

eDiluter log, Rev. 12/2/19 Diluter s/n: 86106 Calibration Date: 9/23/19 Sampling Location: CLEARSTAY TSI flowmeter s/n: 423-7007  
UPSTREAM INLET P MB

Date/Time	Operator	Inlet flow, slpm	Inlet p, mb	Target flow	% d	CO in, ppm	CO out, ppm	DF	Target DF	% d	P
11:25 (12/15/19)	Brian Vinac	7.730	996.0	7.78	0.64%	4964	149.5	33.2	37.5	12.6	MB
12/19/19 @ 16:22	Brian Vinac	7.170	1060.1	7.90	9.24%	4964	156.6	31.6	37.5	15.4	
<del>12/9/19 10:45</del>	<del>BV/GAA</del>	<del>7.26</del>	<del>1011.2</del>								
12/9 10:55	BV/GAA	7.25	997.3	7.81		4964	117.8	NO	DUMP!		GAA
12/9 11:55	BV/GAA		1014			4964	98.5				
12/9 12:55	BV/GAA	7.60	993	7.68		4964	46				
17:17	BV/GAA					4964	129	38.4	36.4	5.5	1012
12/10 13:10	GAA	7.55				4964	135.7	36.6	36.8		1008
12/10 14:30	BV/GAA COLD	7.42	985	7.43	+1.5						1006
12/11/19 11:49	BV/GAA COLD	7.91	1015.5	8.34	5.2	4964	129	38.5	37.3	+3.2	1002
12:51		7.80	999	7.87	-0.9	4964	144	34.4	35.9		1015
13:20		After HIT measurement				4964	143	34.7	35.7		1017
17:30	zic COLD	7.73	1000.5	7.91	2.3	"	140	35.5	35.7		1017
12/13/19 10:08	GAA/BV COLD	8.49	1005	8.05	+5.5	"	140	35.5	35.6		1018
12/18/19 11:48	GAA CO MON CAL + ZIC COLD	7.73	984	7.40	+4.5	"	178	27.9	34.9		1026
12/18/19 13:22	GAA APPR COMON CALIBRATION					"	158	31.4	37.2		1003
12/19/19 14:42	GAA POST RUN	7.28	1001.0	7.93	8.2	"	138	36.0	37.2	3.2	1003
12/19 15:10	GAA					"	258	19.2			1019
12/20 - 8:21	BV	8.14	1005.7	8.05	1.11%	4964	150	33.1	35.0	0.5	1019

12/11 CO CAL 39% High  
 12/18 CO CAL 29% Low  
 12/19 605 ppm reads 106 ppm



eDiluter log, Rev. 12/20/19 eDiluter s/n: 86106 Calibration Date: 9/23/19 Sampling Location: PUTNAM CT CLEARSTAR TSI flowmeter s/n: 7007

Date/Time	Operator Initials	Inlet flow SLPM	Inlet P mb	Target flow slpm	% D	CO in ppm	CO out ppm	Inlet P mb	DF	Target DF	% D	Comments
1/6/20 @ 3:02	BV	7.76	989	7.56	2.6 ✓	4964	151	1007	32.8	36.7	10.6X	Pre ESP + Pre test check
1/6/20 @ 3:38	BV	7.76	988	7.53	3.05 ✓	4964	148	1007	33.5	36.7	8.71X	Pre ESP / Pre test check
1/7/20 @ 8:24	BV	7.86	995	7.75	1.41 ✓	4964	151	1013	32.9	36.1	8.8 ✓	Pre ESP, Pre Check
1/7/20 @ 5:34	BV	7.70	990	7.59	1.44 ✓	4964	149	1008	33.3	36.6	9.01 ✓	Pre ESP Post Check
1/8/20 @ 9:55	BV	7.80	987	7.50	4.0 ✓	4964	142	1003	34.95	37.2	6.0 ✓	Pre ESP / <sup>Pre</sup> POST CHECK
1/8/20 @ 5:06	BV	7.70	990	7.59	1.44 ✓	4964	140	1008	33.5	36.6	3.0 ✓	Pre ESP / Post Check
1/9/20 @ 8:09	BV	8.26	1012	8.25	0.12 ✓	4964	155	1031	32.0	34.4	6.97 ✓	Pre ESP / Pre check
1/9/20 @ 4:25	BV	<del>8.10</del> 8.20	1014	8.31	1.3 ✓	4964	156	1032	31.8	34.4	7.55 ✓	Pre ESP / Post Check
1/12/20 @ 12:35	BV	8.10	1004	8.02	0.74 ✓	4964	149	1023 <del>1026</del>	33.3	<del>35.1</del> 34.4	5.1 ✓	PRE ESP / PRE-CHECK
1/14/20 @ 8:13	BV	8.10	1003	7.99	1.37 ✓	4964	145	1022	34.2	35.2	2.8 ✓	Pre ESP / Pre Check
* 1/14/20 @ 4:26	BV	2.69	1019	8.31	67.6X	4964	63	1029	78.8	34.6	127.7X	Pre ESP / Post Check
1/14/20 @ 7:28	BV	8.00	997	7.81	2.4 ✓							
1/15/20 @ 8:21	BV	<del>8.01</del>	995	7.75	3.35 ✓	4964		1041		33.7		
1/15/20 @ 9:12	BV	7.98	996	7.78	2.57 ✓	4964	145	1015	34.2	35.9	4.7 ✓	Pre ESP / Pre Check
1/15/20 @ 3:55	BV	7.90	995	7.75	1.93 ✓	4964	143	1003	34.7	37.2	6.7 ✓	Pre ESP / Post Check
1/17/20 @ 7:27	BV	8.15	1065	8.05	1.24 ✓	4964	151	1024	32.8	35.0	6.2 ✓	Pre ESP / Pre Check
1/17/20 @ <sup>4:38</sup> <del>5:39</del>	BV	5.02	1021	8.50	40.9X	4964	102	1036	48.7	34.0	43.2X	Pre ESP / Post Check
1/21/20 @ 8:25	BV	7.77	1006	8.08	3.83 ✓	4964	144	1025	34.5	34.9	1.1 ✓	Pre ESP / Pre Check ✓
1/21/20 @ 4:46	BV	6.91	1007	8.11	14.8X	4964	139	1024	35.7	35.0	2.0 ✓	Pre ESP / Post Check

Notes:

changed to 9-1002 flowmeter

Date/Time	Operator Initials	Inlet flow SLPM	Inlet P mb	Target flow slpm	% D	CO in ppm	CO out ppm	Inlet P mb	DF	Target DF	% D	Comments
1/21/20 @ 8:15	BV	7.62	1007	8.11	6.04	4964	151	1026	32.9	34.9	5.7	Pre ESP / Pre Check
1/22/20 @ 4:11	BV	7.36	<del>1024</del> 1004	8.02	8.23	4964	138	1023	35.9	35.1	2.28	Pre ESP / Post Check
1/23/20 @ 8:25	BV	<del>7.88</del> 7.88	1005	8.05	5.6	4964	155	1024	32.0	35.0	8.5	Pre ESP / Pre check
1/23/20 @ 5:00pm	BV	7.96	1000	7.90	0.75	4964	148	1020	33.5	35.4	5.34	Pre ESP / Post Check
1/27/20 @ 2:32pm	BV	7.67	977	7.17	6.97	4964	153	997	32.4	32.9	14.5*	Pre ESP *
1/28/20 @ 2:38	BV	7.77	982	7.33	6.0	4964	140	1001	35.4	37.4	5.34	Pre ESP ✓
1/29/20 @ 8:09	BV	7.97	992	7.65	4.18	4964	141	1009	35.2	36.5	3.56	Pre ESP / Pre Check
1/29/20 @ 3:56:10 - 4:02:22	BV	7.88	993	7.68	2.6	4964	142	1010	<del>34.95</del> 35.0	36.4	3.84	Pre ESP / Post Check
1/30/20 @ 8:02:42 - 8:14:51	BV	8.15	1001	7.93	2.77	4964	147	1019	33.8	35.5	4.78	Pre ESP / Pre Check ✓
1/30/20 @ 4:07	BV	8.00	1001	7.93	0.88	4964	69	1019	71.9	35.5	X	Fail Note analyzer was the cause
8:21 @ 3/16/20	BV	8.04	993	7.68	4.6							

Notes:

eDiluter log, Rev. 12/20/19 eDiluter s/n: 87106 Calibration Date: 1/21/20 Sampling Location: CLEARSTAIR DOWNSTAIRS / PRE TSI flowmeter s/n: 1316007  
 \*PRO SPECIAL EDITION FROM ERKKI/DEKATI

Date/Time	Operator Initials	Inlet flow SLPM	Inlet P mb	Target flow slpm	% D	CO in ppm	CO out ppm	Inlet P mb	DF	Target DF	% D	Comments
2/19/20 AM	GA/BV	6.10	986	6.07	0.5	4964	127	—	39.1	35	11.7	DF=10 (1 <sup>ST</sup> STAGE)
2/19/20 4:50p	GA/BV	9.18	—	9.77	6.0	4964	129	—	38.5	35	10.0	DF=5 (1 <sup>ST</sup> STAGE)
2/20/19 11:45	GA	0.36		9.77	X							DF=5
87106												
3/17 @ 9:37	BV	8.186	999	7.87	3.7% ✓	4964	158	1016	31.4	35.8	12.2%	PRE ESP <sub>2</sub> Precheck
					TAKE #2	4964	144	1016	34.5	35.8	3.6% ✓	PRE ESP <sub>3</sub>
3/17 @ 5:48	BV	7.90	993	7.68	2.9% ✓	4964	142	1011	34/35.0	36.3	4.4% ✓	Pre ESP ✓ post check
3/24/20 @ 11:35	BV	7.99 7.1699	996	7.78	2.69% ✓	4964 5018		1012		36.2		
3/24/20 @ 1:10	BV	7.73	995	7.75	.02% ✓	5018	152	1011	33.0	36.3	9.0%	POST CAT PRECHECK
3/25/8:30	BV	7.88	998	7.84	.25% ✓	5018						
3/26/8:25	BV	8.04	993	7.68	4.6% ✓	5018	157 12.0	1010	32.0	36.4	12% X	Post CAT / Pre Check
3/26/20 8:56	BV	7.99	993	7.68	4.63% ✓	5018	151	1010	33.2	36.4	8.8%	POST CAT / Pre check ✓
3/26/20 @ 4:44	BV	7.68	988	7.53	1.99% ✓	5018	143	1003	35.1	37.2	5.64%	POST CAT / Post Check ✓

Notes: PRO AUTO-ADJUST FOR INLET PRESSURE - READINGS NOT USED

#106

Sn 86106, cal date: 19-09-23. Inlet Pressure (mb), Inlet Flow (SLPM), DF

INLET	PRESSURE	FLOW	TARGET	DF
951	6.25	45.9		
952	6.29	45.7		
953	6.33	45.5		
954	6.36	45.2		
955	6.40	45.0		
956	6.44	44.8		
957	6.47	44.6		
958	6.51	44.3		
959	6.55	44.1		
960	6.58	43.9		
961	6.62	43.7		
962	6.65	43.5		
963	6.69	43.3		
964	6.72	43.1		
965	6.76	42.9		
966	6.79	42.7		
967	6.83	42.5		
968	6.86	42.3		
969	6.90	42.2		
970	6.93	42.0		
971	6.97	41.8		
972	7.00	41.6		
973	7.03	41.4		
974	7.07	41.3		
975	7.10	41.1		
976	7.13	40.9		
977	7.17	40.8		
978	7.20	40.6		
979	7.23	40.4		
980	7.27	40.3		
981	7.30	40.1		
982	7.33	40.0		
983	7.37	39.8		
984	7.40	39.7		
985	7.43	39.5		
986	7.46	39.4		
987	7.50	39.2		
988	7.53	39.1		
989	7.56	38.9		
990	7.59	38.8		
991	7.62	38.7		
992	7.65	38.5		
993	7.68	38.4		
994	7.72	38.3		
995	7.75	38.1		
996	7.78	38.0		
997	7.81	37.9		
998	7.84	37.8		
999	7.87	37.6		
1000	7.90	37.5		
1001	7.93	37.4		
1002	7.96	37.3		
1003	7.99	37.2		
1004	8.02	37.1		
1005	8.05	36.9		
1006	8.08	36.8		
1007	8.11	36.7		
1008	8.14	36.6		
8.17 1009	<del>8.20</del>	36.5		
1010	8.20	36.4		
1011	8.22	36.3		
1012	8.25	36.2		
1013	8.28	36.1		
1014	8.31	36.0		
1015	8.34	35.9		
1016	8.37	35.8		
1017	8.39	35.7		
1018	8.42	35.6		
1019	8.45	35.5		
1020	8.48	35.4		
1021	8.50	35.3		
1022	8.53	35.2		
1023	8.56	35.1		
1024	8.59	35.0		
1025	8.61	34.9		
1026	8.64	34.9		
1027	8.67	34.8		
1028	8.69	34.7		
1029	8.72	34.6		
1030	8.75	34.5		
1031	8.77	34.4		
1032	8.80	34.4		
1033	8.82	34.3		
1034	8.85	34.2		
1035	8.87	34.1		
1036	8.90	34.0		
1037	8.92	34.0		
1038	8.95	33.9		
1039	8.97	33.8		
1040	9.00	33.7		
1041	9.02	33.7		
1042	9.05	33.6		
1043	9.07	33.5		
1044	9.10	33.4		
1045	9.12	33.4		
1046	9.15	33.3		
1047	9.17	33.2		
1048	9.19	33.2		
1049	9.22	33.1		
1050	9.24	33.0		
1051	9.26	33.0		
1052	9.29	32.9		
1053	9.31	32.8		
1054	9.33	32.8		
1055	9.36	32.7		
1056	9.38	32.6		
1057	9.40	32.6		
1058	9.42	32.5		
1059	9.44	32.4		
1060	9.47	32.4		
1061	9.49	32.3		
1062	9.51	32.3		
1063	9.53	32.2		
1064	9.55	32.1		
1065	9.58	32.1		
1066	9.60	32.0		
1067	9.62	32.0		
1068	9.64	31.9		
1069	9.66	31.9		
1070	9.68	31.8		
1071	9.70	31.7		
1072	9.72	31.7		
1073	9.74	31.6		
1074	9.76	31.6		