	21-Oct-20 09:40:00	70,307
21-Oct-20 09:41:00	26.58	21-Oct-20 09:41:00	23.85	21-Oct-20 09:41:00	4.83	21-Oct-20 09:41:00	72,453
21-Oct-20 09:42:00	26.44	21-Oct-20 09:42:00	24.12	21-Oct-20 09:42:00	4.57	21-Oct-20 09:42:00	72,459
21-Oct-20 09:43:00	27.20	21-Oct-20 09:43:00	24.09	21-Oct-20 09:43:00	5.05	21-Oct-20 09:43:00	68,131
21-Oct-20 09:44:00	26.61	21-Oct-20 09:44:00	23.52	21-Oct-20 09:44:00	5.08	21-Oct-20 09:44:00	70,281
21-Oct-20 09:45:00	26.60	21-Oct-20 09:45:00	23.92	21-Oct-20 09:45:00	4.80	21-Oct-20 09:45:00	71,029
21-Oct-20 09:46:00	26.94	21-Oct-20 09:46:00	23.99	21-Oct-20 09:46:00	4.96	21-Oct-20 09:46:00	68,540
21-Oct-20 09:47:00	26.80	21-Oct-20 09:47:00	23.63	21-Oct-20 09:47:00	5.12	21-Oct-20 09:47:00	70,113
21-Oct-20 09:48:00	26.79	21-Oct-20 09:48:00	24.19	21-Oct-20 09:48:00	4.75	21-Oct-20 09:48:00	71,716
21-Oct-20 09:49:00	26.77	21-Oct-20 09:49:00	24.19	21-Oct-20 09:49:00	4.72	21-Oct-20 09:49:00	71,804
21-Oct-20 09:50:00	26.99	21-Oct-20 09:50:00	24.35	21-Oct-20 09:50:00	4.75	21-Oct-20 09:50:00	70,786
21-Oct-20 09:51:00	27.44	21-Oct-20 09:51:00	24.13	21-Oct-20 09:51:00	5.14	21-Oct-20 09:51:00	68,893
21-Oct-20 09:52:00	27.25	21-Oct-20 09:52:00	23.96	21-Oct-20 09:52:00	5.16	21-Oct-20 09:52:00	69,728
Average Stack NOx, ppm (3% O2)	**26.81**	**Average Stack Raw NOx, ppm**	**23.98**	**Average Stack O2 (%)**	**4.89**	**Average Gas Flow (SCFH)**	**70,722**

Run 5

New-Indy Oxnard, LLC
Nebraska Boiler CEMS RATA TEST - November 21, 2020 10/21/2020 9:53 10/21/2020 10:15 1 m

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI393.AT		931AI392.AT		931FI374B.ft	
21-Oct-20 09:53:00	27.13	21-Oct-20 09:53:00	24.09	21-Oct-20 09:53:00	5.01	21-Oct-20 09:53:00	70,441
21-Oct-20 09:54:00	27.08	21-Oct-20 09:54:00	24.08	21-Oct-20 09:54:00	4.98	21-Oct-20 09:54:00	71,472
21-Oct-20 09:55:00	26.84	21-Oct-20 09:55:00	24.37	21-Oct-20 09:55:00	4.85	21-Oct-20 09:55:00	71,883
21-Oct-20 09:56:00	27.31	21-Oct-20 09:56:00	24.38	21-Oct-20 09:56:00	4.93	21-Oct-20 09:56:00	70,133
21-Oct-20 09:57:00	27.45	21-Oct-20 09:57:00	24.38	21-Oct-20 09:57:00	5.01	21-Oct-20 09:57:00	70,099
21-Oct-20 09:58:00	27.55	21-Oct-20 09:58:00	24.42	21-Oct-20 09:58:00	5.04	21-Oct-20 09:58:00	70,012
21-Oct-20 09:59:00	27.51	21-Oct-20 09:59:00	24.39	21-Oct-20 09:59:00	5.03	21-Oct-20 09:59:00	70,073
21-Oct-20 10:00:00	27.46	21-Oct-20 10:00:00	24.40	21-Oct-20 10:00:00	4.99	21-Oct-20 10:00:00	70,076
21-Oct-20 10:01:00	27.30	21-Oct-20 10:01:00	24.33	21-Oct-20 10:01:00	4.95	21-Oct-20 10:01:00	70,067
21-Oct-20 10:02:00	27.23	21-Oct-20 10:02:00	24.26	21-Oct-20 10:02:00	4.95	21-Oct-20 10:02:00	70,085
21-Oct-20 10:03:00	26.88	21-Oct-20 10:03:00	24.21	21-Oct-20 10:03:00	4.79	21-Oct-20 10:03:00	72,131
21-Oct-20 10:04:00	27.01	21-Oct-20 10:04:00	24.55	21-Oct-20 10:04:00	4.63	21-Oct-20 10:04:00	71,312
21-Oct-20 10:05:00	27.34	21-Oct-20 10:05:00	24.28	21-Oct-20 10:05:00	5.00	21-Oct-20 10:05:00	69,731
21-Oct-20 10:06:00	27.25	21-Oct-20 10:06:00	24.18	21-Oct-20 10:06:00	5.02	21-Oct-20 10:06:00	69,715
21-Oct-20 10:07:00	27.23	21-Oct-20 10:07:00	24.15	21-Oct-20 10:07:00	5.02	21-Oct-20 10:07:00	69,756
21-Oct-20 10:08:00	27.05	21-Oct-20 10:08:00	24.09	21-Oct-20 10:08:00	4.95	21-Oct-20 10:08:00	71,085
21-Oct-20 10:09:00	27.01	21-Oct-20 10:09:00	24.37	21-Oct-20 10:09:00	4.75	21-Oct-20 10:09:00	71,465
21-Oct-20 10:10:00	27.06	21-Oct-20 10:10:00	24.30	21-Oct-20 10:10:00	4.81	21-Oct-20 10:10:00	70,026
21-Oct-20 10:11:00	27.19	21-Oct-20 10:11:00	23.99	21-Oct-20 10:11:00	5.11	21-Oct-20 10:11:00	69,915
21-Oct-20 10:12:00	26.96	21-Oct-20 10:12:00	24.05	21-Oct-20 10:12:00	4.94	21-Oct-20 10:12:00	70,660
21-Oct-20 10:13:00	26.84	21-Oct-20 10:13:00	24.05	21-Oct-20 10:13:00	4.86	21-Oct-20 10:13:00	72,363
21-Oct-20 10:14:00	27.18	21-Oct-20 10:14:00	24.52	21-Oct-20 10:14:00	4.75	21-Oct-20 10:14:00	70,097
Average Stack NOx, ppm (3% O2)	**27.18**	**Average Stack Raw NOx, ppm**	**24.27**	**Average Stack O2 (%)**	**4.92**	**Average Gas Flow (SCFH)**	**70,572**

Rata 6

New-Indy Oxnard, LLC
Nebraska Boiler CEMS RATA TEST - November 21, 2020 10/21/2020 10:15 10/21/2020 10:37 1 m

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI393.AT		931AI392.AT		931FI374B.ft	
21-Oct-20 10:15:00	26.94	21-Oct-20 10:15:00	24.18	21-Oct-20 10:15:00	4.83	21-Oct-20 10:15:00	76,095
21-Oct-20 10:16:00	27.00	21-Oct-20 10:16:00	24.94	21-Oct-20 10:16:00	4.36	21-Oct-20 10:16:00	78,293
21-Oct-20 10:17:00	27.85	21-Oct-20 10:17:00	24.87	21-Oct-20 10:17:00	4.91	21-Oct-20 10:17:00	70,327
21-Oct-20 10:18:00	27.82	21-Oct-20 10:18:00	24.01	21-Oct-20 10:18:00	5.45	21-Oct-20 10:18:00	68,200
21-Oct-20 10:19:00	26.95	21-Oct-20 10:19:00	23.87	21-Oct-20 10:19:00	5.04	21-Oct-20 10:19:00	71,328
21-Oct-20 10:20:00	27.02	21-Oct-20 10:20:00	24.15	21-Oct-20 10:20:00	4.91	21-Oct-20 10:20:00	71,182
21-Oct-20 10:21:00	27.46	21-Oct-20 10:21:00	24.08	21-Oct-20 10:21:00	5.19	21-Oct-20 10:21:00	69,277
21-Oct-20 10:22:00	26.97	21-Oct-20 10:22:00	23.93	21-Oct-20 10:22:00	5.02	21-Oct-20 10:22:00	71,920
21-Oct-20 10:23:00	26.95	21-Oct-20 10:23:00	24.30	21-Oct-20 10:23:00	4.77	21-Oct-20 10:23:00	72,739
21-Oct-20 10:24:00	27.26	21-Oct-20 10:24:00	24.42	21-Oct-20 10:24:00	4.87	21-Oct-20 10:24:00	70,836
21-Oct-20 10:25:00	27.46	21-Oct-20 10:25:00	24.21	21-Oct-20 10:25:00	5.13	21-Oct-20 10:25:00	70,942
21-Oct-20 10:26:00	26.79	21-Oct-20 10:26:00	24.29	21-Oct-20 10:26:00	4.69	21-Oct-20 10:26:00	74,482
21-Oct-20 10:27:00	27.28	21-Oct-20 10:27:00	24.72	21-Oct-20 10:27:00	4.68	21-Oct-20 10:27:00	72,018
21-Oct-20 10:28:00	28.12	21-Oct-20 10:28:00	24.49	21-Oct-20 10:28:00	5.31	21-Oct-20 10:28:00	67,691
21-Oct-20 10:29:00	27.29	21-Oct-20 10:29:00	24.26	21-Oct-20 10:29:00	5.02	21-Oct-20 10:29:00	71,329
21-Oct-20 10:30:00	27.21	21-Oct-20 10:30:00	24.48	21-Oct-20 10:30:00	4.80	21-Oct-20 10:30:00	71,757
21-Oct-20 10:31:00	27.28	21-Oct-20 10:31:00	24.49	21-Oct-20 10:31:00	4.83	21-Oct-20 10:31:00	71,860
21-Oct-20 10:32:00	27.47	21-Oct-20 10:32:00	24.60	21-Oct-20 10:32:00	4.87	21-Oct-20 10:32:00	71,914
21-Oct-20 10:33:00	27.35	21-Oct-20 10:33:00	24.59	21-Oct-20 10:33:00	4.81	21-Oct-20 10:33:00	71,744
21-Oct-20 10:34:00	27.73	21-Oct-20 10:34:00	24.68	21-Oct-20 10:34:00	4.98	21-Oct-20 10:34:00	69,537
21-Oct-20 10:35:00	27.94	21-Oct-20 10:35:00	24.63	21-Oct-20 10:35:00	5.12	21-Oct-20 10:35:00	69,156
21-Oct-20 10:36:00	27.94	21-Oct-20 10:36:00	24.63	21-Oct-20 10:36:00	5.12	21-Oct-20 10:36:00	69,156
Average Stack NOx, ppm (3% O2)	**27.37**	**Average Stack Raw NOx, ppm**	**24.40**	**Average Stack O2 (%)**	**4.94**	**Average Gas Flow (SCFH)**	**71,445**

Kata 7

New-Indy Oxnard, LLC
Nebraska Boiler CEMS RATA TEST - November 21, 2020 10/21/2020 10:50 10/21/2020 11:12 1 m

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI393.AT		931AI392.AT		931FI374B.ft	
21-Oct-20 10:50:00	26.92	21-Oct-20 10:50:00	24.21	21-Oct-20 10:50:00	4.80	21-Oct-20 10:50:00	71,287
21-Oct-20 10:51:00	26.87	21-Oct-20 10:51:00	24.16	21-Oct-20 10:51:00	4.80	21-Oct-20 10:51:00	71,334
21-Oct-20 10:52:00	26.93	21-Oct-20 10:52:00	24.16	21-Oct-20 10:52:00	4.84	21-Oct-20 10:52:00	71,325
21-Oct-20 10:53:00	26.85	21-Oct-20 10:53:00	24.18	21-Oct-20 10:53:00	4.78	21-Oct-20 10:53:00	71,364
21-Oct-20 10:54:00	26.84	21-Oct-20 10:54:00	24.09	21-Oct-20 10:54:00	4.83	21-Oct-20 10:54:00	71,315
21-Oct-20 10:55:00	26.92	21-Oct-20 10:55:00	24.10	21-Oct-20 10:55:00	4.87	21-Oct-20 10:55:00	71,374
21-Oct-20 10:56:00	26.95	21-Oct-20 10:56:00	24.14	21-Oct-20 10:56:00	4.88	21-Oct-20 10:56:00	71,381
21-Oct-20 10:57:00	27.17	21-Oct-20 10:57:00	24.30	21-Oct-20 10:57:00	4.89	21-Oct-20 10:57:00	70,045
21-Oct-20 10:58:00	27.45	21-Oct-20 10:58:00	24.10	21-Oct-20 10:58:00	5.18	21-Oct-20 10:58:00	68,906
21-Oct-20 10:59:00	26.77	21-Oct-20 10:59:00	24.00	21-Oct-20 10:59:00	4.85	21-Oct-20 10:59:00	71,754
21-Oct-20 11:00:00	26.59	21-Oct-20 11:00:00	24.29	21-Oct-20 11:00:00	4.56	21-Oct-20 11:00:00	72,812
21-Oct-20 11:01:00	27.10	21-Oct-20 11:01:00	24.44	21-Oct-20 11:01:00	4.76	21-Oct-20 11:01:00	70,429
21-Oct-20 11:02:00	27.22	21-Oct-20 11:02:00	24.18	21-Oct-20 11:02:00	5.00	21-Oct-20 11:02:00	69,735
21-Oct-20 11:03:00	27.12	21-Oct-20 11:03:00	24.08	21-Oct-20 11:03:00	4.99	21-Oct-20 11:03:00	70,238
21-Oct-20 11:04:00	26.76	21-Oct-20 11:04:00	24.08	21-Oct-20 11:04:00	4.80	21-Oct-20 11:04:00	71,221
21-Oct-20 11:05:00	26.84	21-Oct-20 11:05:00	24.22	21-Oct-20 11:05:00	4.76	21-Oct-20 11:05:00	71,190
21-Oct-20 11:06:00	27.16	21-Oct-20 11:06:00	24.54	21-Oct-20 11:06:00	4.74	21-Oct-20 11:06:00	71,170
21-Oct-20 11:07:00	27.22	21-Oct-20 11:07:00	24.60	21-Oct-20 11:07:00	4.73	21-Oct-20 11:07:00	70,813
21-Oct-20 11:08:00	27.45	21-Oct-20 11:08:00	24.42	21-Oct-20 11:08:00	4.97	21-Oct-20 11:08:00	69,469
21-Oct-20 11:09:00	26.76	21-Oct-20 11:09:00	24.28	21-Oct-20 11:09:00	4.67	21-Oct-20 11:09:00	72,869
21-Oct-20 11:10:00	26.97	21-Oct-20 11:10:00	24.68	21-Oct-20 11:10:00	4.52	21-Oct-20 11:10:00	71,688
21-Oct-20 11:11:00	27.73	21-Oct-20 11:11:00	24.50	21-Oct-20 11:11:00	5.08	21-Oct-20 11:11:00	67,230
Average Stack NOx, ppm (3% O2)	**27.03**	**Average Stack Raw NOx, ppm**	**24.26**	**Average Stack O2 (%)**	**4.83**	**Average Gas Flow (SCFH)**	**70,861**

Rata 8

New-Indy Oxnard, LLC
Nebraska Boiler CEMS RATA TEST - November 21, 2020 10/21/2020 11:12 10/21/2020 11:34 1 m

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI393.AT		931AI392.AT		931FI374B.ft	
21-Oct-20 11:12:00	27.15	21-Oct-20 11:12:00	24.16	21-Oct-20 11:12:00	4.98	21-Oct-20 11:12:00	70,143
21-Oct-20 11:13:00	26.82	21-Oct-20 11:13:00	24.38	21-Oct-20 11:13:00	4.64	21-Oct-20 11:13:00	72,493
21-Oct-20 11:14:00	26.70	21-Oct-20 11:14:00	24.53	21-Oct-20 11:14:00	4.46	21-Oct-20 11:14:00	72,812
21-Oct-20 11:15:00	27.23	21-Oct-20 11:15:00	24.70	21-Oct-20 11:15:00	4.67	21-Oct-20 11:15:00	70,744
21-Oct-20 11:16:00	27.46	21-Oct-20 11:16:00	24.45	21-Oct-20 11:16:00	4.96	21-Oct-20 11:16:00	69,886
21-Oct-20 11:17:00	27.34	21-Oct-20 11:17:00	24.35	21-Oct-20 11:17:00	4.95	21-Oct-20 11:17:00	69,932
21-Oct-20 11:18:00	27.06	21-Oct-20 11:18:00	24.26	21-Oct-20 11:18:00	4.85	21-Oct-20 11:18:00	71,084
21-Oct-20 11:19:00	26.96	21-Oct-20 11:19:00	24.30	21-Oct-20 11:19:00	4.76	21-Oct-20 11:19:00	71,141
21-Oct-20 11:20:00	27.05	21-Oct-20 11:20:00	24.33	21-Oct-20 11:20:00	4.81	21-Oct-20 11:20:00	71,131
21-Oct-20 11:21:00	27.23	21-Oct-20 11:21:00	24.46	21-Oct-20 11:21:00	4.82	21-Oct-20 11:21:00	71,090
21-Oct-20 11:22:00	27.29	21-Oct-20 11:22:00	24.51	21-Oct-20 11:22:00	4.82	21-Oct-20 11:22:00	70,533
21-Oct-20 11:23:00	27.54	21-Oct-20 11:23:00	24.39	21-Oct-20 11:23:00	5.04	21-Oct-20 11:23:00	69,653
21-Oct-20 11:24:00	26.89	21-Oct-20 11:24:00	24.32	21-Oct-20 11:24:00	4.71	21-Oct-20 11:24:00	72,587
21-Oct-20 11:25:00	26.80	21-Oct-20 11:25:00	24.58	21-Oct-20 11:25:00	4.48	21-Oct-20 11:25:00	71,968
21-Oct-20 11:26:00	27.34	21-Oct-20 11:26:00	24.41	21-Oct-20 11:26:00	4.92	21-Oct-20 11:26:00	67,573
21-Oct-20 11:27:00	26.89	21-Oct-20 11:27:00	23.84	21-Oct-20 11:27:00	5.03	21-Oct-20 11:27:00	69,973
21-Oct-20 11:28:00	26.45	21-Oct-20 11:28:00	24.17	21-Oct-20 11:28:00	4.55	21-Oct-20 11:28:00	73,276
21-Oct-20 11:29:00	26.61	21-Oct-20 11:29:00	24.45	21-Oct-20 11:29:00	4.47	21-Oct-20 11:29:00	72,791
21-Oct-20 11:30:00	27.19	21-Oct-20 11:30:00	24.45	21-Oct-20 11:30:00	4.79	21-Oct-20 11:30:00	68,496
21-Oct-20 11:31:00	27.14	21-Oct-20 11:31:00	23.87	21-Oct-20 11:31:00	5.16	21-Oct-20 11:31:00	69,141
21-Oct-20 11:32:00	26.42	21-Oct-20 11:32:00	24.03	21-Oct-20 11:32:00	4.61	21-Oct-20 11:32:00	72,801
21-Oct-20 11:33:00	26.65	21-Oct-20 11:33:00	24.41	21-Oct-20 11:33:00	4.50	21-Oct-20 11:33:00	71,250
Average Stack NOx, ppm (3% O2)	**27.01**	**Average Stack Raw NOx, ppm**	**24.33**	**Average Stack O2 (%)**	**4.77**	**Average Gas Flow (SCFH)**	**70,932**

Rata 5

New-Indy Oxnard, LLC
Nebraska Boiler CEMS RATA TEST - November 21, 2020 10/21/2020 11:34 10/21/2020 11:56 1 m

NOx, ppm (3% O2)		Raw NOx, ppm		O2 (%)		Gas Flow (SCFH)	
931AI391_CNOX		931AI393.AT		931AI392.AT		931FI374B.ft	
21-Oct-20 11:34:00	27.28	21-Oct-20 11:34:00	24.07	21-Oct-20 11:34:00	5.10	21-Oct-20 11:34:00	68,276
21-Oct-20 11:35:00	26.69	21-Oct-20 11:35:00	23.86	21-Oct-20 11:35:00	4.89	21-Oct-20 11:35:00	71,683
21-Oct-20 11:36:00	26.45	21-Oct-20 11:36:00	24.18	21-Oct-20 11:36:00	4.54	21-Oct-20 11:36:00	73,108
21-Oct-20 11:37:00	26.78	21-Oct-20 11:37:00	24.36	21-Oct-20 11:37:00	4.62	21-Oct-20 11:37:00	71,479
21-Oct-20 11:38:00	27.31	21-Oct-20 11:38:00	24.22	21-Oct-20 11:38:00	5.02	21-Oct-20 11:38:00	69,811
21-Oct-20 11:39:00	27.22	21-Oct-20 11:39:00	24.07	21-Oct-20 11:39:00	5.09	21-Oct-20 11:39:00	69,769
21-Oct-20 11:40:00	26.92	21-Oct-20 11:40:00	23.99	21-Oct-20 11:40:00	4.94	21-Oct-20 11:40:00	71,077
21-Oct-20 11:41:00	26.77	21-Oct-20 11:41:00	24.09	21-Oct-20 11:41:00	4.79	21-Oct-20 11:41:00	71,284
21-Oct-20 11:42:00	26.77	21-Oct-20 11:42:00	24.14	21-Oct-20 11:42:00	4.77	21-Oct-20 11:42:00	71,353
21-Oct-20 11:43:00	26.84	21-Oct-20 11:43:00	24.21	21-Oct-20 11:43:00	4.78	21-Oct-20 11:43:00	71,356
21-Oct-20 11:44:00	27.25	21-Oct-20 11:44:00	24.51	21-Oct-20 11:44:00	4.80	21-Oct-20 11:44:00	71,360
21-Oct-20 11:45:00	26.98	21-Oct-20 11:45:00	24.30	21-Oct-20 11:45:00	4.77	21-Oct-20 11:45:00	71,361
21-Oct-20 11:46:00	26.91	21-Oct-20 11:46:00	24.27	21-Oct-20 11:46:00	4.75	21-Oct-20 11:46:00	71,396
21-Oct-20 11:47:00	27.09	21-Oct-20 11:47:00	24.37	21-Oct-20 11:47:00	4.80	21-Oct-20 11:47:00	70,172
21-Oct-20 11:48:00	27.37	21-Oct-20 11:48:00	24.12	21-Oct-20 11:48:00	5.12	21-Oct-20 11:48:00	69,120
21-Oct-20 11:49:00	26.85	21-Oct-20 11:49:00	24.03	21-Oct-20 11:49:00	4.88	21-Oct-20 11:49:00	71,598
21-Oct-20 11:50:00	26.67	21-Oct-20 11:50:00	24.39	21-Oct-20 11:50:00	4.53	21-Oct-20 11:50:00	72,349
21-Oct-20 11:51:00	27.12	21-Oct-20 11:51:00	24.38	21-Oct-20 11:51:00	4.81	21-Oct-20 11:51:00	69,804
21-Oct-20 11:52:00	26.90	21-Oct-20 11:52:00	24.05	21-Oct-20 11:52:00	4.90	21-Oct-20 11:52:00	71,567
21-Oct-20 11:53:00	26.65	21-Oct-20 11:53:00	24.32	21-Oct-20 11:53:00	4.57	21-Oct-20 11:53:00	73,132
21-Oct-20 11:54:00	26.86	21-Oct-20 11:54:00	24.51	21-Oct-20 11:54:00	4.56	21-Oct-20 11:54:00	71,416
Average Stack NOx, ppm (3% O2)	**26.95**	**Average Stack Raw NOx, ppm**	**24.21**	**Average Stack O2 (%)**	**4.82**	**Average Gas Flow (SCFH)**	**71,018**

AIR Testing Inc.

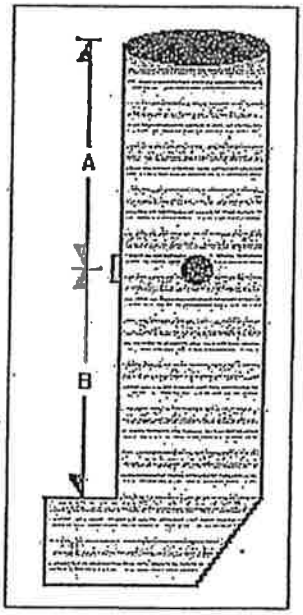
BOILER DATA SHEET

Client: New Indy
Site: Oxnard
Unit: Nebraska Boiler

Date: 10-21-20
Job #: 220-012
Lab #: 23002

Make: Nebrasica
S/N: 2D-1983
Model NBE9551
BTU/hr Rating 10.8 MMBTU/hr
Fuel Type: NG
FGR Equipped: YES

Stack Diameter: 44"
"A" Distance: 30'
"B" Distance: 26"
Port Size: 3/8"
M or F: HOLE
Offset:



Boiler Load: Run 1: Normal → Run 2: Run 3: % of Rating

FGR Setting: Run 1: 40 Run 2: 40 Run 3: 40

Notes:

EPA METHOD 20 MEASUREMENT
SYSTEM PERFORMANCE TIME

RESPONSE TIME

DATE OF TEST: 10-21-20

PROBE LOCATION: Stack

ANALYZER TYPE & MODEL #

NOx: API 200EH

CO: —

O2: Servomex 1400

Span Gas Concentration/Analyzer Full Scale Setting:

NOx; Gas, ppmv: 40.0 Full Scale setting, ppmv 50

CO; Gas, ppmv: — Full Scale setting, ppmv —

O2; Gas, %: 8.05 Full Scale setting, % 25

UPSCALE TIME - Analyzer + Sampling System:

Trial #	Nox	CO	O2
1	56	—	46 seconds
2	55	—	45 seconds
3	55	—	46 seconds
Average Response	56	—	46 seconds

DOWNSCALE - Analyzer + Sampling System:

Trial #	Nox	CO	O2
1	53	—	43 seconds
2	53	—	43 seconds
3	53	—	43 seconds
Average Response	53	—	43 seconds

Slower Average	56	—	46 seconds

EPA METHOD 20 MEASUREMENT
SYSTEM PERFORMANCE TIME

RESPONSE TIME

DATE OF TEST: 10-20-20

PROBE LOCATION: Stack

ANALYZER TYPE & MODEL #

NOx: Horiba VA 5000

CO: —

O2: —

Span Gas Concentration/Analyzer Full Scale Setting:

NOx; Gas, ppmv: 81.43 Full Scale setting, ppmv 100

CO; Gas, ppmv: — Full Scale setting, ppmv —

O2; Gas, %: — Full Scale setting, % —

UPSCALE TIME - Analyzer + Sampling System:

Trial #	Nox	CO	O2
1	60	—	— seconds
2	60	—	— seconds
3	60	—	— seconds
Average Response	60	—	— seconds

DOWNSCALE - Analyzer + Sampling System:

Trial #	Nox	CO	O2
1	55	—	— seconds
2	55	—	— seconds
3	55	—	— seconds
Average Response	55	—	— seconds

Slower Average	60	—	— seconds

DESCRIPTION OF METHOD(S) USED

EPA Method 7 - Nitrogen Oxides (NOx)

Method 7: NOx from stationary sources

Applicability: Applicable range: 2 mg/m^3 <[NOx] $_{as\ NO2}$ <400 mg/m^3 (m^3 at dry standard conditions)

Principle: A grab sample is collected in a evacuated flask containing a dilute sulfuric acid-hydrogen peroxide absorbing solution, and the **NOx (except NO) are measured colorimetrically** using phenoldisulfonic acid.

Method 7A: NOx from stationary sources

Applicability: Applicable range: 125 mg/m^3(65ppm) <[NOx] $_{as\ NO2}$ <1250 mg/m^3 (655 ppm)

Principle: A grab sample is collected in a evacuated flask containing a dilute sulfuric acid-hydrogen peroxide absorbing solution, and the **NOx (except NO) are oxidized to nitrates and measured by ion chromatography.**

Method 7B: NOx from nitric acid plants

Applicability: Applicable range: 57 mg/m^3(30ppm) <[NOx] $_{as\ NO2}$ <1550 mg/m^3 (786 ppm)

Principle: A grab sample is collected in a evacuated flask containing a dilute sulfuric acid-hydrogen peroxide absorbing solution, and the **NOx (except NO) are measured by ultraviolet absorption.**

Method 7C and 7D: NOx from fossil fuel fired generators, electric utility plants or nitric acid plants

Applicability: Applicable range: 13 mg/m^3(7ppm) <[NOx] $_{as\ NO2}$ <1782 mg/m^3 (932 ppm)

Principle: A grab sample is collected from the stack in alkaline-potassium permanganate solution. NOx = NO + NO_2
7C: NOx are oxidized to NO_2 and NO_3. Cadmium is used to reduce NO_3 to NO_2, which is **analyzed colorimetreically.**
7D: NOx are oxized to NO_3 and **analyzed by ion chromatography.**

Method 7E: NOx from stationary source - Using Instrumental Analyzer

Analytical range: Determined by instrumental design. A portion of it is selected by choosing the span of the monitoring system. The span shall be selected such that the pollutant gas concentration equivalent to the emission standard is not less than 30% of the span. If at any time during the test, the pollutant concentration exceeds the span, the test is invalid.

Sensitivity: The Minimum Detection Limit (MDL) depends on the analytical range, the span, and the signal-to-noise ratio of the measurement system. The MDL should be less than 2% of the span.

Principle: A gas sample is continuously extracted from a stack and conveyed to a ***chemiluminescent*** analyzer for determination of NOx concentraction.

Measurement system: Sample interface, Gas analyzer, Data recorder.

NO_2 to NO converter: Not necessary if the NO_2 portion of the exhaust gas is less than 5% of the total NOx concentration.

NOx analyzer: Based on the chemiluminescent reaction of NO and ozone to form NO_2 in an excited state. Light emission is monitored through an optical filter by a high sensitivity photomultiplier tube, the output of which is electrically processed so it is linearly proportional to the NO concentraction.

NOx calibration gases (NO in N_2): Three calibration gases shall be used. Ambiant air may be used for the zero gas.

CARB Method 100
Generalized Procedures For Continuous Gaseous Emission Stack Sampling

Principle: A sample of an exhaust gas stream is continuously extracted, conditioned, and analyzed by instruments to determine average emission concentrations. By combining this information with stack gas flowrate and moisture, mass emission rates can be determined.

Applicability: Determination of emissions of oxides of nitrogen, carbon monoxide, carbon dioxide, sulfur dioxide, total hydrocarbons, and oxygen from stationary sources flowing gas streams in ducts, stacks, and flues. This method is an alternative to EPA reference methods 3A, 6C, 7E, 10, and 25A and B.

Range: The range is selected so that the sample gas concentration for each run is between 10 and 95% of the range for each pollutant of interest.

Measurement system: Sample interface, Gas analyzer, Data acquisition

Probe Nozzle: Quartz, borosilicate, stainless steel , porcelain or aluminum oxide
Probe: Shall have an inside diameter of 6 mm or larger and shall be of one of the materials mentioned above
Sample line: Teflon or other material that does not alter the sample gas
Sample conditioner: capable of reducing sample gas temperature to 60°F or 20°F lower than ambient temp.
Probe filter: internal or external, to prevent accumulation of particulate in the measurement system
Probe Calibration System: allows calibration of the instruments by introducing calibration gases
Sample System Heaters: if needed, to prevent condensation of water or hydrocarbons
Gas analyzers: shall be housed in a temperature-controlled, vibration-free environment:

- CO & CO2: Nondispersive infrared analyzer
- O2 : Paramagnetic or electrochemical (fuel cell) analyzer
- Total HC : Flame ionization detector (FID) or nondispersive infrared analyzer (NDIR)
- NOx : Chemiluminescent analyzer, minimum of 90% efficiency for NO2 conversion
- SO2 : Infrared or ultraviolet absorption or fluorescence analyzer

Data recorder: Provides a permanent record of gas analyzer data. Consist of a strip chart recorder and an electronic data logger capable of integration at ten second interval. Resolution or readability should be 0.5% of range.

Range: Upper limit of the gas concentration measurement range displayed on the data recorder

Calibration gas (CalGas): A gas of known concentration in an inert diluent gas

- High-Range: 80 to 100% of the range
- Mid-Range: 40 to 60% of the range
- Zero gas: impurity concentration < 0.25% of the range → Nitrogen

Analyzer calibration error: The difference between the known concentration of the CalGas and the gas concentration exhibited by the gas analyzer when the CalGas is introduced directly to the analyzer.
Performance Spec: less than **2%** of the range for the zero, mid-range, and high-range CalGas.

Sampling system BIAS: The difference between the gas concentrations exhibited by the measurement system when CalGas is introduced at the sampling probe tip filter and when the same CalGas is introduced directly to the analyzer.
Performance Spec: less than **5%** of the range for the zero, mid-range, and high-range CalGas.

Zero Drift: The difference in the measurement system responses at a zero concentration level during the initial calibration, and final calibration check after a test.
No adjustment to the measurement system is allowed at that point.
Performance Spec: less than **3%** of the range over the period of each run.

Calibration Drift (or Span Drift): The difference in the measurement system responses at a mid-range

concentration level during the initial calibration, and final calibration check after a test. No adjustment to the measurement system is allowed at that point.
Performance Spec: less than 3% of the range over the period of each run.

Response time: the time required for the system to display 95% of a step change in gas concentration on the data recorder.

Interference response: The output response of the measurement system to a component in the sample gas, other than the gas component being measured.
Performance Spec: less than 5% of the range.

Measurement System Performance Test Procedures:

- *Cleaning/Assembly of sample train:* Flush probe, lines and sample conditioner with Deionized Water, then acetone. Dry with filtered dry air. Assemble as shown in accompanying figure.
- *Pretest Leak Check:* Leak check the vacuum side of the assembly at the maximum pump vacuum.
- *Calibrate analyzers and data recorders:* Allow analyzers to warm up. Adjust system components to achieve manufacturer's recommended sampling rates. Introduce CalGases directly to the instruments and make all necessary adjustments to calibrate the analyzer and data recorder.
- *Analyzer calibration error check:* at the beginning of test run
    1. Introduce zero, mid-range, high range CalGas
    2. Make no adjustments to the system except those necessary to achieve the correct flow rate.
    3. If invalid calibration is exhibited (> 2% of the range), take corrective action and repeat check.
- *Sampling system BIAS check:* **Mandatory**
    1. Backflush gas through the probe as necessary to prevent particulate buildup
    2. Introduce zero, and either mid-range or high-range (whichever is closest to effluent concentration)
    3. Make no adjustments to the system except those necessary to achieve the correct flow rate.
    4. If invalid calibration is exhibited (> 5% of the range), take corrective action and repeat check.
    5. If adjustment to the analyzer is required, first repeat the analyzer calibration error check, then repeat the sampling system BIAS check.
- *Stratification check:* Select traverse points according to ARB Methods 1 and 2. Multipoint gas sampling (traversing) must be performed unless data is available to demonstrate the mean pollutant concentration is ***less than 10% different*** from any single point.

Sample Collection:

1. Insert probe in stack
2. If traversing required, leave probe at each position for at least the system response time + 1 minute.
3. Three sample runs is recommended. See District Rules and permit conditions for special requirements.
4. When test duration exceeds one hour, conduct system BIAS checks every 2 hours. Adjust settings as necessary, mark strip charts and record changes in log books.
5. Strip chart must include the following information: pollutant, source, range, calibration cylinder ID number, chart speeds, date, time, operator.
6. **At end of run, perform sampling system BIAS Check.** Make no adjustments except to flow rates.

INSTRUMENT INFORMATION

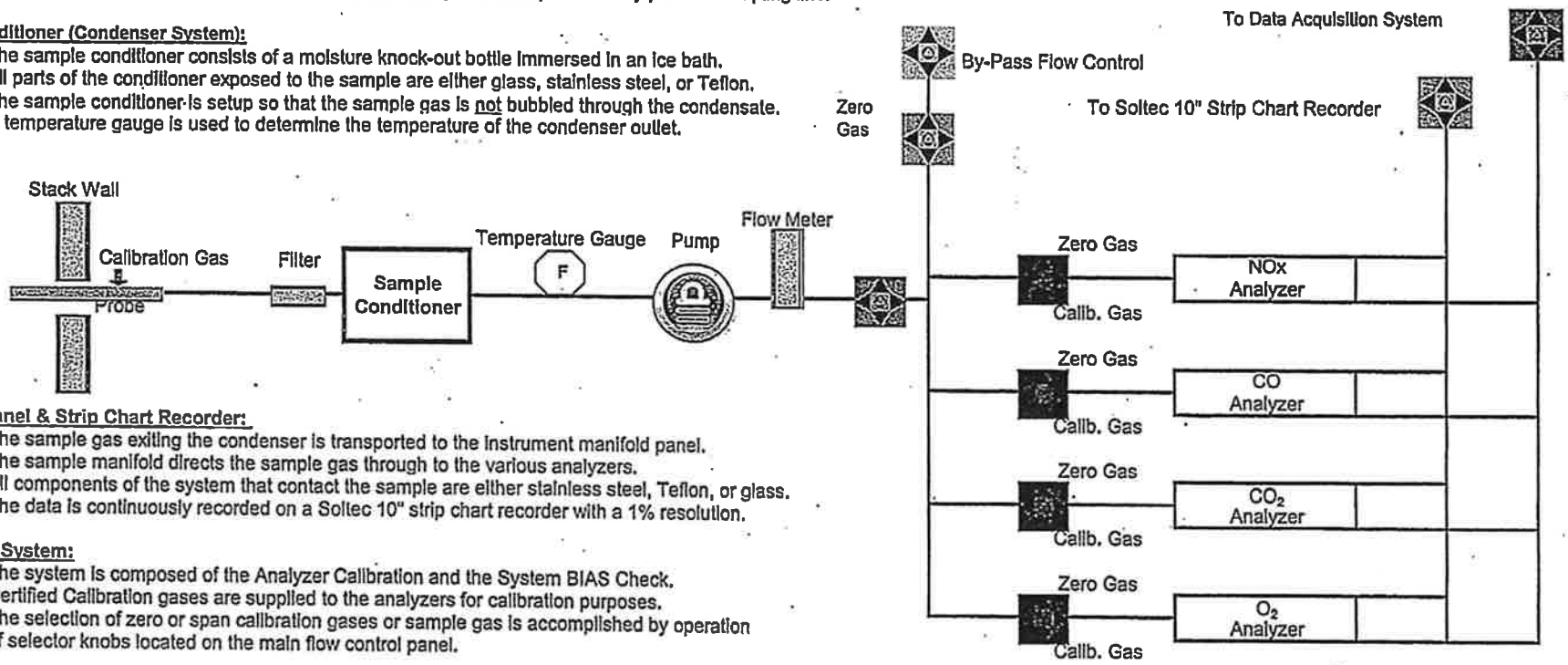
Method 100 – Sample Train Assembly

Probe:

1. AIRx Testing Services, Inc. uses a stainless steel sampling probe.
2. The probe is connected to the sample conditioner using a heated (if necessary) Teflon sampling line.

Sample Conditioner (Condenser System):

1. The sample conditioner consists of a moisture knock-out bottle immersed in an ice bath.
2. All parts of the conditioner exposed to the sample are either glass, stainless steel, or Teflon.
3. The sample conditioner is setup so that the sample gas is <u>not</u> bubbled through the condensate.
4. A temperature gauge is used to determine the temperature of the condenser outlet.



Manifold Panel & Strip Chart Recorder:

1. The sample gas exiting the condenser is transported to the instrument manifold panel.
2. The sample manifold directs the sample gas through to the various analyzers.
3. All components of the system that contact the sample are either stainless steel, Teflon, or glass.
4. The data is continuously recorded on a Soltec 10" strip chart recorder with a 1% resolution.

Calibration System:

1. The system is composed of the Analyzer Calibration and the System BIAS Check.
2. Certified Calibration gases are supplied to the analyzers for calibration purposes.
3. The selection of zero or span calibration gases or sample gas is accomplished by operation of selector knobs located on the main flow control panel.

<u>Nitrogen Oxides: – Chemiluminescent Analyzer:</u> Based on the chemiluminescent reaction of NO and ozone to form NO_2 in an excited state. Light emission is monitored through an optical filter by a high sensitivity photomultiplier tube, the output of which is electronically processed so it is linearly proportional to the NO concentration. The output is in units of ppmv.

<u>Carbon Monoxide – Non-Dispersive Infrared (NDIR) Analyzer:</u> Radiation from an infrared source is passed through a narrow band-pass filter and a multiple optical pass sample cell where absorption by the sample gas occurs. The infrared radiation exits the sample cell and falls on a solid state infrared detector. The output is in units of ppmv.

<u>Oxygen – Electrochemical Analyzer:</u> Oxygen in the flue gas sample diffuses through a Teflon membrane and is reduced on the surface of the cathode. A corresponding oxidation occurs at the anode and an electric current proportional to the concentration of oxygen is produced. The output is in units of percent O_2 by volume.

<u>Carbon Dioxide – Non Dispersive Infrared (NDIR) Analyzer:</u> The instrument measures the differential in infrared energy absorbed from energy beams passed through a reference cell (containing a gas selected to have minimal absorption of infrared energy in the wavelength absorbed by CO_2) and a sample cell through which the sample gas flows continuously. The output is in units of percent CO_2 by volume.

OXYGEN

Unit No. - 5:	
Manufacturer:	California Analytical Instruments
Model No.:	110P
Serial No.:	T02034
Method:	Paramagnetic
Range (%)	0-5, 10, 25

Unit No. - 7:	
Manufacturer:	Teledyne
Model No.:	320-AX
Serial No.:	108742
Method:	Electrochemical
Range (%)	0-5, 10, 25

Unit No. - 9:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B701/730
Method:	Paramagnetic
Range (%)	0-25, 100

Unit No. - 10:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B308
Method:	Paramagnetic
Range (%)	0-25

Unit No. - 11:	
Manufacturer:	Teledyne
Model No.:	320-A
Serial No.:	111211
Method:	Electrochemical
Range (%)	0-5, 10, 25

Unit No. - 12:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	01420/B7103
Method:	Paramagnetic
Range (%)	0-25, 100

Unit No. - 13:	
Manufacturer:	Servomex
Model No.:	1400
Serial No.:	X1420/B707
Method:	Paramagnetic
Range (%)	0-25

AIR TESTING

OXIDES OF NITROGEN

Unit No. - 1:	
Manufacturer:	API
Model No.:	200 EH
Serial No.:	233
Method:	Chemiluminescence
Range (ppmv)	0-5000
Unit No. - 2:	
Manufacturer:	API
Model No.:	200 EH
Serial No.:	234
Method:	Chemiluminescence
Range (ppmv)	0-5000
Unit No. - 3:	
Manufacturer:	API
Model No.:	200 EH
Serial No.:	109
Method:	Chemiluminescence
Range (ppmv)	0-5000
Unit No. - 4:	
Manufacturer:	API
Model No.:	200 EH
Serial No.:	442
Method:	Chemiluminescence
Range (ppmv)	0-5000
Unit No. - 5:	
Manufacturer:	API
Model No.:	200 EH
Serial No.:	441
Method:	Chemiluminescence
Range (ppmv)	0-5000

Unit No. - 6:	
Manufacturer:	API
Model No.:	200 A
Serial No.:	1013
Method:	Chemiluminescence
Range (ppmv)	0-50
Unit No. - 7:	
Manufacturer:	Thermo Environmental (TECO)
Model No.:	10AR
Serial No.:	25559-221
Method:	Chemiluminescence
Range (ppmv)	0-2.5, 10, 25, 100, 250, 1000, 2500, 10000
Unit No. - 8:	
Manufacturer:	Thermo Environmental (TECO)
Model No.:	10AR
Serial No.:	38586-258
Method:	Chemiluminescence
Range (ppmv)	0-2.5, 10, 25, 100, 250, 1000, 2500, 10000

QUALITY ASSURANCE

PRAXAIR

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Tel: (323) 585-2154 Fax:(714) 542-6689
PGVPID: F22017

DocNumber: 000105588

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Praxair Order Number: 70207599
Customer P. O. Number:
Customer Reference Number:

Fill Date: 2/27/2017
Part Number: NI CD80E-AS
Lot Number: 109705811
Cylinder Style & Outlet: AS CGA 580
Cylinder Pressure & Volume: 2000 psig 140 cu. ft.

Certified Concentration:

Expiration Date: 3/8/2025		Cylinder Number: CC60235	NIST Traceable Analytical Uncertainty:
7.98	%	CARBON DIOXIDE	± 0.4 %
3.98	%	OXYGEN	± 0.4 %
Balance		NITROGEN	

Certifcation Information: *Certification Date:* 3/8/2017 *Term:* 96 Months *Expiration Date:* 3/8/2025

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1. Do Not Use this Standard if Pressure is less than 100 PSIG.

CO2 responses have been corrected for Oxygen IR Broadening effect. O2 responses have been corrected for CO2 interference.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. Component: CARBON DIOXIDE

Requested Concentration: 8 %
Certified Concentration: 7.98 %
Instrument Used: Horiba VIA-510 S/N 574763031
Analytical Method: NDIR
Last Multipoint Calibration: 2/13/2017

First Analysis Data:						Date:	3/8/2017
Z:	0	R:	6.98	C:	7.97	Conc:	7.985
R:	6.98	Z:	0	C:	7.97	Conc:	7.985
Z:	0	C:	7.97	R:	7	Conc:	7.985
UOM:	%			Mean Test Assay:			7.985 %

Reference Standard Type: GMIS
Ref. Std. Cylinder # : DT0008914
Ref. Std. Conc: 7.00 %
Ref. Std. Traceable to SRM # : 1674b
SRM Sample # : 7-H-07
SRM Cylinder # : FF10631

Second Analysis Data:						Date:	
Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0
UOM:	%			Mean Test Assay:			0 %

2. Component: OXYGEN

Requested Concentration: 4 %
Certified Concentration: 3.98 %
Instrument Used: OXYMAT 5E
Analytical Method: PARAMAGNETIC
Last Multipoint Calibration: 3/3/2017

First Analysis Data:						Date:	3/8/2017
Z:	0	R:	5.01	C:	3.97	Conc:	3.975
R:	5	Z:	0	C:	3.97	Conc:	3.975
Z:	0	C:	3.97	R:	5	Conc:	3.975
UOM:	%			Mean Test Assay:			3.975 %

Reference Standard Type: GMIS
Ref. Std. Cylinder # : CC244935
Ref. Std. Conc: 5.01%
Ref. Std. Traceable to SRM # : 2656a
SRM Sample # : 72-D-28
SRM Cylinder # : CAL016862

Second Analysis Data:						Date:	
Z:	0	R:	0	C:	0	Conc:	0
R:	0	Z:	0	C:	0	Conc:	0
Z:	0	C:	0	R:	0	Conc:	0
UOM:	%			Mean Test Assay:			0 %

Analyzed by:

Ying Yu

Ying Yu

Certified by:

Nassim Haddad

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Intertek

RATA CLASS

Guaranteed +/- 1% Accuracy

8832 DICE ROAD, SANTA FE SPRINGS, CA 90670-2516 Phone: 800-323-2212 Fax: 562-464-5262

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory - PGVP Vendor ID: A52013

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
8832 DICE ROAD
SANTA FE SPRINGS, CA 90670-2516

Document # : 51261426-004
P.O. No.: AIRX

Customer

ALHC-HCF-FRESNO-MEDGAS (LOC 24337)
3703 BAGLEY AVENUE
TRANSFER ACCOUNT
FRESNO CA 93725
US

ANALYTICAL INFORMATION Gas Type : CO2,O2,BALN

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1.
EPA/600/R-12/531, May 2012. Do not use this standard if pressure is less than 100 psig.

Cylinder Number: CC160530
Cylinder Pressure: 2000 PSIG
Certification Date: 02Jul2013
Exp. Date: 03Jul2021
Batch No: SB0007326-1

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY ABSOLUTE / RELATIVE
CARBON DIOXIDE	20.1 %	.13 % / .6 %
OXYGEN	8.05 %	.06 % / .7 %
NITROGEN	BALANCE	

TRACEABILITY

REFERENCE STANDARD

COMPONENT	CONCENTRATION	UNCERTAINTY	CYLINDER	TYPE/SRM SAMPLE	EXP. DATE
CARBON DIOXIDE	17.87 %	0.110 %	K026459	NTRM 1800/	01Mar2019
OXYGEN	10.03 %	0.070 %	K027603	NTRM 2658/	01Feb2016

ANALYTICAL METHOD

1st Analysis: 02Jul2013

COMPONENT	INSTRUMENT	ANALYTICAL PRINCIPLE	CALIBRATED	CONCENTRATION
CARBON DIOXIDE	GC-TCD/HP 5890 II/3140A38374	GC	28Jun2013	20.11 %
OXYGEN	GC-TCD/HP 5890 II/3140A38374	GC	22Jun2013	8.051 %

APPROVED BY: DC

PRAXAIR

Making our planet more productive

DocNumber: 253580

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22019

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Certificate Issuance Date: 06/27/2019
Praxair Order Number: 70998288
Part Number: NI NO20ME-AS
Customer PO Number: 78981976

Fill Date: 06/07/2019
Lot Number: 70086915805
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	06/27/2022	NIST Traceable
Cylinder Number:	CC724466	Expanded Uncertainty
20.1 ppm	Nitric oxide	± 0.5 %
Balance	Nitrogen	

For Reference Only: *NOx 20.2 ppm*

Certification Information: *Certification Date:* 06/27/2019 *Term:* 36 Months *Expiration Date:* 06/27/2022

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.

Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: *(R=Reference Standard, Z=Zero Gas, C=Gas Candidate)*

1. *Component:* Nitric oxide

Requested Concentration: 20 ppm
Certified Concentration: 20.1 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030645077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 06/10/2019

Reference Standard: Type / Cylinder #: GMIS / CC2919
Concentration / Uncertainty: 19.90 ppm ±0.504%
Expiration Date: 03/28/2022
Traceable to: SRM # / Sample # / Cylinder #: APEX1161149 / NA / APEX1161149
SRM Concentration / Uncertainty: 20.03 ppm / ±0.10 ppm
SRM Expiration Date: 01/27/2020

First Analysis Data:						Date	06/20/2019
Z: 0	R: 19.9	C: 20	Conc: 20				
R: 19.88	Z: 0	C: 20.1	Conc: 20.1				
Z: 0	C: 20.1	R: 19.91	Conc: 20.1				
UOM: ppm			Mean Test Assay:	20.1	ppm		

Second Analysis Data:						Date	06/27/2019
Z: 0	R: 19.9	C: 20.1	Conc: 20.1				
R: 19.89	Z: 0	C: 20.2	Conc: 20.2				
Z: 0	C: 20.1	R: 19.89	Conc: 20.1				
UOM: ppm			Mean Test Assay:	20.1	ppm		

Analyzed By Henry Koung

Certified By Leeanna Flores

PRAXAIR
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Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles, CA 90058
Tel: 323-585-2154
Fax: 714-542-6689

Customer & Order Information:

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD,
OXNARD, CA 93030-7224

Praxair Order Number: **71378203**
Customer PO Number: **79369772**

Certificate Issuance Date: **7/10/2020**
Certification Date: **7/10/2020**
Lot Number: **70086018201**
Part Number: **NI NX20MP-AS**
DocNumber: **232651**
Expiration Date: **7/10/2021**

CERTIFICATE OF ANALYSIS
Primary Standard

Component	Requested Concentration (Molar)	Certified Concentration (Molar)	Analytical Reference	Analytical Uncertainty
Nitrogen dioxide (as NOx)	**20 ppm**	**19.01 ppm**	**1**	**± 1%**
Nitrogen	**Balance**	**Balance**		

Cylinder Style: **AS**
Cylinder Pressure @ 70 F: **2000 psig**
Cylinder Volume: **142 ft3**
Valve Outlet Connection: **CGA 660**
Cylinder Number(s): **CC3240**

Fill Date: **6/30/2020**
Analysis Date: **7/10/2020**

Filling Method: **Gravimetric**

Comments: **This mixture contains 2% Oxygen.**

Analyst: **Leeanna Flores**

Approved Signer: **Henry Koung**

Key to Analytical Techniques:

Reference	Analytical Instrument - Analytical Principle
1	MKS MG2031 - FTIR

The gas calibration cylinder standard prepared by Praxair Distribution, Inc. is considered a certified standard. It is prepared by gravimetric, volumetric, or partial pressure techniques. The calibration standard provided is certified against Praxair Distribution, Inc. Reference Materials which are traceable to the International System of Units (SI) through either weights traceable to the National Institute of Standards and Technology (NIST) or Measurement Canada, or through NIST Standard Reference Materials or equivalent where available.

Note: All expressions for concentration (e.g., % or ppm) are for gas phase, by volume (e.g., ppmv) unless otherwise noted. Analytical uncertainty is expressed as a Relative % unless otherwise noted.

PRAXAIR
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DocNumber: 224276

Praxair Distribution, Inc.
5700 S. Alameda Street
Los Angeles CA 90058
Tel: 323-585-2154
Fax: 714-542-6689
PGVP ID: F22018

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information

PRAXAIR PKG OXNARD CA HPS
455 E WOOLEY RD
OXNARD CA 93030

Certificate Modification Date: 09/18/2018
Praxair Order Number: 70717073
Part Number: NI NO40ME-AS

Fill Date: 09/05/2018
Lot Number: 70068624602
Cylinder Style & Outlet: AS CGA 660
Cylinder Pressure and Volume: 2000 psig 140 ft3

Certified Concentration

ProSpec EZ Cert

Expiration Date:	09/18/2021	NIST Traceable
Cylinder Number:	DT0028765	Expanded Uncertainty
39.9 ppm	Nitric oxide	± 0.8 %
Balance	Nitrogen	

For Reference Only: NOx 40.0 ppm

Certification Information: Certification Date: 09/18/2018 Term: 36 Months Expiration Date: 09/18/2021

This cylinder was certified according to the 2012 EPA Traceability Protocol, Document #EPA-600/R-12/531, using Procedure G1.
Do Not Use this Standard if Pressure is less than 100 PSIG.

Analytical Data: (R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: Nitric oxide

Requested Concentration: 40 ppm
Certified Concentration: 39.9 ppm
Instrument Used: Thermo Electron 42i-LS S/N 1030845077
Analytical Method: Chemiluminescence
Last Multipoint Calibration: 09/10/2018

Reference Standard: Type / Cylinder #: GMIS / CC505947
Concentration / Uncertainty: 49.44 ppm ±0.714%
Expiration Date: 08/08/2021
Traceable to: SRM # / Sample # / Cylinder #: 1683b / 45.-V-37 / CAL017868
SRM Concentration / Uncertainty: 49.79 / ±0.34 ppm
SRM Expiration Date: 03/25/2019

First Analysis Data:					Date 09/11/2018
Z: 0	R: 49.4	C: 39.8	Conc: 39.8		
R: 49.4	Z: 0	C: 39.9	Conc: 39.9		
Z: 0	C: 39.9	R: 49.4	Conc: 39.8		
UOM: ppm		Mean Test Assay:	39.9	ppm	

Second Analysis Data:					Date 09/18/2018
Z: 0	R: 49.4	C: 39.7	Conc: 39.7		
R: 49.4	Z: 0	C: 39.9	Conc: 39.9		
Z: 0	C: 39.9	R: 49.4	Conc: 39.9		
UOM: ppm		Mean Test Assay:	39.9	ppm	

Analyzed By Henry Koung

Certified By Amalia Beal

Airgas
an Air Liquide company

Nebraska Boiler
Changed: 09-29-20

Airgas Specialty Gases
Airgas USA, LLC
11711 S. Alameda Street
Los Angeles, CA 90059
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number:	E02NI99E15A01M5	Reference Number:	48-401725601-1
Cylinder Number:	CC105295	Cylinder Volume:	144.3 CF
Laboratory:	124 - Los Angeles (SAP) - CA	Cylinder Pressure:	2015 PSIG
PGVP Number:	B32020	Valve Outlet:	660
Gas Code:	NO,NOX,BALN	Certification Date:	Feb 13, 2020

Expiration Date: Feb 13, 2028

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a mole/mole basis unless otherwise noted.

Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	82.00 PPM	81.43 PPM	G1	+/- 1.0% NIST Traceable	02/06/2020, 02/13/2020
NITRIC OXIDE	82.00 PPM	81.23 PPM	G1	+/- 1.1% NIST Traceable	02/06/2020, 02/13/2020
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	13010422	KAL004028	97.6 PPM NITRIC OXIDE/NITROGEN	+/- 0.8%	Jul 23, 2025
PRM	12386	D685025	9.91 PPM NITROGEN DIOXIDE/AIR	+/- 2.0%	Feb 20, 2020
GMIS	401203436104	CC513876	4.653 PPM NITROGEN DIOXIDE/NITROGEN	+/- 2.1%	May 02, 2022

The SRM, PRM or RGM noted above is only in reference to the GMIS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 6700 AHR0801551 NO	FTIR	Jan 21, 2020
Nicolet 6700 AHR0801551 NO2	FTIR	Jan 21, 2020

Triad Data Available Upon Request

Approved for Release

AIRx Testing Services, Inc.

RATA EMISSIONS TESTING
NEW INDY OXNARD
N8E9551 – NEBRASKA BOILER
NOx Analyzer - Horiba VA-50 (Old)
VCAPCD PTO #0157-281
Test Date: October 22, 2020

Prepared for:
NEW INDY OXNARD
5936 Perkins Road,
Oxnard, CA 93033

Attn: Robyn Lebrilla

Submitted to:
Ventura County Air Pollution Control District
669 County Square Drive
Ventura, California 93003

Attn: Ed Swede

Prepared by:
AIRx Testing Services, Inc.
2472 Eastman Avenue #34
Ventura, CA 93003

Job No.: 23022

Lab No.: 220-113

Tom Porter for

Wesley Hart; Source Test Engineer

Tom Porter

Tom Porter; Vice President of Testing Services

Submitted:
November 3, 2020

Table of Contents

AIRx Testing Services, Inc.

New Indy
Nebraska Boiler
10/22/2020

CEMS RATA
Calculations

Run	AIRx Testing - Reference Method		
	NOx ppmv	O2 Dry %	NOx ppmv @ 3% O2
1	25.17	4.39	27.29
2	24.56	4.46	26.75
3	24.47	4.43	26.59
4	24.62	4.45	26.79
5	25.18	4.48	27.45
6	24.86	4.46	27.07
7	26.03	4.54	28.48
8	26.04	4.47	28.38
9	25.70	4.50	28.04

Run	New Indy	Nebraska	CEMS
	NOx ppmv	O2 Dry %	NOx ppmv @ 3%
1	28.06	4.86	31.31
2	27.99	4.89	31.30
3	27.90	4.87	31.16
4	27.69	4.85	30.89
5	27.39	4.87	30.60
6	27.20	4.80	30.24
7	26.89	4.91	30.10
8	26.66	4.82	29.66
9	26.50	4.86	29.58

Run	Reference Method - CEM, Difference		
	NOx ppmv	O2 Dry %	NOx ppmv @ 3%
1	-2.89	-0.47	-4.02
2	-3.43	-0.43	-4.55
3	-3.43	-0.44	-4.57
4	-3.07	-0.40	-4.10
5	-2.21	-0.39	-3.15
6	-2.34	-0.34	-3.17
7	-0.86	-0.37	-1.62
8	-0.62	-0.35	-1.28
9	-0.80	-0.36	-1.54

Arithmetic Mean, d	-2.18	-0.39	-3.11
Standard Deviation, Sd	1.15	0.04	1.32
Confidence Coefficient, CC	0.88	0.03	1.02
Avg Reference Method, RM	25.18	4.47	27.43
Relative Accuracy, RA	**12.17**	**9.58**	**15.06**

NOTE: Calculations based on "Code of Federal Regulations 40", 1988, Part 60, Appendix B, Specification 2, p. 939.

INTRODUCTION

1.0 INTRODUCTION

On October 22, 2020 AIRx Testing Services conducted RATA source testing on a natural gas fired 108/MMBTU Nebraska Boiler N8E9551. The unit is located at the New Indy Plant at 5936 Perkins Road, in Oxnard. The boiler is used for the generation of steam for specific facility operations. The tests were required to satisfy requirements detailed in PTO #0157-281.

The objective of the testing was to determine the relative accuracy (RATA) of the facility's boiler CEM equipment (Old NOx Analyzer). Operational data reported by New Indy personnel included NOx readings from their Horiba analyzer and O2 readings from their Rosemont analyzer.

PROCESS DETAILS: The Nebraska Boiler is rated for 108 MMBtu/hr heat input and exhausts into 44''exhaust stack. The sample was taken off the existing facility CEM system NOx/O2 probe with it being located at A and B distances of 360'' and 26'' respectively (8.2 diameters upstream and 0.6 diameters downstream).

CEM DATA: CEM data was recorded by the Data Acquisition System (DAS) during the test program in the form of one (1) minute averages. The one (1) minute data readings were then printed out and averaged to obtain data for comparison to New Indy's CEM data. The facility CEM data was obtained by plant personnel during the test program and provided to the test team. The CEM data monitored NOx and O2 concentrations and also correcting the NOx to 3% oxygen.

CONTINUOUS MONITORS: NOx and O2 sampling utilized a stainless steel sampling probe connected with a Teflon sampling line to a sample conditioner. The dry gases were then transported through a Teflon line to the sample gas flow panel for distribution to the individual analyzers. Three (3) 63 minute sampling runs for NOx and O2 were performed in accordance with EPA Method 7e and CARB Method 100. NOx measurements were made utilizing an API 200EH chemiluminescent analyzer. Oxygen concentration was measured utilizing a Servomex Model 1400 paramagnetic analyzer. Initial three (3) point calibrations were performed on the analyzers. Subsequent calibrations were performed through the sample system probe tip (Bias checks). All initial bias checks correlated with the initial instrument calibrations to within 2% of analyzer range. Bias calibrations were performed before and after each test run and used to correct the emissions data for any analyzer drift. All monitor calibrations were performed with EPA Protocol 1 calibration gases.

During all tests, the NOx and O2 RM analyzers were operated on the 50 ppmv and 10% scales, respectively.

TEST DAY DISCUSSION: On 10-22-2020, RATA testing was performed on the facilities" old NOx Analyzer (Horiba VA-50). Three (3) 63 minute runs were performed and broken into three 21 minute RATA test runs. This is acceptable according to the test methodology and by Ed Swede with the VCAPCD. The three test runs were conducted while the boiler was operating under normal conditions.

1.0 INTRODUCTION (cont)

All monitored data was continuously recorded on a 10" analog chart recorder. Chart speed was maintained at 10 cm/hr. Analyzer output was also recorded with a PC based Data Acquisition System (DAS) and imported into spreadsheets for determination of average run concentrations.

All reporting and calculations have been performed using VCAPCD standard conditions of 68°F and 29.92 inches of Hg. If you have any questions regarding this test program or report, please contact the undersigned at (805) 644-1099.

Respectfully Submitted
AIRx Testing Services, Inc.

Wesley Hart
Source Test Engineer

Reviewed by:

Tom Porter
Vice President of Testing Services

CC: Ventura County APCD
Attn: Ed Swede

CALCULATIONS

RATA Bias Adjustment

Facility: New Indy
Source: Nebraska Boiler
Date: 10/22/20

Run No. 1

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	25.14	20.2	0.0	0.0	0.0	20.2	20.2	20.2	**25.17**
O2	4.50	3.98	0.0	0.0	0.0	4.0	4.0	4.1	**4.39**

Run No. 2

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	24.53	20.2	0.0	0.0	0.0	20.2	20.2	20.2	**24.56**
O2	4.50	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.46**

Run No. 3

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	24.44	20.2	0.0	0.0	0.0	20.2	20.2	20.2	**24.47**
O2	4.47	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.43**

Run No. 4

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	24.53	20.2	0.0	0.0	0.0	20.2	20.1	20.1	**24.62**
O2	4.47	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.45**

Run No. 5

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	25.09	20.2	0.0	0.0	0.0	20.2	20.1	20.1	**25.18**
O2	4.50	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.48**

RATA Bias Adjustment

Facility: New Indy
Source: Nebraska Boiler
Date: 10/22/20

Run No. 6

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	24.76	20.2	0.0	0.0	0.0	20.2	20.1	20.1	**24.86**
O2	4.48	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.46**

Run No. 7

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	25.90	20.2	0.0	0.0	0.0	20.1	20.1	20.1	**26.03**
O2	4.55	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.54**

Run No. 8

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	25.91	20.2	0.0	0.0	0.0	20.1	20.1	20.1	**26.04**
O2	4.48	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.47**

Run No. 9

Parameter	Measured Conc. (ppm,%)	Reference Span gas (ppm.%)	Initial Zero (ppm.%)	Final Zero (ppm.%)	Average Zero (ppm.%)	Initial Span (ppm.%)	Final Span (ppm.%)	Average Span (ppm.%)	Adjusted Conc. (ppm.%)
NOx	25.57	20.2	0.0	0.0	0.0	20.1	20.1	20.1	**25.70**
O2	4.50	3.98	0.0	0.0	0.0	4.0	4.0	4.0	**4.50**