

ATTACHMENT B

EPNG REPRESENTATIVE GAS QUALITY IN NM
SUMMARY OF ANNUAL AVERAGE VOC CONTENT

Transmission Compressor Station	Annual* VOC Content by Weight
Caprock	0.775%
Eunice	0.206%
Monument	0.820%
Rio Vista	0.633%
Washington Ranch	0.436%

* For July 2020 to July 2021.

EPNG Caprock

FLOW_CO MP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	07/16/2020 09:00	0.4827	0.0092	0.0155	0.002	0.0018	0.0018	0.0009	0.0009	0	0	0	0	17.43	1.328	98.672
1	07/17/2020 09:00	0.4672	0.0095	0.0162	0.0016	0.0011	0.0016	0.0008	0.0008	0	0	0	0	17.38	1.291	98.709
1	07/18/2020 09:00	0.4392	0.0087	0.0148	0.0012	0.0009	0.0012	0.0006	0.0006	0	0	0	0	17.37	1.208	98.792
1	07/19/2020 09:00	0.4772	0.0097	0.0162	0.0017	0.0014	0.0014	0.0007	0.0007	0	0	0	0	17.40	1.315	98.685
1	07/20/2020 09:00	0.4844	0.0093	0.0157	0.0016	0.0011	0.0018	0.0009	0.0009	0	0	0	0	17.44	1.329	98.671
1	07/21/2020 09:00	0.4591	0.009	0.0157	0.0016	0.0014	0.0014	0.0007	0.0007	0	0	0	0	17.39	1.266	98.734
1	07/22/2020 09:00	0.4486	0.0085	0.0143	0.0014	0.0012	0.0012	0.0006	0.0006	0	0	0	0	17.39	1.230	98.770
1	07/23/2020 09:00	0.4397	0.0084	0.0145	0.0013	0.0009	0.0012	0.0006	0.0006	0	0	0	0	17.38	1.208	98.792
1	07/24/2020 09:00	0.4009	0.0082	0.0152	0.0016	0.0015	0.0012	0.0006	0.0006	0	0	0	0	17.34	1.117	98.883
1	07/25/2020 09:00	0.4403	0.0098	0.0188	0.002	0.0019	0.0018	0.0009	0.0009	0	0	0	0	17.31	1.243	98.757
1	07/26/2020 09:00	0.3964	0.0096	0.0184	0.0025	0.0026	0.0018	0.0009	0.0009	0	0	0	0	17.28	1.136	98.864
1	07/27/2020 09:00	0.359	0.0089	0.0179	0.0026	0.0029	0.002	0.001	0.001	0	0	0	0	17.24	1.042	98.958
1	07/28/2020 09:00	0.368	0.0086	0.0172	0.0024	0.0025	0.0018	0.0009	0.0009	0	0	0	0	17.25	1.057	98.943
1	07/29/2020 09:00	0.3483	0.0083	0.0165	0.0022	0.0022	0.0016	0.0008	0.0008	0	0	0	0	17.21	1.003	98.997
1	07/30/2020 09:00	0.2942	0.0089	0.0169	0.0021	0.0022	0.0016	0.0008	0.0008	0	0	0	0	17.18	0.869	99.131
1	07/31/2020 09:00	0.1994	0.0057	0.0114	0.0019	0.0019	0.0018	0.0009	0.0009	0	0	0	0	17.05	0.599	99.401
1	08/01/2020 09:00	0.1955	0.006	0.0133	0.0024	0.0025	0.0018	0.0009	0.0009	0	0	0	0	17.02	0.602	99.398
1	08/02/2020 09:00	0.2018	0.0057	0.0112	0.0016	0.0016	0.0016	0.0008	0.0008	0	0	0	0	17.04	0.601	99.399
1	08/03/2020 09:00	0.2259	0.005	0.0098	0.0012	0.0015	0.0012	0.0006	0.0006	0	0	0	0	17.11	0.650	99.350
1	08/04/2020 09:00	0.223	0.0051	0.0107	0.0014	0.0015	0.0012	0.0006	0.0006	0	0	0	0	17.10	0.647	99.353
1	08/05/2020 09:00	0.2334	0.0054	0.012	0.0013	0.0013	0.001	0.0005	0.0005	0	0	0	0	17.13	0.676	99.324
1	08/06/2020 09:00	0.2396	0.0061	0.0128	0.0017	0.0017	0.0014	0.0007	0.0007	0	0	0	0	17.15	0.701	99.299
1	08/07/2020 09:00	0.2372	0.0057	0.0112	0.0015	0.0017	0.0018	0.0009	0.0009	0	0	0	0	17.16	0.689	99.311
1	08/08/2020 09:00	0.2458	0.0056	0.0112	0.0016	0.0019	0.0016	0.0008	0.0008	0	0	0	0	17.18	0.711	99.289
1	08/09/2020 09:00	0.2755	0.006	0.0118	0.0015	0.0018	0.0014	0.0007	0.0007	0	0	0	0	17.19	0.788	99.212
1	08/10/2020 09:00	0.2251	0.0051	0.0102	0.0013	0.0017	0.0014	0.0007	0.0007	0	0	0	0	17.15	0.650	99.350
1	08/11/2020 09:00	0.24	0.0058	0.0118	0.0014	0.0018	0.0014	0.0007	0.0007	0	0	0	0	17.17	0.697	99.303
1	08/12/2020 09:00	0.2577	0.0064	0.0136	0.0018	0.002	0.0016	0.0008	0.0008	0	0	0	0	17.16	0.754	99.246
1	08/13/2020 09:00	0.2385	0.0058	0.0122	0.0008	0.0007	0.0014	0.0007	0.0007	0	0	0	0	17.16	0.687	99.313
1	08/14/2020 09:00	0.2633	0.0063	0.0128	0.0012	0.0013	0.0012	0.0006	0.0006	0	0	0	0	17.19	0.757	99.243
1	08/15/2020 09:00	0.2557	0.006	0.0124	0.0016	0.0018	0.0014	0.0007	0.0007	0	0	0	0	17.18	0.740	99.260
1	08/16/2020 09:00	0.2491	0.006	0.0121	0.0018	0.0021	0.0016	0.0008	0.0008	0	0	0	0	17.19	0.725	99.275
1	08/17/2020 09:00	0.2552	0.0058	0.0114	0.0015	0.0019	0.0016	0.0008	0.0008	0	0	0	0	17.16	0.736	99.264
1	08/18/2020 09:00	0.2264	0.0048	0.0097	0.0011	0.0016	0.001	0.0005	0.0005	0	0	0	0	17.11	0.649	99.351
1	08/19/2020 09:00	0.2256	0.0054	0.0109	0.0014	0.0017	0.0012	0.0006	0.0006	0	0	0	0	17.13	0.655	99.345
1	08/20/2020 09:00	0.24	0.0055	0.0113	0.0007	0.0008	0.0006	0.0003	0.0003	0	0	0	0	17.12	0.685	99.315
1	08/21/2020 09:00	0.2409	0.0054	0.0113	0.001	0.0015	0.0008	0.0004	0.0004	0	0	0	0	17.15	0.691	99.309
1	08/22/2020 09:00	0.2878	0.0063	0.0126	0.0013	0.0018	0.0012	0.0006	0.0006	0	0	0	0	17.20	0.821	99.179
1	08/23/2020 09:00	0.2695	0.0058	0.0112	0.0007	0.0009	0.001	0.0005	0.0005	0	0	0	0	17.16	0.762	99.238
1	08/24/2020 09:00	0.2502	0.0061	0.012	0.0014	0.0016	0.0012	0.0006	0.0006	0	0	0	0	17.16	0.723	99.277
1	08/25/2020 09:00	0.2349	0.0056	0.0115	0.0012	0.0014	0.0016	0.0008	0.0008	0	0	0	0	17.12	0.682	99.318
1	08/26/2020 09:00	0.2421	0.0055	0.0108	0.001	0.0013	0.0016	0.0008	0.0008	0	0	0	0	17.13	0.696	99.304
1	08/27/2020 09:00	0.2715	0.0062	0.0121	0.0007	0.0007	0.0012	0.0006	0.0006	0	0	0	0	17.12	0.773	99.227
1	08/28/2020 09:00	0.2337	0.0053	0.0105	0.0003	0.0002	0.001	0.0005	0.0005	0	0	0	0	17.13	0.662	99.338
1	08/29/2020 09:00	0.2329	0.0051	0.0102	0.0007	0.0011	0.0012	0.0006	0.0006	0	0	0	0	17.15	0.664	99.336
1	08/30/2020 09:00	0.2394	0.0055	0.011	0.0008	0.0012	0.0012	0.0006	0.0006	0	0	0	0	17.18	0.685	99.315
1	08/31/2020 09:00	0.2227	0.0051	0.0101	0.0009	0.0013	0.0012	0.0006	0.0006	0	0	0	0	17.17	0.639	99.361
1	09/01/2020 09:00	0.2217	0.0054	0.0106	0.001	0.0015	0.0012	0.0006	0.0006	0	0	0	0	17.15	0.641	99.359
1	09/02/2020 09:00	0.2124	0.0053	0.0103	0.0011	0.0016	0.0012	0.0006	0.0006	0	0	0	0	17.13	0.617	99.383
1	09/03/2020 09:00	0.2138	0.0051	0.0101	0.001	0.0014	0.0012	0.0006	0.0006	0	0	0	0	17.13	0.618	99.382
1	09/04/2020 09:00	0.211	0.0049	0.0098	0.0004	0.0005	0.001	0.0005	0.0005	0	0	0	0	17.07	0.604	99.396
1	09/05/2020 09:00	0.2478	0.0062	0.0132	0.0014	0.0017	0.0016	0.0008	0.0008	0	0	0	0	17.13	0.725	99.275
1	09/06/2020 09:00	0.2439	0.0054	0.0101	0.0008	0.0011	0.0012	0.0006	0.0006	0	0	0	0	17.29	0.688	99.312
1	09/07/2020 09:00	0.2367	0.0054	0.0111	0.001	0.0012	0.001	0.0005	0.0005	0	0	0	0	17.30	0.673	99.327
1	09/08/2020 09:00	0.2185	0.0049	0.0092	0.0007	0.0007	0.001	0.0005	0.0005	0	0	0	0	17.28	0.616	99.384
1	09/09/2020 09:00	0.2259	0.0052	0.0099	0.0004	0.0002	0.001	0.0005	0.0005	0	0	0	0	17.33	0.633	99.367
1	09/10/2020 09:00	0.2265	0.0054	0.0102	0.0007	0.0007	0.0014	0.0007	0.0007	0	0	0	0	17.29	0.643	99.357

EPNG Caprock

FLOW_CO MP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	09/11/2020 09:00	0.2196	0.0055	0.0095	0.0001	0.0002	0.0008	0.0004	0.0004	0	0	0	0	17.05	0.625	99.375
1	09/12/2020 09:00	0.2308	0.0053	0.0097	0.0001	0	0.0006	0.0003	0.0003	0	0	0	0	17.04	0.652	99.348
1	09/13/2020 09:00	0.1755	0.0044	0.0088	0.0004	0.0005	0.0008	0.0004	0.0004	0	0	0	0	16.99	0.509	99.491
1	09/14/2020 09:00	0.1785	0.0048	0.0095	0.0007	0.0008	0.001	0.0005	0.0005	0	0	0	0	16.98	0.524	99.476
1	09/15/2020 09:00	0.2035	0.0053	0.0104	0.0007	0.0007	0.001	0.0005	0.0005	0	0	0	0	17.00	0.592	99.408
1	09/16/2020 09:00	0.184	0.0051	0.0101	0.0007	0.001	0.001	0.0005	0.0005	0	0	0	0	16.98	0.542	99.458
1	09/17/2020 09:00	0.2193	0.0063	0.0129	0.0019	0.002	0.0014	0.0007	0.0007	0	0	0	0	17.26	0.648	99.352
1	09/18/2020 09:00	0.2329	0.0071	0.0158	0.0028	0.0031	0.0026	0.0013	0.0013	0	0	0	0	17.25	0.710	99.290
1	09/19/2020 09:00	0.238	0.0067	0.0145	0.0022	0.0024	0.002	0.001	0.001	0	0	0	0	17.13	0.714	99.286
1	09/20/2020 09:00	0.1956	0.0055	0.0121	0.0016	0.0017	0.002	0.001	0.001	0	0	0	0	17.05	0.590	99.410
1	09/21/2020 09:00	0.1539	0.0036	0.0076	0.0005	0.0009	0.0012	0.0006	0.0006	0	0	0	0	17.00	0.450	99.550
1	09/22/2020 09:00	0.1562	0.0039	0.0084	0.0009	0.0012	0.0014	0.0007	0.0007	0	0	0	0	17.00	0.463	99.537
1	09/23/2020 09:00	0.1658	0.0043	0.0092	0.0012	0.0014	0.0014	0.0007	0.0007	0	0	0	0	16.98	0.495	99.505
1	09/24/2020 09:00	0.1613	0.0039	0.0086	0.0007	0.0008	0.0012	0.0006	0.0006	0	0	0	0	17.01	0.473	99.527
1	09/25/2020 09:00	0.1546	0.0047	0.0107	0.0017	0.0019	0.002	0.001	0.001	0	0	0	0	17.01	0.479	99.521
1	09/26/2020 09:00	0.1533	0.0038	0.0084	0.0008	0.0009	0.0016	0.0008	0.0008	0	0	0	0	16.99	0.455	99.545
1	09/27/2020 09:00	0.1908	0.0043	0.0087	0.0008	0.0009	0.0014	0.0007	0.0007	0	0	0	0	17.03	0.553	99.447
1	09/28/2020 09:00	0.2136	0.0048	0.0098	0.0014	0.0016	0.0014	0.0007	0.0007	0	0	0	0	17.06	0.621	99.379
1	09/29/2020 09:00	0.2307	0.0059	0.0126	0.0017	0.0019	0.0014	0.0007	0.0007	0	0	0	0	17.05	0.682	99.318
1	09/30/2020 09:00	0.2027	0.0055	0.0112	0.0014	0.0013	0.0012	0.0006	0.0006	0	0	0	0	17.01	0.600	99.400
1	10/01/2020 09:00	0.1741	0.0042	0.0084	0.0009	0.001	0.0012	0.0006	0.0006	0	0	0	0	16.99	0.509	99.491
1	10/02/2020 09:00	0.1901	0.005	0.0098	0.0013	0.0012	0.0012	0.0006	0.0006	0	0	0	0	17.04	0.559	99.441
1	10/03/2020 09:00	0.1817	0.0062	0.0127	0.0024	0.0024	0.002	0.001	0.001	0	0	0	0	17.01	0.566	99.434
1	10/04/2020 09:00	0.1687	0.0051	0.01	0.0017	0.0017	0.0016	0.0008	0.0008	0	0	0	0	17.01	0.511	99.489
1	10/05/2020 09:00	0.1707	0.0052	0.0104	0.0015	0.0014	0.0012	0.0006	0.0006	0	0	0	0	17.02	0.514	99.486
1	10/06/2020 09:00	0.1691	0.0053	0.0107	0.0021	0.0022	0.0014	0.0007	0.0007	0	0	0	0	17.02	0.518	99.482
1	10/07/2020 09:00	0.1578	0.0047	0.0093	0.0016	0.0017	0.0014	0.0007	0.0007	0	0	0	0	16.99	0.479	99.521
1	10/08/2020 09:00	0.1576	0.005	0.0102	0.0018	0.002	0.0014	0.0007	0.0007	0	0	0	0	17.01	0.484	99.516
1	10/09/2020 09:00	0.1278	0.0033	0.0057	0.0002	0.0002	0.0006	0.0003	0.0003	0	0	0	0	17.00	0.367	99.633
1	10/10/2020 09:00	0.2126	0.0057	0.0097	0.003	0.0042	0.002	0.001	0.001	0	0	0	0	17.07	0.642	99.358
1	10/11/2020 09:00	0.225	0.0074	0.0144	0.0026	0.0028	0.0016	0.0008	0.0008	0	0	0	0	17.11	0.685	99.315
1	10/12/2020 09:00	0.209	0.0064	0.0125	0.0022	0.0023	0.0016	0.0008	0.0008	0	0	0	0	17.10	0.630	99.370
1	10/13/2020 09:00	0.1905	0.0057	0.0108	0.0016	0.0015	0.0014	0.0007	0.0007	0	0	0	0	17.06	0.569	99.431
1	10/14/2020 09:00	0.1623	0.0051	0.01	0.0016	0.0016	0.0014	0.0007	0.0007	0	0	0	0	16.96	0.494	99.506
1	10/15/2020 09:00	0.1727	0.0057	0.0116	0.0019	0.0018	0.0016	0.0008	0.0008	0	0	0	0	16.94	0.533	99.467
1	10/16/2020 09:00	0.1726	0.0054	0.0107	0.0016	0.0015	0.0014	0.0007	0.0007	0	0	0	0	16.94	0.525	99.475
1	10/17/2020 09:00	0.1755	0.0054	0.0108	0.0015	0.0012	0.0012	0.0006	0.0006	0	0	0	0	16.93	0.530	99.470
1	10/18/2020 09:00	0.1917	0.0082	0.0188	0.0034	0.0034	0.002	0.001	0.001	0	0	0	0	16.95	0.630	99.370
1	10/19/2020 09:00	0.1798	0.0063	0.0131	0.0024	0.0024	0.0022	0.0011	0.0011	0	0	0	0	16.96	0.566	99.434
1	10/20/2020 09:00	0.1621	0.0052	0.0096	0.0015	0.0016	0.0016	0.0008	0.0008	0	0	0	0	16.94	0.494	99.506
1	10/21/2020 09:00	0.1874	0.0059	0.0118	0.0018	0.0022	0.0016	0.0008	0.0008	0	0	0	0	17.00	0.572	99.428
1	10/22/2020 09:00	0.2066	0.0072	0.0142	0.0019	0.0019	0.0016	0.0008	0.0008	0	0	0	0	17.02	0.633	99.367
1	10/23/2020 09:00	0.2403	0.0071	0.0139	0.0024	0.0024	0.002	0.001	0.001	0	0	0	0	17.07	0.723	99.277
1	10/24/2020 09:00	0.2132	0.0059	0.0108	0.0016	0.0015	0.0018	0.0009	0.0009	0	0	0	0	17.03	0.631	99.369
1	10/25/2020 09:00	0.183	0.0057	0.0109	0.0013	0.0009	0.0012	0.0006	0.0006	0	0	0	0	16.97	0.548	99.452
1	10/26/2020 09:00	0.1905	0.0059	0.0118	0.0013	0.0008	0.0012	0.0006	0.0006	0	0	0	0	17.00	0.570	99.430
1	10/27/2020 09:00	0.1828	0.0052	0.0102	0.0012	0.0008	0.0012	0.0006	0.0006	0	0	0	0	16.98	0.542	99.458
1	10/28/2020 09:00	0.2064	0.0058	0.0105	0.001	0.001	0.001	0.0005	0.0005	0	0	0	0	16.91	0.608	99.392
1	10/29/2020 09:00	0.1821	0.0052	0.0107	0.001	0.0011	0.0012	0.0006	0.0006	0	0	0	0	16.92	0.544	99.456
1	10/30/2020 09:00	0.2225	0.0068	0.0125	0.0012	0.001	0.0008	0.0004	0.0004	0	0	0	0	17.11	0.652	99.348
1	10/31/2020 09:00	0.2494	0.0068	0.0132	0.0008	0.0006	0.0008	0.0004	0.0004	0	0	0	0	17.17	0.718	99.282
1	11/01/2020 09:00	0.2219	0.0062	0.0119	0.001	0.0007	0.0008	0.0004	0.0004	0	0	0	0	17.16	0.643	99.357
1	11/02/2020 09:00	0.2514	0.0078	0.0134	0.0011	0.0006	0.0008	0.0004	0.0004	0	0	0	0	17.20	0.727	99.273
1	11/03/2020 09:00	0.1946	0.0061	0.0111	0.001	0.0006	0.001	0.0005	0.0005	0	0	0	0	17.18	0.569	99.431
1	11/04/2020 09:00	0.1726	0.0046	0.0081	0.0003	0.0002	0.0008	0.0004	0.0004	0	0	0	0	17.09	0.495	99.505
1	11/05/2020 09:00	0.1706	0.0045	0.0083	0.0006	0.0005	0.0008	0.0004	0.0004	0	0	0	0	16.97	0.496	99.504
1	11/06/2020 09:00	0.161	0.0047	0.009	0.0008	0.0005	0.001	0.0005	0.0005	0	0	0	0	16.94	0.477	99.523

EPNG Caprock

FLOW_CO MP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	11/07/2020 09:00	0.158	0.0046	0.0088	0.0006	0.0005	0.001	0.0005	0.0005	0	0	0	0	16.95	0.467	99.533
1	11/08/2020 09:00	0.1624	0.0045	0.0086	0.0006	0.0003	0.0008	0.0004	0.0004	0	0	0	0	16.95	0.475	99.525
1	11/09/2020 09:00	0.1767	0.0049	0.0096	0.001	0.0009	0.001	0.0005	0.0005	0	0	0	0	17.00	0.521	99.479
1	11/10/2020 09:00	0.2031	0.0064	0.0125	0.0016	0.0013	0.0012	0.0006	0.0006	0	0	0	0	17.08	0.607	99.393
1	11/11/2020 09:00	0.1617	0.0049	0.01	0.0009	0.0007	0.001	0.0005	0.0005	0	0	0	0	16.95	0.484	99.516
1	11/12/2020 09:00	0.153	0.0049	0.0097	0.0009	0.0007	0.001	0.0005	0.0005	0	0	0	0	16.93	0.461	99.539
1	11/13/2020 09:00	0.1763	0.0054	0.0105	0.001	0.0007	0.0012	0.0006	0.0006	0	0	0	0	16.96	0.526	99.474
1	11/14/2020 09:00	0.1976	0.0064	0.0125	0.0012	0.0009	0.0012	0.0006	0.0006	0	0	0	0	16.98	0.593	99.407
1	11/15/2020 09:00	0.1692	0.0053	0.0106	0.0008	0.0006	0.0008	0.0004	0.0004	0	0	0	0	16.95	0.505	99.495
1	11/16/2020 09:00	0.1639	0.0048	0.0093	0.0006	0.0004	0.0008	0.0004	0.0004	0	0	0	0	16.98	0.482	99.518
1	11/17/2020 09:00	0.1756	0.0048	0.0093	0.0008	0.0006	0.0008	0.0004	0.0004	0	0	0	0	16.99	0.514	99.486
1	11/18/2020 09:00	0.193	0.0055	0.0104	0.0006	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.03	0.562	99.438
1	11/19/2020 09:00	0.237	0.0077	0.0141	0.0007	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.10	0.694	99.306
1	11/20/2020 09:00	0.1628	0.0046	0.0087	0.0002	0.0001	0.0006	0.0003	0.0003	0	0	0	0	17.04	0.471	99.529
1	11/21/2020 09:00	0.1581	0.004	0.0078	0.0002	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.98	0.455	99.545
1	11/22/2020 09:00	0.1396	0.0034	0.0072	0.0002	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.95	0.404	99.596
1	11/23/2020 09:00	0.1493	0.0046	0.0093	0.0009	0.0004	0.0006	0.0003	0.0003	0	0	0	0	16.95	0.445	99.555
1	11/24/2020 09:00	0.1357	0.0036	0.0072	0.0004	0.0003	0.0006	0.0003	0.0003	0	0	0	0	16.91	0.397	99.603
1	11/25/2020 09:00	0.1389	0.0047	0.0101	0.0011	0.0009	0.001	0.0005	0.0005	0	0	0	0	16.91	0.427	99.573
1	11/26/2020 09:00	0.1245	0.0039	0.0085	0.0008	0.0007	0.0012	0.0006	0.0006	0	0	0	0	16.89	0.380	99.620
1	11/27/2020 09:00	0.1732	0.0066	0.0136	0.002	0.0017	0.0014	0.0007	0.0007	0	0	0	0	16.94	0.543	99.457
1	11/28/2020 09:00	0.1593	0.006	0.0124	0.0021	0.0019	0.0014	0.0007	0.0007	0	0	0	0	16.90	0.503	99.497
1	11/29/2020 09:00	0.1443	0.0043	0.0084	0.0007	0.0005	0.001	0.0005	0.0005	0	0	0	0	16.91	0.430	99.570
1	11/30/2020 09:00	0.131	0.0037	0.0071	0.0003	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.94	0.383	99.617
1	12/01/2020 09:00	0.1349	0.0039	0.0076	0.0005	0.0004	0.0006	0.0003	0.0003	0	0	0	0	16.94	0.398	99.602
1	12/02/2020 09:00	0.1573	0.0049	0.0095	0.0009	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.06	0.465	99.535
1	12/03/2020 09:00	0.1919	0.0058	0.0104	0.0008	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.15	0.557	99.443
1	12/04/2020 09:00	0.1689	0.005	0.0096	0.0009	0.0006	0.001	0.0005	0.0005	0	0	0	0	17.09	0.497	99.503
1	12/05/2020 09:00	0.1699	0.0042	0.0081	0.0004	0.0003	0.0006	0.0003	0.0003	0	0	0	0	17.18	0.484	99.516
1	12/06/2020 09:00	0.2089	0.0062	0.0112	0.0007	0.0003	0.0008	0.0004	0.0004	0	0	0	0	17.20	0.602	99.398
1	12/07/2020 09:00	0.2015	0.0056	0.0103	0.0011	0.0008	0.0008	0.0004	0.0004	0	0	0	0	17.19	0.583	99.417
1	12/08/2020 09:00	0.2021	0.006	0.0112	0.0014	0.0008	0.001	0.0005	0.0005	0	0	0	0	17.21	0.590	99.410
1	12/09/2020 09:00	0.1975	0.006	0.0113	0.0012	0.0007	0.001	0.0005	0.0005	0	0	0	0	17.21	0.577	99.423
1	12/10/2020 09:00	0.1934	0.0053	0.0098	0.0005	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.23	0.554	99.446
1	12/11/2020 09:00	0.1854	0.0048	0.0089	0.0004	0.0002	0.0006	0.0003	0.0003	0	0	0	0	17.22	0.527	99.473
1	12/12/2020 09:00	0.1805	0.0043	0.0078	0.0005	0.0003	0.0006	0.0003	0.0003	0	0	0	0	17.24	0.509	99.491
1	12/13/2020 09:00	0.213	0.0056	0.0099	0.0008	0.0004	0.0006	0.0003	0.0003	0	0	0	0	17.26	0.604	99.396
1	12/14/2020 09:00	0.2654	0.0085	0.0152	0.0022	0.0018	0.001	0.0005	0.0005	0	0	0	0	17.29	0.778	99.222
1	12/15/2020 09:00	0.2082	0.005	0.0089	0.0005	0.0003	0.0008	0.0004	0.0004	0	0	0	0	17.21	0.588	99.412
1	12/16/2020 09:00	0.2119	0.0067	0.0122	0.0015	0.001	0.001	0.0005	0.0005	0	0	0	0	17.25	0.621	99.379
1	12/17/2020 09:00	0.2165	0.0058	0.0114	0.0017	0.0015	0.0014	0.0007	0.0007	0	0	0	0	17.26	0.632	99.368
1	12/18/2020 09:00	0.2415	0.0054	0.01	0.0009	0.0007	0.001	0.0005	0.0005	0	0	0	0	17.32	0.678	99.322
1	12/19/2020 09:00	0.2738	0.0079	0.0156	0.0027	0.0024	0.0014	0.0007	0.0007	0	0	0	0	17.39	0.801	99.199
1	12/20/2020 09:00	0.2722	0.0056	0.0102	0.0011	0.0006	0.001	0.0005	0.0005	0	0	0	0	17.39	0.755	99.245
1	12/21/2020 09:00	0.3044	0.0059	0.0107	0.0013	0.0008	0.001	0.0005	0.0005	0	0	0	0	17.40	0.841	99.159
1	12/22/2020 09:00	0.2916	0.0053	0.0095	0.0012	0.0009	0.001	0.0005	0.0005	0	0	0	0	17.40	0.802	99.198
1	12/23/2020 09:00	0.2615	0.0055	0.0104	0.0018	0.0015	0.001	0.0005	0.0005	0	0	0	0	17.38	0.736	99.264
1	12/24/2020 09:00	0.2772	0.0058	0.0104	0.0015	0.0011	0.001	0.0005	0.0005	0	0	0	0	17.41	0.772	99.228
1	12/25/2020 09:00	0.199	0.0056	0.0107	0.0013	0.0007	0.001	0.0005	0.0005	0	0	0	0	17.21	0.578	99.422
1	12/26/2020 09:00	0.2691	0.0057	0.0104	0.0016	0.0012	0.0012	0.0006	0.0006	0	0	0	0	17.32	0.757	99.243
1	12/27/2020 09:00	0.3086	0.0057	0.0101	0.0012	0.0007	0.001	0.0005	0.0005	0	0	0	0	17.36	0.849	99.151
1	12/28/2020 09:00	0.3064	0.0061	0.0106	0.0014	0.0009	0.0012	0.0006	0.0006	0	0	0	0	17.37	0.849	99.151
1	12/29/2020 09:00	0.2692	0.0063	0.0119	0.0017	0.0014	0.0012	0.0006	0.0006	0	0	0	0	17.33	0.765	99.235
1	12/30/2020 09:00	0.2866	0.0075	0.0139	0.001	0.0007	0.001	0.0005	0.0005	0	0	0	0	17.36	0.812	99.188
1	12/31/2020 09:00	0.2627	0.0055	0.0098	0.0005	0.0002	0.0008	0.0004	0.0004	0	0	0	0	17.32	0.727	99.273
1	01/01/2021 09:00	0.244	0.0056	0.0104	0.0007	0.0005	0.0008	0.0004	0.0004	0	0	0	0	17.15	0.691	99.309
1	01/02/2021 09:00	0.2658	0.0058	0.0107	0.0011	0.0007	0.0012	0.0006	0.0006	0	0	0	0	17.22	0.750	99.250

EPNG Caprock

FLOW_CO MP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	01/03/2021 09:00	0.2822	0.0062	0.0115	0.001	0.0006	0.001	0.0005	0.0005	0	0	0	0	17.17	0.797	99.203
1	01/04/2021 09:00	0.299	0.0061	0.0112	0.0007	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.19	0.834	99.166
1	01/05/2021 09:00	0.2817	0.0058	0.0107	0.001	0.0006	0.0008	0.0004	0.0004	0	0	0	0	17.19	0.789	99.211
1	01/06/2021 09:00	0.2795	0.0059	0.0111	0.0009	0.0005	0.0008	0.0004	0.0004	0	0	0	0	17.20	0.784	99.216
1	01/07/2021 09:00	0.2891	0.0067	0.0129	0.0018	0.0015	0.0012	0.0006	0.0006	0	0	0	0	17.25	0.825	99.175
1	01/08/2021 09:00	0.2397	0.0056	0.0111	0.001	0.0009	0.0012	0.0006	0.0006	0	0	0	0	17.17	0.686	99.314
1	01/09/2021 09:00	0.2351	0.0051	0.0093	0.0006	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.15	0.662	99.338
1	01/10/2021 09:00	0.259	0.0052	0.0094	0.0003	0.0002	0.0008	0.0004	0.0004	0	0	0	0	17.16	0.721	99.279
1	01/11/2021 09:00	0.2546	0.0063	0.0114	0.0008	0.0002	0.0008	0.0004	0.0004	0	0	0	0	17.16	0.723	99.277
1	01/12/2021 09:00	0.4146	0.0148	0.0271	0.002	0.0008	0.0008	0.0004	0.0004	0	0	0	0	17.25	1.217	98.783
1	01/13/2021 09:00	0.3371	0.0086	0.0159	0.0019	0.0012	0.001	0.0005	0.0005	0	0	0	0	17.23	0.963	99.037
1	01/14/2021 09:00	0.4283	0.0194	0.0348	0.0055	0.0038	0.002	0.001	0.001	0	0	0	0	17.31	1.322	98.678
1	01/15/2021 09:00	0.348	0.0108	0.0182	0.0028	0.0021	0.0024	0.0012	0.0012	0	0	0	0	17.28	1.018	98.982
1	01/16/2021 09:00	0.2911	0.0065	0.0117	0.0011	0.0006	0.0018	0.0009	0.0009	0	0	0	0	17.21	0.823	99.177
1	01/17/2021 09:00	0.2533	0.0057	0.0106	0.0008	0.0005	0.0012	0.0006	0.0006	0	0	0	0	17.16	0.718	99.282
1	01/18/2021 09:00	0.292	0.0095	0.0209	0.0035	0.0035	0.002	0.001	0.001	0	0	0	0	17.19	0.891	99.109
1	01/19/2021 09:00	0.3061	0.0065	0.012	0.0009	0.0007	0.0014	0.0007	0.0007	0	0	0	0	17.20	0.861	99.139
1	01/20/2021 09:00	0.3046	0.0074	0.0146	0.0019	0.0016	0.0014	0.0007	0.0007	0	0	0	0	17.20	0.877	99.123
1	01/21/2021 09:00	0.2687	0.0061	0.0117	0.001	0.0008	0.0014	0.0007	0.0007	0	0	0	0	17.14	0.766	99.234
1	01/22/2021 09:00	0.2541	0.0063	0.0117	0.0007	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.06	0.727	99.273
1	01/23/2021 09:00	0.2553	0.0071	0.0137	0.0014	0.0009	0.0008	0.0004	0.0004	0	0	0	0	17.05	0.745	99.255
1	01/24/2021 09:00	0.2345	0.006	0.0111	0.001	0.0006	0.001	0.0005	0.0005	0	0	0	0	17.02	0.678	99.322
1	01/25/2021 09:00	0.2376	0.0059	0.011	0.0007	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.03	0.682	99.318
1	01/26/2021 09:00	0.2582	0.0064	0.0116	0.0006	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.07	0.737	99.263
1	01/27/2021 09:00	0.2327	0.0063	0.0123	0.0013	0.0008	0.001	0.0005	0.0005	0	0	0	0	17.03	0.680	99.320
1	01/28/2021 09:00	0.2298	0.0075	0.0148	0.0018	0.0013	0.001	0.0005	0.0005	0	0	0	0	16.99	0.691	99.309
1	01/29/2021 09:00	0.2221	0.0063	0.0115	0.0012	0.0007	0.001	0.0005	0.0005	0	0	0	0	16.96	0.651	99.349
1	01/30/2021 09:00	0.2106	0.0071	0.0142	0.002	0.0015	0.0014	0.0007	0.0007	0	0	0	0	17.01	0.641	99.359
1	01/31/2021 09:00	0.2356	0.0075	0.0146	0.0023	0.0021	0.0016	0.0008	0.0008	0	0	0	0	17.04	0.712	99.288
1	02/01/2021 09:00	0.2161	0.006	0.0111	0.0012	0.0007	0.0016	0.0008	0.0008	0	0	0	0	17.00	0.635	99.365
1	02/02/2021 09:00	0.2026	0.0051	0.0095	0.0009	0.0007	0.0014	0.0007	0.0007	0	0	0	0	16.98	0.590	99.410
1	02/03/2021 09:00	0.2025	0.0064	0.0118	0.001	0.0005	0.001	0.0005	0.0005	0	0	0	0	16.97	0.600	99.400
1	02/04/2021 09:00	0.2134	0.0073	0.0147	0.0018	0.0011	0.001	0.0005	0.0005	0	0	0	0	17.01	0.646	99.354
1	02/05/2021 09:00	0.1991	0.0073	0.0148	0.0023	0.0021	0.0014	0.0007	0.0007	0	0	0	0	16.99	0.618	99.382
1	02/06/2021 09:00	0.1695	0.007	0.0148	0.0025	0.0022	0.0018	0.0009	0.0009	0	0	0	0	16.93	0.546	99.454
1	02/07/2021 09:00	0.1427	0.0045	0.0087	0.0006	0.0005	0.001	0.0005	0.0005	0	0	0	0	16.91	0.427	99.573
1	02/08/2021 09:00	0.1739	0.0058	0.0119	0.0019	0.0017	0.0012	0.0006	0.0006	0	0	0	0	16.98	0.534	99.466
1	02/09/2021 09:00	0.1874	0.0062	0.013	0.0018	0.0015	0.0016	0.0008	0.0008	0	0	0	0	16.97	0.575	99.425
1	02/10/2021 09:00	0.1892	0.0049	0.0096	0.0005	0.0002	0.001	0.0005	0.0005	0	0	0	0	16.97	0.549	99.451
1	02/11/2021 09:00	0.1989	0.0051	0.0095	0.0005	0.0001	0.0006	0.0003	0.0003	0	0	0	0	17.04	0.570	99.430
1	02/12/2021 09:00	0.1565	0.0102	0.0121	0.0026	0.0014	0.0022	0.0011	0.0011	0	0	0	0	17.06	0.509	99.491
1	02/13/2021 09:00	0.2926	0.0193	0.0188	0.0064	0.004	0.0076	0.0038	0.0038	0	0	0	0	17.13	0.964	99.036
1	02/14/2021 09:00	0.4695	0.0343	0.0325	0.0079	0.0048	0.0096	0.0048	0.0048	0	0	0	0	17.21	1.530	98.470
1	02/15/2021 09:00	0.5997	0.0581	0.0561	0.0141	0.0087	0.013	0.0065	0.0065	0	0	0	0	17.27	2.076	97.924
1	02/16/2021 09:00	0.7208	0.0663	0.0603	0.015	0.0093	0.0154	0.0077	0.0077	0	0	0	0	17.35	2.433	97.567
1	02/17/2021 09:00	0.8541	0.072	0.0638	0.0129	0.0077	0.0132	0.0066	0.0066	0	0	0	0	17.51	2.752	97.248
1	02/18/2021 09:00	0.884	0.0836	0.0694	0.0164	0.0099	0.0142	0.0071	0.0071	0	0	0	0	17.51	2.912	97.088
1	02/19/2021 09:00	0.7623	0.0908	0.0729	0.0214	0.0132	0.0186	0.0093	0.0093	0	0	0	0	17.44	2.707	97.293
1	02/20/2021 09:00	0.4164	0.0563	0.0468	0.0151	0.0091	0.0154	0.0077	0.0077	0	0	0	0	17.26	1.590	98.410
1	02/21/2021 09:00	0.2124	0.0178	0.0155	0.0049	0.0029	0.0078	0.0039	0.0039	0	0	0	0	17.13	0.732	99.268
1	02/22/2021 09:00	0.2014	0.0159	0.014	0.0042	0.0024	0.0058	0.0029	0.0029	0	0	0	0	17.11	0.678	99.322
1	02/23/2021 09:00	0.6473	0.0782	0.0625	0.0185	0.0109	0.0126	0.0063	0.0063	0	0	0	0	17.38	2.298	97.702
1	02/24/2021 09:00	0.6202	0.0544	0.0461	0.0114	0.0068	0.0136	0.0068	0.0068	0	0	0	0	17.56	2.032	97.968
1	02/25/2021 09:00	0.3384	0.0102	0.0137	0.0015	0.0004	0.004	0.002	0.002	0	0	0	0	17.55	0.957	99.043
1	02/26/2021 09:00	0.3577	0.01	0.0173	0.0023	0.0018	0.002	0.001	0.001	0	0	0	0	17.48	1.020	98.980
1	02/27/2021 09:00	0.3331	0.0087	0.0153	0.0019	0.0011	0.0014	0.0007	0.0007	0	0	0	0	17.46	0.940	99.060
1	02/28/2021 09:00	0.405	0.0098	0.0187	0.0028	0.0026	0.0016	0.0008	0.0008	0	0	0	0	17.53	1.143	98.857

EPNG Caprock

FLOW_CO MP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	03/01/2021 09:00	0.3395	0.008	0.0152	0.0021	0.0017	0.0014	0.0007	0.0007	0	0	0	0	17.50	0.955	99.045
1	03/02/2021 09:00	0.3413	0.0067	0.0119	0.0011	0.0004	0.001	0.0005	0.0005	0	0	0	0	17.51	0.933	99.067
1	03/03/2021 09:00	0.283	0.0069	0.0132	0.0016	0.0014	0.0014	0.0007	0.0007	0	0	0	0	17.27	0.810	99.190
1	03/04/2021 09:00	0.3382	0.0083	0.0157	0.0018	0.0012	0.0012	0.0006	0.0006	0	0	0	0	17.26	0.964	99.036
1	03/05/2021 09:00	0.3061	0.0061	0.0108	0.0006	0.0002	0.0008	0.0004	0.0004	0	0	0	0	17.27	0.846	99.154
1	03/06/2021 09:00	0.3204	0.0072	0.0124	0.0012	0.0009	0.001	0.0005	0.0005	0	0	0	0	17.31	0.896	99.104
1	03/07/2021 09:00	0.2398	0.0046	0.0078	0.0001	0	0.0008	0.0004	0.0004	0	0	0	0	17.21	0.661	99.339
1	03/08/2021 09:00	0.2882	0.0071	0.0133	0.0016	0.0012	0.001	0.0005	0.0005	0	0	0	0	17.26	0.822	99.178
1	03/09/2021 09:00	0.3072	0.0076	0.014	0.0017	0.0013	0.0014	0.0007	0.0007	0	0	0	0	17.28	0.876	99.124
1	03/10/2021 09:00	0.3161	0.0085	0.0161	0.0025	0.0022	0.0016	0.0008	0.0008	0	0	0	0	17.29	0.916	99.084
1	03/11/2021 09:00	0.309	0.0072	0.0129	0.0014	0.0011	0.0014	0.0007	0.0007	0	0	0	0	17.30	0.873	99.127
1	03/12/2021 09:00	0.2681	0.0096	0.0189	0.0028	0.0024	0.0018	0.0009	0.0009	0	0	0	0	17.19	0.815	99.185
1	03/13/2021 09:00	0.2535	0.0089	0.0175	0.0025	0.0022	0.0018	0.0009	0.0009	0	0	0	0	17.18	0.769	99.231
1	03/14/2021 09:00	0.2564	0.0097	0.0196	0.003	0.0028	0.002	0.001	0.001	0	0	0	0	17.17	0.792	99.208
1	03/15/2021 09:00	0.2261	0.0092	0.0187	0.0028	0.0025	0.002	0.001	0.001	0	0	0	0	17.08	0.711	99.289
1	03/16/2021 09:00	0.2216	0.0087	0.0186	0.0028	0.0024	0.002	0.001	0.001	0	0	0	0	17.06	0.698	99.302
1	03/17/2021 09:00	0.2339	0.0098	0.0209	0.0033	0.0029	0.0022	0.0011	0.0011	0	0	0	0	17.12	0.744	99.256
1	03/18/2021 09:00	0.2358	0.0083	0.0165	0.0021	0.0018	0.0018	0.0009	0.0009	0	0	0	0	17.06	0.720	99.280
1	03/19/2021 09:00	0.2162	0.0069	0.0129	0.0014	0.0009	0.0014	0.0007	0.0007	0	0	0	0	17.03	0.644	99.356
1	03/20/2021 09:00	0.245	0.0071	0.0135	0.0011	0.0003	0.001	0.0005	0.0005	0	0	0	0	17.04	0.715	99.285
1	03/21/2021 09:00	0.2096	0.0067	0.0132	0.0015	0.0009	0.0012	0.0006	0.0006	0	0	0	0	17.04	0.627	99.373
1	03/22/2021 09:00	0.1844	0.0053	0.0094	0.0005	0.0003	0.001	0.0005	0.0005	0	0	0	0	17.03	0.536	99.464
1	03/23/2021 09:00	0.2119	0.0056	0.0098	0.0003	0	0.0008	0.0004	0.0004	0	0	0	0	17.05	0.606	99.394
1	03/24/2021 09:00	0.2303	0.0061	0.0111	0.0009	0.0003	0.001	0.0005	0.0005	0	0	0	0	17.11	0.662	99.338
1	03/25/2021 09:00	0.2285	0.0065	0.0133	0.0009	0.0005	0.0008	0.0004	0.0004	0	0	0	0	17.11	0.666	99.334
1	03/26/2021 09:00	0.2746	0.0068	0.0125	0.0009	0.0006	0.0012	0.0006	0.0006	0	0	0	0	17.16	0.783	99.217
1	03/27/2021 09:00	0.2389	0.0053	0.0104	0.0003	0	0.0006	0.0003	0.0003	0	0	0	0	17.10	0.674	99.326
1	03/28/2021 09:00	0.2368	0.005	0.0095	0.0002	0	0.0004	0.0002	0.0002	0	0	0	0	17.12	0.662	99.338
1	03/29/2021 09:00	0.2628	0.007	0.0136	0.001	0.0004	0.0006	0.0003	0.0003	0	0	0	0	17.11	0.756	99.244
1	03/30/2021 09:00	0.2581	0.0061	0.0115	0.0003	0	0.0006	0.0003	0.0003	0	0	0	0	17.06	0.732	99.268
1	03/31/2021 09:00	0.2604	0.0057	0.0114	0.0003	0	0.0006	0.0003	0.0003	0	0	0	0	17.09	0.735	99.265
1	04/01/2021 09:00	0.2588	0.0058	0.0099	0.0001	0	0.0006	0.0003	0.0003	0	0	0	0	17.12	0.724	99.276
1	04/02/2021 09:00	0.2938	0.0064	0.0113	0.0007	0.0004	0.0006	0.0003	0.0003	0	0	0	0	17.16	0.823	99.177
1	04/03/2021 09:00	0.2336	0.0071	0.0137	0.0016	0.0012	0.0012	0.0006	0.0006	0	0	0	0	17.07	0.692	99.308
1	04/04/2021 09:00	0.21	0.0072	0.0159	0.0027	0.0026	0.002	0.001	0.001	0	0	0	0	17.02	0.656	99.344
1	04/05/2021 09:00	0.224	0.0074	0.0171	0.0029	0.0028	0.002	0.001	0.001	0	0	0	0	17.03	0.698	99.302
1	04/06/2021 09:00	0.2299	0.0074	0.0163	0.0028	0.0027	0.002	0.001	0.001	0	0	0	0	17.07	0.708	99.292
1	04/07/2021 09:00	0.2068	0.0057	0.0115	0.0016	0.0014	0.0018	0.0009	0.0009	0	0	0	0	17.06	0.615	99.385
1	04/08/2021 09:00	0.2394	0.006	0.0114	0.0009	0.0006	0.0012	0.0006	0.0006	0	0	0	0	17.12	0.688	99.312
1	04/09/2021 09:00	0.2424	0.0055	0.0101	0.0005	0.0003	0.0008	0.0004	0.0004	0	0	0	0	17.11	0.685	99.315
1	04/10/2021 09:00	0.29	0.0062	0.0116	0.0005	0.0003	0.0008	0.0004	0.0004	0	0	0	0	17.15	0.814	99.186
1	04/11/2021 09:00	0.3426	0.009	0.0191	0.0029	0.0026	0.0018	0.0009	0.0009	0	0	0	0	17.16	1.008	98.992
1	04/12/2021 09:00	0.2802	0.0056	0.0104	0.0004	0.0002	0.0012	0.0006	0.0006	0	0	0	0	17.08	0.787	99.213
1	04/13/2021 09:00	0.3057	0.0072	0.0135	0.0009	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.13	0.867	99.133
1	04/14/2021 09:00	0.2161	0.0047	0.0095	0.0005	0.0001	0.001	0.0005	0.0005	0	0	0	0	17.07	0.614	99.386
1	04/15/2021 09:00	0.1898	0.0047	0.0106	0.0013	0.0009	0.0012	0.0006	0.0006	0	0	0	0	17.05	0.558	99.442
1	04/16/2021 09:00	0.2174	0.0051	0.0106	0.0011	0.0007	0.001	0.0005	0.0005	0	0	0	0	17.09	0.627	99.373
1	04/17/2021 09:00	0.2195	0.0061	0.0128	0.0016	0.0013	0.0014	0.0007	0.0007	0	0	0	0	17.09	0.650	99.350
1	04/18/2021 09:00	0.2197	0.0055	0.0107	0.0009	0.0005	0.001	0.0005	0.0005	0	0	0	0	17.14	0.631	99.369
1	04/19/2021 09:00	0.2158	0.0059	0.0124	0.0016	0.0013	0.0014	0.0007	0.0007	0	0	0	0	17.10	0.638	99.362
1	04/20/2021 09:00	0.2241	0.0064	0.0139	0.002	0.0015	0.0018	0.0009	0.0009	0	0	0	0	17.09	0.671	99.329
1	04/21/2021 09:00	0.2386	0.0064	0.013	0.0017	0.0014	0.0016	0.0008	0.0008	0	0	0	0	17.11	0.702	99.298
1	04/22/2021 09:00	0.2442	0.0078	0.0171	0.0028	0.0026	0.0018	0.0009	0.0009	0	0	0	0	17.07	0.747	99.253
1	04/23/2021 09:00	0.2346	0.0082	0.0166	0.0031	0.0026	0.0022	0.0011	0.0011	0	0	0	0	17.04	0.727	99.273
1	04/24/2021 09:00	0.2714	0.0088	0.0196	0.0032	0.003	0.002	0.001	0.001	0	0	0	0	17.08	0.834	99.166
1	04/25/2021 09:00	0.2525	0.0065	0.0139	0.0018	0.0012	0.0014	0.0007	0.0007	0	0	0	0	17.12	0.739	99.261
1	04/26/2021 09:00	0.2632	0.0072	0.0159	0.0018	0.0013	0.001	0.0005	0.0005	0	0	0	0	17.10	0.775	99.225

EPNG Caprock

FLOW_CO MP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	04/27/2021 09:00	0.2679	0.0055	0.0095	0.0001	0.0001	0.0004	0.0002	0.0002	0	0	0	0	17.14	0.743	99.257
1	04/28/2021 09:00	0.2703	0.0079	0.015	0.0012	0.0006	0.0004	0.0002	0.0002	0	0	0	0	17.16	0.782	99.218
1	04/29/2021 09:00	0.264	0.006	0.01	0.0002	0.0002	0.0006	0.0003	0.0003	0	0	0	0	17.13	0.739	99.261
1	04/30/2021 09:00	0.3315	0.008	0.0145	0.0011	0.0009	0.0008	0.0004	0.0004	0	0	0	0	17.21	0.938	99.062
1	05/01/2021 09:00	0.2653	0.0056	0.0094	0.0002	0	0.0008	0.0004	0.0004	0	0	0	0	17.10	0.740	99.260
1	05/02/2021 09:00	0.2131	0.0041	0.0074	0	0	0.0004	0.0002	0.0002	0	0	0	0	17.07	0.592	99.408
1	05/03/2021 09:00	0.2286	0.0039	0.0066	0	0	0.0004	0.0002	0.0002	0	0	0	0	17.11	0.627	99.373
1	05/04/2021 09:00	0.2411	0.0063	0.012	0.0011	0.0007	0.0008	0.0004	0.0004	0	0	0	0	17.13	0.695	99.305
1	05/05/2021 09:00	0.2783	0.0079	0.0158	0.0025	0.0024	0.0018	0.0009	0.0009	0	0	0	0	17.13	0.826	99.174
1	05/06/2021 09:00	0.2524	0.0064	0.0123	0.001	0.0008	0.0014	0.0007	0.0007	0	0	0	0	17.09	0.730	99.270
1	05/07/2021 09:00	0.2612	0.0059	0.0116	0	0	0.0002	0.0001	0.0001	0	0	0	0	17.16	0.732	99.268
1	05/08/2021 09:00	0.26	0.0062	0.0117	0.0009	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.12	0.740	99.260
1	05/09/2021 09:00	0.3372	0.0108	0.0232	0.004	0.0038	0.0022	0.0011	0.0011	0	0	0	0	17.17	1.025	98.975
1	05/10/2021 09:00	0.3888	0.014	0.0326	0.007	0.0072	0.0046	0.0023	0.0023	0	0	0	0	17.26	1.233	98.767
1	05/11/2021 09:00	0.3447	0.0117	0.0257	0.0047	0.0046	0.0038	0.0019	0.0019	0	0	0	0	17.25	1.065	98.935
1	05/12/2021 09:00	0.2292	0.0065	0.0147	0.0021	0.002	0.002	0.001	0.001	0	0	0	0	17.15	0.689	99.311
1	05/13/2021 09:00	0.2491	0.0057	0.011	0.0005	0.0001	0.0008	0.0004	0.0004	0	0	0	0	17.15	0.704	99.296
1	05/14/2021 09:00	0.2397	0.0064	0.0135	0.0023	0.0023	0.0014	0.0007	0.0007	0	0	0	0	17.09	0.713	99.287
1	05/15/2021 09:00	0.3297	0.0157	0.0379	0.0085	0.0089	0.0048	0.0024	0.0024	0	0	0	0	17.21	1.123	98.877
1	05/16/2021 09:00	0.2894	0.0094	0.0195	0.0039	0.004	0.0032	0.0016	0.0016	0	0	0	0	17.12	0.893	99.107
1	05/17/2021 09:00	0.3073	0.0077	0.0148	0.0024	0.0023	0.0022	0.0011	0.0011	0	0	0	0	17.17	0.896	99.104
1	05/18/2021 09:00	0.284	0.0065	0.0121	0.0016	0.0016	0.0022	0.0011	0.0011	0	0	0	0	17.10	0.820	99.180
1	05/19/2021 09:00	0.2831	0.0067	0.0125	0.001	0.0006	0.0018	0.0009	0.0009	0	0	0	0	17.11	0.811	99.189
1	05/20/2021 09:00	0.3206	0.0077	0.0157	0.002	0.0017	0.0016	0.0008	0.0008	0	0	0	0	17.22	0.924	99.076
1	05/21/2021 09:00	0.2725	0.0108	0.0252	0.0047	0.0047	0.0028	0.0014	0.0014	0	0	0	0	17.14	0.877	99.123
1	05/22/2021 09:00	0.3005	0.0108	0.0239	0.0054	0.0055	0.0042	0.0021	0.0021	0	0	0	0	17.20	0.955	99.045
1	05/23/2021 09:00	0.242	0.0071	0.0141	0.0027	0.003	0.003	0.0015	0.0015	0	0	0	0	17.15	0.733	99.267
1	05/24/2021 09:00	0.2504	0.0071	0.0151	0.0029	0.0032	0.0028	0.0014	0.0014	0	0	0	0	17.17	0.758	99.242
1	05/25/2021 09:00	0.2367	0.0072	0.0146	0.0028	0.0031	0.003	0.0015	0.0015	0	0	0	0	17.14	0.723	99.277
1	05/26/2021 09:00	0.4154	0.0121	0.0232	0.0028	0.0028	0.0028	0.0014	0.0014	0	0	0	0	17.26	1.217	98.783
1	05/27/2021 09:00	0.3644	0.0127	0.0286	0.0055	0.0058	0.0046	0.0023	0.0023	0	0	0	0	17.24	1.142	98.858
1	05/28/2021 09:00	0.2346	0.0081	0.0156	0.0026	0.0028	0.0028	0.0014	0.0014	0	0	0	0	17.05	0.724	99.276
1	05/29/2021 09:00	0.2379	0.008	0.0178	0.0032	0.0035	0.0028	0.0014	0.0014	0	0	0	0	17.07	0.745	99.255
1	05/30/2021 09:00	0.24	0.0067	0.014	0.0024	0.0027	0.0024	0.0012	0.0012	0	0	0	0	17.07	0.724	99.276
1	05/31/2021 09:00	0.2442	0.007	0.0141	0.0022	0.0025	0.0024	0.0012	0.0012	0	0	0	0	17.07	0.735	99.265
1	06/01/2021 09:00	0.2911	0.0081	0.016	0.0026	0.0026	0.0024	0.0012	0.0012	0	0	0	0	17.14	0.865	99.135
1	06/02/2021 09:00	0.2788	0.0084	0.0181	0.0036	0.0039	0.0038	0.0019	0.0019	0	0	0	0	17.10	0.860	99.140
1	06/03/2021 09:00	0.2317	0.0063	0.0119	0.0016	0.0019	0.0022	0.0011	0.0011	0	0	0	0	17.03	0.688	99.312
1	06/04/2021 09:00	0.2603	0.0083	0.0175	0.0035	0.0036	0.0032	0.0016	0.0016	0	0	0	0	17.08	0.806	99.194
1	06/05/2021 09:00	0.2313	0.0071	0.017	0.0035	0.0036	0.0036	0.0018	0.0018	0	0	0	0	17.10	0.727	99.273
1	06/06/2021 09:00	0.2257	0.009	0.0206	0.0046	0.0048	0.0044	0.0022	0.0022	0	0	0	0	17.08	0.746	99.254
1	06/07/2021 09:00	0.2283	0.0072	0.0166	0.0032	0.0035	0.003	0.0015	0.0015	0	0	0	0	17.12	0.712	99.288
1	06/08/2021 09:00	0.2395	0.0092	0.0208	0.0048	0.0051	0.0044	0.0022	0.0022	0	0	0	0	17.13	0.782	99.218
1	06/09/2021 09:00	0.2934	0.0093	0.0179	0.0029	0.0031	0.003	0.0015	0.0015	0	0	0	0	17.20	0.884	99.116
1	06/10/2021 09:00	0.3643	0.0113	0.0217	0.0025	0.0022	0.0022	0.0011	0.0011	0	0	0	0	17.30	1.070	98.930
1	06/11/2021 09:00	0.3296	0.0085	0.0175	0.0023	0.0022	0.0016	0.0008	0.0008	0	0	0	0	17.29	0.955	99.045
1	06/12/2021 09:00	0.3327	0.0087	0.018	0.0019	0.0018	0.0016	0.0008	0.0008	0	0	0	0	17.26	0.963	99.037
1	06/13/2021 09:00	0.2848	0.0101	0.0219	0.0034	0.0031	0.0024	0.0012	0.0012	0	0	0	0	17.23	0.876	99.124
1	06/14/2021 09:00	0.297	0.0085	0.0175	0.0032	0.0037	0.003	0.0015	0.0015	0	0	0	0	17.22	0.892	99.108
1	06/15/2021 09:00	0.2958	0.0067	0.0131	0.002	0.0023	0.002	0.001	0.001	0	0	0	0	17.25	0.851	99.149
1	06/16/2021 09:00	0.3007	0.0071	0.0147	0.0023	0.0026	0.0022	0.0011	0.0011	0	0	0	0	17.28	0.872	99.128
1	06/17/2021 09:00	0.3122	0.0087	0.0184	0.0029	0.003	0.0024	0.0012	0.0012	0	0	0	0	17.21	0.928	99.072
1	06/18/2021 09:00	0.2951	0.0077	0.0162	0.0023	0.0024	0.0024	0.0012	0.0012	0	0	0	0	17.17	0.871	99.129
1	06/19/2021 09:00	0.3685	0.0094	0.0196	0.003	0.0028	0.0026	0.0013	0.0013	0	0	0	0	17.23	1.078	98.922
1	06/20/2021 09:00	0.3444	0.0102	0.022	0.0041	0.0041	0.0032	0.0016	0.0016	0	0	0	0	17.19	1.043	98.957
1	06/21/2021 09:00	0.3306	0.009	0.0193	0.0032	0.0033	0.003	0.0015	0.0015	0	0	0	0	17.18	0.987	99.013
1	06/22/2021 09:00	0.3281	0.0111	0.0258	0.0051	0.005	0.0036	0.0018	0.0018	0	0	0	0	17.21	1.026	98.974

EPNG Caprock

FLOW_CO MP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	06/23/2021 09:00	0.3485	0.0136	0.0316	0.0071	0.0071	0.0054	0.0027	0.0027	0	0	0	0	17.20	1.133	98.867
1	06/24/2021 09:00	0.2682	0.011	0.025	0.0055	0.0055	0.0044	0.0022	0.0022	0	0	0	0	17.12	0.882	99.118
1	06/25/2021 09:00	0.4003	0.0137	0.03	0.0057	0.0058	0.0046	0.0023	0.0023	0	0	0	0	17.33	1.236	98.764
1	06/26/2021 09:00	0.3091	0.0093	0.0209	0.0039	0.0041	0.0036	0.0018	0.0018	0	0	0	0	17.22	0.945	99.055
1	06/27/2021 09:00	0.2908	0.0081	0.018	0.0034	0.0037	0.0038	0.0019	0.0019	0	0	0	0	17.21	0.882	99.118
1	06/28/2021 09:00	0.2692	0.0078	0.0184	0.0036	0.0038	0.0036	0.0018	0.0018	0	0	0	0	17.16	0.830	99.170
1	06/29/2021 09:00	0.3264	0.0086	0.0192	0.0031	0.0031	0.0032	0.0016	0.0016	0	0	0	0	17.12	0.977	99.023
1	06/30/2021 09:00	0.2432	0.0066	0.0159	0.0026	0.0026	0.003	0.0015	0.0015	0	0	0	0	17.02	0.744	99.256
1	07/01/2021 09:00	0.1897	0.0055	0.013	0.0024	0.0024	0.0028	0.0014	0.0014	0	0	0	0	16.95	0.592	99.408
1	07/02/2021 09:00	0.2596	0.0072	0.0161	0.0028	0.003	0.003	0.0015	0.0015	0	0	0	0	17.00	0.793	99.207
1	07/03/2021 09:00	0.3195	0.0101	0.0239	0.0054	0.0058	0.0046	0.0023	0.0023	0	0	0	0	17.15	1.007	98.993
1	07/04/2021 09:00	0.3321	0.0131	0.0327	0.0074	0.008	0.0068	0.0034	0.0034	0	0	0	0	17.20	1.105	98.895
1	07/05/2021 09:00	0.3598	0.0128	0.03	0.0065	0.0069	0.0056	0.0028	0.0028	0	0	0	0	17.22	1.150	98.850
1	07/06/2021 09:00	0.573	0.0188	0.0423	0.009	0.0095	0.008	0.004	0.004	0	0	0	0	17.39	1.774	98.226
1	07/07/2021 09:00	0.5508	0.0195	0.0433	0.0088	0.0095	0.0086	0.0043	0.0043	0	0	0	0	17.35	1.729	98.271
1	07/08/2021 09:00	0.3296	0.0106	0.0251	0.0055	0.0059	0.0058	0.0029	0.0029	0	0	0	0	17.18	1.044	98.956
1	07/09/2021 09:00	0.3013	0.0077	0.0168	0.0036	0.004	0.0042	0.0021	0.0021	0	0	0	0	17.22	0.907	99.093
1	07/10/2021 09:00	0.3234	0.0069	0.0138	0.0024	0.0028	0.0026	0.0013	0.0013	0	0	0	0	17.26	0.931	99.069
1	07/11/2021 09:00	0.3322	0.0089	0.0189	0.0034	0.0037	0.0032	0.0016	0.0016	0	0	0	0	17.23	0.990	99.010
1	07/12/2021 09:00	0.3429	0.0088	0.017	0.0029	0.003	0.003	0.0015	0.0015	0	0	0	0	17.27	1.002	98.998
1	07/13/2021 09:00	0.2951	0.0089	0.0181	0.0036	0.0039	0.0036	0.0018	0.0018	0	0	0	0	17.18	0.898	99.102
1	07/14/2021 09:00	0.2803	0.0079	0.0161	0.0031	0.0033	0.0036	0.0018	0.0018	0	0	0	0	17.18	0.846	99.154
1	07/15/2021 09:00	0.2866	0.0075	0.0156	0.0032	0.0036	0.0036	0.0018	0.0018	0	0	0	0	17.24	0.858	99.142

Annual
Average = 0.775 99.225

EPNG Eunice

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	07/16/2020 09:00	0.0382	0.0005	0.0016	0	0	0	0	0	0	0	0	0	16.49	0.110	99.890
1	07/17/2020 09:00	0.0829	0.0022	0.0036	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.58	0.242	99.758
1	07/18/2020 09:00	0.0393	0.001	0.0023	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.53	0.117	99.883
1	07/19/2020 09:00	0.0418	0.001	0.0023	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.59	0.124	99.876
1	07/20/2020 09:00	0.1504	0.0064	0.0089	0.0002	0.0001	0.0002	0.0001	0.0001	0	0	0	0	16.70	0.453	99.547
1	07/21/2020 09:00	0.042	0.001	0.0022	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.56	0.124	99.876
1	07/22/2020 09:00	0.0397	0.0011	0.0024	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.50	0.121	99.879
1	07/23/2020 09:00	0.038	0.0009	0.0021	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.49	0.113	99.887
1	07/24/2020 09:00	0.0358	0.0008	0.002	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.48	0.107	99.893
1	07/25/2020 09:00	0.0492	0.0017	0.0039	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.54	0.155	99.845
1	07/26/2020 09:00	0.0441	0.0014	0.0032	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.51	0.137	99.863
1	07/27/2020 09:00	0.0359	0.0009	0.0021	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.48	0.108	99.892
1	07/28/2020 09:00	0.0357	0.0007	0.0019	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.49	0.106	99.894
1	07/29/2020 09:00	0.0399	0.0007	0.0018	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.52	0.116	99.884
1	07/30/2020 09:00	0.0432	0.0008	0.0018	0	0.0001	0.0002	0.0001	0.0001	0	0	0	0	16.54	0.126	99.874
1	07/31/2020 09:00	0.0421	0.0007	0.0015	0	0	0.0001	0	0	0	0	0	0	16.52	0.121	99.879
1	08/01/2020 09:00	0.0467	0.0001	0.0001	0	0	0	0	0	0	0	0	0	16.54	0.125	99.875
1	08/02/2020 09:00	0.0326	0	0	0.0001	0	0	0	0	0	0	0	0	16.49	0.088	99.912
1	08/03/2020 09:00	0.1525	0.0102	0.0183	0.0018	0.0014	0.0004	0.0002	0.0002	0	0	0	0	16.60	0.521	99.479
1	08/04/2020 09:00	0.0537	0.0005	0.0006	0	0	0	0	0	0	0	0	0	16.53	0.147	99.853
1	08/05/2020 09:00	0.0352	0	0	0	0	0	0	0	0	0	0	0	16.49	0.094	99.906
1	08/06/2020 09:00	0.1093	0.0053	0.0086	0.0005	0.0003	0	0	0	0	0	0	0	16.58	0.343	99.657
1	08/07/2020 09:00	0.0331	0	0	0	0	0	0	0	0	0	0	0	16.48	0.089	99.911
1	08/08/2020 09:00	0.0347	0.0001	0.0009	0	0	0	0	0	0	0	0	0	16.48	0.096	99.904
1	08/09/2020 09:00	0.0452	0.0014	0.0031	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.52	0.140	99.860
1	08/10/2020 09:00	0.0438	0.0011	0.0024	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.53	0.132	99.868
1	08/11/2020 09:00	0.0549	0.0012	0.0023	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.63	0.159	99.841
1	08/12/2020 09:00	0.0384	0.0008	0.0021	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.51	0.115	99.885
1	08/13/2020 09:00	0.0531	0.001	0.0024	0	0	0	0	0	0	0	0	0	16.52	0.154	99.846
1	08/14/2020 09:00	0.048	0.0008	0.0019	0.0001	0.0001	0.0001	0	0	0	0	0	0	16.49	0.139	99.861
1	08/15/2020 09:00	0.0372	0.0004	0.0015	0	0	0	0	0	0	0	0	0	16.49	0.106	99.894
1	08/16/2020 09:00	0.0359	0.0003	0.0016	0	0	0	0	0	0	0	0	0	16.48	0.103	99.897
1	08/17/2020 09:00	0.0382	0.001	0.0022	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.48	0.116	99.884
1	08/18/2020 09:00	0.0426	0.0012	0.0027	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.52	0.128	99.872
1	08/19/2020 09:00	0.0414	0.0011	0.0026	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.50	0.125	99.875
1	08/20/2020 09:00	0.0352	0.0003	0.0008	0	0	0	0	0	0	0	0	0	16.49	0.098	99.902
1	08/21/2020 09:00	0.0356	0	0	0	0	0	0	0	0	0	0	0	16.49	0.095	99.905
1	08/22/2020 09:00	0.0403	0.0004	0.0007	0	0	0	0	0	0	0	0	0	16.52	0.111	99.889
1	08/23/2020 09:00	0.0405	0.0009	0.002	0	0	0	0	0	0	0	0	0	16.50	0.118	99.882
1	08/24/2020 09:00	0.0402	0.0009	0.002	0	0	0	0	0	0	0	0	0	16.50	0.118	99.882
1	08/25/2020 09:00	0.0512	0.0016	0.0036	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.52	0.158	99.842
1	08/26/2020 09:00	0.0381	0.0008	0.0021	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.48	0.113	99.887
1	08/27/2020 09:00	0.0392	0.001	0.0022	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.49	0.117	99.883
1	08/28/2020 09:00	0.0385	0.0005	0.0017	0	0	0.0001	0	0	0	0	0	0	16.49	0.111	99.889
1	08/29/2020 09:00	0.0364	0.0004	0.0015	0	0	0.0001	0	0	0	0	0	0	16.48	0.105	99.895
1	08/30/2020 09:00	0.0327	0.0001	0.0007	0	0	0	0	0	0	0	0	0	16.46	0.090	99.910
1	08/31/2020 09:00	0.0313	0	0.0004	0	0	0	0	0	0	0	0	0	16.46	0.085	99.915
1	09/01/2020 09:00	0.0369	0.0005	0.0015	0	0	0	0	0	0	0	0	0	16.49	0.106	99.894
1	09/02/2020 09:00	0.0324	0	0.0006	0	0	0	0	0	0	0	0	0	16.46	0.089	99.911
1	09/03/2020 09:00	0.0326	0	0.0001	0	0	0	0	0	0	0	0	0	16.48	0.088	99.912
1	09/04/2020 09:00	0.03	0	0.0003	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.46	0.082	99.918
1	09/05/2020 09:00	0.028	0.0001	0.0006	0	0	0	0	0	0	0	0	0	16.44	0.078	99.922
1	09/06/2020 09:00	0.027	0.0001	0.001	0	0	0	0	0	0	0	0	0	16.43	0.076	99.924
1	09/07/2020 09:00	0.0248	0.0001	0.0009	0	0	0	0	0	0	0	0	0	16.41	0.070	99.930
1	09/08/2020 09:00	0.0234	0.0003	0.0008	0.0002	0.0001	0	0	0	0	0	0	0	16.40	0.068	99.932

EPNG Eunice

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	09/09/2020 09:00	0.032	0.0005	0.0014	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.45	0.094	99.906
1	09/10/2020 09:00	0.073	0.0022	0.0049	0.0003	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.57	0.224	99.776
1	09/11/2020 09:00	0.0913	0.0035	0.0076	0.0006	0.0004	0.0014	0.0007	0.0007	0	0	0	0	16.62	0.293	99.707
1	09/12/2020 09:00	0.0609	0.0023	0.0053	0	0	0.001	0.0005	0.0005	0	0	0	0	16.54	0.194	99.806
1	09/13/2020 09:00	0.0586	0.0023	0.0051	0	0	0.001	0.0005	0.0005	0	0	0	0	16.54	0.187	99.813
1	09/14/2020 09:00	0.0476	0.002	0.0046	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.50	0.155	99.845
1	09/15/2020 09:00	0.0399	0.0013	0.003	0.0001	0	0.0006	0.0003	0.0003	0	0	0	0	16.48	0.126	99.874
1	09/16/2020 09:00	0.0322	0.0007	0.002	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.44	0.097	99.903
1	09/17/2020 09:00	0.0314	0.0004	0.0013	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.45	0.091	99.909
1	09/18/2020 09:00	0.035	0.0009	0.0022	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.45	0.107	99.893
1	09/19/2020 09:00	0.0288	0	0.0004	0	0	0	0	0	0	0	0	0	16.44	0.079	99.921
1	09/20/2020 09:00	0.0271	0	0	0	0	0	0	0	0	0	0	0	16.43	0.073	99.927
1	09/21/2020 09:00	0.029	0	0	0	0	0	0	0	0	0	0	0	16.44	0.078	99.922
1	09/22/2020 09:00	0.0289	0	0.0001	0	0	0	0	0	0	0	0	0	16.44	0.078	99.922
1	09/23/2020 09:00	0.0302	0	0	0	0	0	0	0	0	0	0	0	16.46	0.081	99.919
1	09/24/2020 09:00	0.0295	0.0001	0.0003	0	0	0	0	0	0	0	0	0	16.44	0.081	99.919
1	09/25/2020 09:00	0.026	0	0.0001	0	0	0	0	0	0	0	0	0	16.42	0.070	99.930
1	09/26/2020 09:00	0.0256	0	0	0	0	0	0	0	0	0	0	0	16.42	0.069	99.931
1	09/27/2020 09:00	0.0265	0.0005	0.0006	0.0007	0.0006	0.0002	0.0001	0.0001	0	0	0	0	16.43	0.082	99.918
1	09/28/2020 09:00	0.0257	0	0	0	0	0	0	0	0	0	0	0	16.42	0.069	99.931
1	09/29/2020 09:00	0.0262	0	0	0	0	0	0	0	0	0	0	0	16.42	0.070	99.930
1	09/30/2020 09:00	0.0674	0.0039	0.0071	0.0007	0.0005	0.0002	0.0001	0.0001	0	0	0	0	16.45	0.226	99.774
1	10/01/2020 09:00	0.0298	0	0.0001	0	0	0	0	0	0	0	0	0	16.42	0.080	99.920
1	10/02/2020 09:00	0.0265	0	0	0	0	0	0	0	0	0	0	0	16.42	0.071	99.929
1	10/03/2020 09:00	0.0213	0.0001	0.0001	0	0.0001	0	0	0	0	0	0	0	16.38	0.058	99.942
1	10/04/2020 09:00	0.0211	0	0	0	0	0	0	0	0	0	0	0	16.39	0.057	99.943
1	10/05/2020 09:00	0.0257	0.0001	0.001	0	0	0	0	0	0	0	0	0	16.41	0.073	99.927
1	10/06/2020 09:00	0.0241	0	0.0003	0	0	0	0	0	0	0	0	0	16.40	0.066	99.934
1	10/07/2020 09:00	0.0247	0	0.0003	0	0	0	0	0	0	0	0	0	16.40	0.067	99.933
1	10/08/2020 09:00	0.0252	0.0001	0.0006	0	0	0	0	0	0	0	0	0	16.40	0.070	99.930
1	10/09/2020 09:00	0.0368	0.0012	0.0027	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.46	0.114	99.886
1	10/10/2020 09:00	0.048	0.0017	0.004	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.50	0.153	99.847
1	10/11/2020 09:00	0.043	0.0016	0.0037	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.49	0.138	99.862
1	10/12/2020 09:00	0.0285	0.0003	0.001	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.41	0.082	99.918
1	10/13/2020 09:00	0.0228	0	0	0	0	0	0	0	0	0	0	0	16.40	0.061	99.939
1	10/14/2020 09:00	0.0234	0	0	0	0	0	0	0	0	0	0	0	16.41	0.063	99.937
1	10/15/2020 09:00	0.0233	0.0002	0.0002	0.0002	0.0001	0.0001	0	0	0	0	0	0	16.40	0.066	99.934
1	10/16/2020 09:00	0.0222	0	0	0	0	0	0	0	0	0	0	0	16.39	0.060	99.940
1	10/17/2020 09:00	0.0225	0	0	0	0	0	0	0	0	0	0	0	16.40	0.061	99.939
1	10/18/2020 09:00	0.0225	0	0	0	0	0	0	0	0	0	0	0	16.39	0.061	99.939
1	10/19/2020 09:00	0.021	0	0	0	0	0	0	0	0	0	0	0	16.40	0.056	99.944
1	10/20/2020 09:00	0.0226	0	0	0	0	0	0	0	0	0	0	0	16.41	0.061	99.939
1	10/21/2020 09:00	0.0262	0	0.0004	0	0	0	0	0	0	0	0	0	16.42	0.072	99.928
1	10/22/2020 09:00	0.0231	0	0	0	0	0	0	0	0	0	0	0	16.41	0.062	99.938
1	10/23/2020 09:00	0.0227	0	0	0	0	0	0	0	0	0	0	0	16.41	0.061	99.939
1	10/24/2020 09:00	0.0318	0.0006	0.0018	0	0	0	0	0	0	0	0	0	16.44	0.094	99.906
1	10/25/2020 09:00	0.0318	0.0006	0.0018	0	0	0.0001	0	0	0	0	0	0	16.44	0.094	99.906
1	10/26/2020 09:00	0.0318	0.0006	0.0018	0	0	0.0001	0	0	0	0	0	0	16.44	0.094	99.906
1	10/27/2020 09:00	0.0318	0.0006	0.0018	0	0	0.0001	0	0	0	0	0	0	16.44	0.094	99.906
1	10/28/2020 09:00	0.0318	0.0006	0.0018	0	0	0.0001	0	0	0	0	0	0	16.44	0.094	99.906
1	10/29/2020 09:00	0.0336	0.001	0.0024	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.46	0.104	99.896
1	10/30/2020 09:00	0.0293	0.0005	0.0014	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.44	0.086	99.914
1	10/31/2020 09:00	0.0249	0	0.0004	0	0	0	0	0	0	0	0	0	16.42	0.068	99.932
1	11/01/2020 09:00	0.027	0	0.0005	0	0	0	0	0	0	0	0	0	16.43	0.074	99.926
1	11/02/2020 09:00	0.027	0.0001	0.0009	0	0	0	0	0	0	0	0	0	16.41	0.076	99.924

EPNG Eunice

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	11/03/2020 09:00	0.03	0.0005	0.0019	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.42	0.090	99.910
1	11/04/2020 09:00	0.0262	0	0.0006	0	0	0	0	0	0	0	0	0	16.41	0.073	99.927
1	11/05/2020 09:00	0.0258	0	0.0006	0	0	0	0	0	0	0	0	0	16.42	0.071	99.929
1	11/06/2020 09:00	0.0249	0	0.0005	0	0	0	0	0	0	0	0	0	16.43	0.069	99.931
1	11/07/2020 09:00	0.0227	0	0	0	0	0	0	0	0	0	0	0	16.42	0.061	99.939
1	11/08/2020 09:00	0.0228	0	0	0	0	0	0	0	0	0	0	0	16.42	0.061	99.939
1	11/09/2020 09:00	0.0235	0	0	0	0	0	0	0	0	0	0	0	16.42	0.063	99.937
1	11/10/2020 09:00	0.023	0	0	0	0	0	0	0	0	0	0	0	16.41	0.062	99.938
1	11/11/2020 09:00	0.0234	0	0	0	0	0	0	0	0	0	0	0	16.41	0.063	99.937
1	11/12/2020 09:00	0.0236	0	0	0	0	0	0	0	0	0	0	0	16.42	0.063	99.937
1	11/13/2020 09:00	0.024	0	0	0	0	0	0	0	0	0	0	0	16.42	0.064	99.936
1	11/14/2020 09:00	0.023	0	0	0	0	0	0	0	0	0	0	0	16.41	0.062	99.938
1	11/15/2020 09:00	0.0238	0	0	0	0	0	0	0	0	0	0	0	16.42	0.064	99.936
1	11/16/2020 09:00	0.0239	0	0	0	0	0	0	0	0	0	0	0	16.42	0.064	99.936
1	11/17/2020 09:00	0.0244	0	0	0	0	0	0	0	0	0	0	0	16.41	0.066	99.934
1	11/18/2020 09:00	0.0247	0	0	0	0	0	0	0	0	0	0	0	16.42	0.066	99.934
1	11/19/2020 09:00	0.0249	0	0	0	0	0	0	0	0	0	0	0	16.47	0.067	99.933
1	11/20/2020 09:00	0.0231	0	0	0	0	0	0	0	0	0	0	0	16.42	0.062	99.938
1	11/21/2020 09:00	0.0239	0	0	0	0	0	0	0	0	0	0	0	16.42	0.064	99.936
1	11/22/2020 09:00	0.024	0.0001	0.0001	0.0001	0	0	0	0	0	0	0	0	16.42	0.066	99.934
1	11/23/2020 09:00	0.0241	0	0	0	0	0	0	0	0	0	0	0	16.42	0.065	99.935
1	11/24/2020 09:00	0.0235	0	0	0	0	0	0	0	0	0	0	0	16.43	0.063	99.937
1	11/25/2020 09:00	0.0281	0.0005	0.0011	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.44	0.082	99.918
1	11/26/2020 09:00	0.0394	0.0016	0.0038	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.47	0.128	99.872
1	11/27/2020 09:00	0.0418	0.002	0.0047	0.0001	0.0002	0.0008	0.0004	0.0004	0	0	0	0	16.48	0.141	99.859
1	11/28/2020 09:00	0.0398	0.0018	0.0044	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.47	0.133	99.867
1	11/29/2020 09:00	0.038	0.0017	0.004	0.0001	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.46	0.126	99.874
1	11/30/2020 09:00	0.0343	0.0013	0.0029	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.45	0.109	99.891
1	12/01/2020 09:00	0.0619	0.0038	0.0091	0.0016	0.0013	0.0014	0.0007	0.0007	0	0	0	0	16.55	0.230	99.770
1	12/02/2020 09:00	0.0666	0.0041	0.0097	0.0017	0.0015	0.0016	0.0008	0.0008	0	0	0	0	16.57	0.248	99.752
1	12/03/2020 09:00	0.0516	0.0027	0.0064	0.0005	0.001	0.001	0.0005	0.0005	0	0	0	0	16.53	0.181	99.819
1	12/04/2020 09:00	0.0405	0.0017	0.0039	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.50	0.131	99.869
1	12/05/2020 09:00	0.0468	0.002	0.0046	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.52	0.151	99.849
1	12/06/2020 09:00	0.0475	0.0019	0.0045	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.53	0.152	99.848
1	12/07/2020 09:00	0.0503	0.0021	0.0049	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.54	0.163	99.837
1	12/08/2020 09:00	0.0998	0.0059	0.0138	0.0028	0.0028	0.0026	0.0013	0.0013	0	0	0	0	16.73	0.369	99.631
1	12/09/2020 09:00	0.0986	0.0056	0.013	0.0026	0.0026	0.0026	0.0013	0.0013	0	0	0	0	16.72	0.360	99.640
1	12/10/2020 09:00	0.071	0.0034	0.0078	0.0011	0.0008	0.0016	0.0008	0.0008	0	0	0	0	16.62	0.244	99.756
1	12/11/2020 09:00	0.0719	0.0035	0.008	0.0013	0.0009	0.0016	0.0008	0.0008	0	0	0	0	16.62	0.249	99.751
1	12/12/2020 09:00	0.0471	0.0022	0.0053	0.0003	0.0001	0.001	0.0005	0.0005	0	0	0	0	16.51	0.159	99.841
1	12/13/2020 09:00	0.0456	0.0023	0.0053	0.0001	0.0001	0.0008	0.0004	0.0004	0	0	0	0	16.50	0.154	99.846
1	12/14/2020 09:00	0.0418	0.0021	0.005	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.49	0.141	99.859
1	12/15/2020 09:00	0.0399	0.0014	0.0032	0.0001	0	0.0012	0.0006	0.0006	0	0	0	0	16.46	0.130	99.870
1	12/16/2020 09:00	0.0603	0.0018	0.0029	0.0002	0.0001	0.002	0.001	0.001	0	0	0	0	16.55	0.189	99.811
1	12/17/2020 09:00	0.0924	0.0025	0.0039	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.72	0.272	99.728
1	12/18/2020 09:00	0.0619	0.0023	0.0044	0.0001	0.0001	0.0016	0.0008	0.0008	0	0	0	0	16.57	0.197	99.803
1	12/19/2020 09:00	0.0376	0.0014	0.0033	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.48	0.120	99.880
1	12/20/2020 09:00	0.0579	0.0027	0.0062	0.0007	0.0004	0.0012	0.0006	0.0006	0	0	0	0	16.57	0.196	99.804
1	12/21/2020 09:00	0.0722	0.0037	0.0086	0.0014	0.0013	0.0016	0.0008	0.0008	0	0	0	0	16.63	0.254	99.746
1	12/22/2020 09:00	0.0823	0.0045	0.0107	0.002	0.0019	0.0022	0.0011	0.0011	0	0	0	0	16.65	0.299	99.701
1	12/23/2020 09:00	0.0827	0.0046	0.0107	0.0022	0.0021	0.002	0.001	0.001	0	0	0	0	16.66	0.301	99.699
1	12/24/2020 09:00	0.0716	0.0037	0.008	0.0016	0.0014	0.0022	0.0011	0.0011	0	0	0	0	16.61	0.256	99.744
1	12/25/2020 09:00	0.0795	0.0038	0.0081	0.0015	0.0014	0.0026	0.0013	0.0013	0	0	0	0	16.64	0.278	99.722
1	12/26/2020 09:00	0.062	0.0024	0.0044	0.0003	0.0002	0.0022	0.0011	0.0011	0	0	0	0	16.57	0.202	99.798
1	12/27/2020 09:00	0.0392	0.0009	0.002	0.0003	0.0002	0.0012	0.0006	0.0006	0	0	0	0	16.48	0.124	99.876

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FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	12/28/2020 09:00	0.0256	0	0.0004	0	0	0	0	0	0	0	0	0	16.44	0.070	99.930
1	12/29/2020 09:00	0.0245	0.0001	0.0001	0.0001	0.0001	0	0	0	0	0	0	0	16.43	0.067	99.933
1	12/30/2020 09:00	0.0505	0.0013	0.0026	0.0002	0.0001	0.001	0.0005	0.0005	0	0	0	0	16.53	0.155	99.845
1	12/31/2020 09:00	0.061	0.002	0.0038	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.56	0.191	99.809
1	01/01/2021 09:00	0.0643	0.0025	0.0051	0.0001	0	0.002	0.001	0.001	0	0	0	0	16.57	0.209	99.791
1	01/02/2021 09:00	0.0717	0.0028	0.0057	0.0001	0.0001	0.002	0.001	0.001	0	0	0	0	16.60	0.231	99.769
1	01/03/2021 09:00	0.0645	0.003	0.0065	0.0008	0.0007	0.003	0.0015	0.0015	0	0	0	0	16.61	0.227	99.773
1	01/04/2021 09:00	0.074	0.0036	0.0079	0.0014	0	0.0025	0.0012	0.0012	0	0	0	0	16.61	0.256	99.744
1	01/05/2021 09:00	0.1247	0.0078	0.018	0.0036	0.0033	0.0028	0.0014	0.0014	0	0	0	0	16.78	0.461	99.539
1	01/06/2021 09:00	0.0594	0.0024	0.0049	0.0005	0.0005	0.0016	0.0008	0.0008	0	0	0	0	16.55	0.197	99.803
1	01/07/2021 09:00	0.0377	0.001	0.0017	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.46	0.114	99.886
1	01/08/2021 09:00	0.0345	0.0001	0.0011	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.45	0.100	99.900
1	01/09/2021 09:00	0.0399	0.0008	0.0019	0.0001	0.0001	0.001	0.0005	0.0005	0	0	0	0	16.47	0.122	99.878
1	01/10/2021 09:00	0.0402	0.001	0.002	0	0	0.001	0.0005	0.0005	0	0	0	0	16.47	0.123	99.877
1	01/11/2021 09:00	0.0386	0.0008	0.0017	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.47	0.115	99.885
1	01/12/2021 09:00	0.0429	0.0013	0.0026	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.49	0.132	99.868
1	01/13/2021 09:00	0.0475	0.0017	0.0035	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.50	0.148	99.852
1	01/14/2021 09:00	0.0455	0.0014	0.0027	0.0001	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.50	0.140	99.860
1	01/15/2021 09:00	0.048	0.0016	0.003	0	0	0.001	0.0005	0.0005	0	0	0	0	16.51	0.150	99.850
1	01/16/2021 09:00	0.0587	0.0022	0.0045	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.55	0.187	99.813
1	01/17/2021 09:00	0.0595	0.0023	0.0049	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.56	0.190	99.810
1	01/18/2021 09:00	0.0539	0.0019	0.0037	0.0001	0.0001	0.001	0.0005	0.0005	0	0	0	0	16.54	0.170	99.830
1	01/19/2021 09:00	0.0513	0.0017	0.003	0.0004	0.0002	0.0008	0.0004	0.0004	0	0	0	0	16.52	0.160	99.840
1	01/20/2021 09:00	0.0675	0.003	0.0064	0.0008	0.0005	0.0012	0.0006	0.0006	0	0	0	0	16.59	0.224	99.776
1	01/21/2021 09:00	0.0574	0.0022	0.0044	0.0001	0	0.001	0.0005	0.0005	0	0	0	0	16.54	0.182	99.818
1	01/22/2021 09:00	0.05	0.0015	0.0027	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.52	0.152	99.848
1	01/23/2021 09:00	0.0482	0.0013	0.0021	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.51	0.144	99.856
1	01/24/2021 09:00	0.0607	0.0026	0.0054	0.0002	0.0001	0.0012	0.0006	0.0006	0	0	0	0	16.55	0.197	99.803
1	01/25/2021 09:00	0.0686	0.003	0.0064	0.0004	0.0002	0.0016	0.0008	0.0008	0	0	0	0	16.59	0.226	99.774
1	01/26/2021 09:00	0.0571	0.0019	0.0034	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.54	0.178	99.822
1	01/27/2021 09:00	0.0584	0.0019	0.0033	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.55	0.182	99.818
1	01/28/2021 09:00	0.0578	0.002	0.0039	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.55	0.181	99.819
1	01/29/2021 09:00	0.0643	0.0022	0.0039	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.57	0.199	99.801
1	01/30/2021 09:00	0.0663	0.0023	0.004	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.58	0.205	99.795
1	01/31/2021 09:00	0.0597	0.0019	0.0032	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.56	0.183	99.817
1	02/01/2021 09:00	0.0346	0.0005	0.0018	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.46	0.103	99.897
1	02/02/2021 09:00	0.043	0.0013	0.0028	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.49	0.133	99.867
1	02/03/2021 09:00	0.0579	0.002	0.0036	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.55	0.181	99.819
1	02/04/2021 09:00	0.0697	0.0015	0.0028	0.0001	0.0001	0.001	0.0005	0.0005	0	0	0	0	16.59	0.206	99.794
1	02/05/2021 09:00	0.0921	0.002	0.0029	0	0	0.001	0.0005	0.0005	0	0	0	0	16.69	0.266	99.734
1	02/06/2021 09:00	0.0736	0.0028	0.0052	0	0	0.0022	0.0011	0.0011	0	0	0	0	16.61	0.235	99.765
1	02/07/2021 09:00	0.0386	0.001	0.0024	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.48	0.122	99.878
1	02/08/2021 09:00	0.0513	0.001	0.0021	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.56	0.149	99.851
1	02/09/2021 09:00	0.059	0.0013	0.0021	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.58	0.173	99.827
1	02/10/2021 09:00	0.0811	0.0016	0.0022	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.70	0.232	99.768
1	02/11/2021 09:00	0.1303	0.0023	0.0028	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.86	0.364	99.636
1	02/12/2021 09:00	0.2807	0.0045	0.0057	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.07	0.771	99.229
1	02/13/2021 09:00	0.1315	0.0037	0.0057	0.0002	0.0001	0.0042	0.0021	0.0021	0	0	0	0	16.74	0.402	99.598
1	02/14/2021 09:00	0.4891	0.0101	0.0109	0.0005	0.0002	0.0038	0.0019	0.0019	0	0	0	0	17.10	1.355	98.645
1	02/15/2021 09:00	0.0963	0.0034	0.0054	0	0	0.0058	0.0029	0.0029	0	0	0	0	16.68	0.315	99.685
1	02/16/2021 09:00	0.0945	0.0035	0.0057	0	0	0.0074	0.0037	0.0037	0	0	0	0	16.68	0.320	99.680
1	02/17/2021 09:00	0.0978	0.0037	0.006	0.0004	0.0001	0.0084	0.0042	0.0042	0	0	0	0	16.70	0.338	99.662
1	02/18/2021 09:00	0.102	0.0039	0.0064	0.0009	0	0.0092	0.0046	0.0046	0	0	0	0	16.71	0.356	99.644
1	02/19/2021 09:00	0.1652	0.0083	0.0145	0.0022	0.0011	0.0112	0.0056	0.0056	0	0	0	0	16.79	0.585	99.415
1	02/20/2021 09:00	0.1121	0.0046	0.0077	0.0017	0.0009	0.012	0.006	0.006	0	0	0	0	16.74	0.411	99.589

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FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	02/21/2021 09:00	0.1158	0.0049	0.0082	0.0019	0.0014	0.013	0.0065	0.0065	0	0	0	0	16.76	0.431	99.569
1	02/22/2021 09:00	0.1207	0.0053	0.0089	0.0021	0.0018	0.0148	0.0074	0.0074	0	0	0	0	16.77	0.459	99.541
1	02/23/2021 09:00	0.1245	0.0068	0.0144	0.0049	0.0055	0.0214	0.0107	0.0107	0	0	0	0	16.80	0.555	99.445
1	02/24/2021 09:00	0.063	0.0025	0.0052	0.0009	0.0008	0.0118	0.0059	0.0059	0	0	0	0	16.57	0.263	99.737
1	02/25/2021 09:00	0.0408	0.0014	0.0034	0	0	0.0034	0.0017	0.0017	0	0	0	0	16.48	0.144	99.856
1	02/26/2021 09:00	0.0785	0.004	0.0095	0.0014	0.0014	0.0028	0.0014	0.0014	0	0	0	0	16.64	0.282	99.718
1	02/27/2021 09:00	0.0826	0.0043	0.0101	0.002	0.002	0.0026	0.0013	0.0013	0	0	0	0	16.67	0.300	99.700
1	02/28/2021 09:00	0.0786	0.0046	0.0109	0.0022	0.0022	0.0024	0.0012	0.0012	0	0	0	0	16.63	0.294	99.706
1	03/01/2021 09:00	0.0495	0.0021	0.005	0.0001	0.0001	0.0014	0.0007	0.0007	0	0	0	0	16.51	0.165	99.835
1	03/02/2021 09:00	0.0528	0.0022	0.0055	0.0006	0.0003	0.0014	0.0007	0.0007	0	0	0	0	16.53	0.179	99.821
1	03/03/2021 09:00	0.065	0.0031	0.0072	0.0008	0.0005	0.0018	0.0009	0.0009	0	0	0	0	16.59	0.224	99.776
1	03/04/2021 09:00	0.1689	0.0086	0.0197	0.0039	0.004	0.0044	0.0022	0.0022	0	0	0	0	17.07	0.588	99.412
1	03/05/2021 09:00	0.065	0.0033	0.0077	0.0012	0.0008	0.0022	0.0011	0.0011	0	0	0	0	16.59	0.231	99.769
1	03/06/2021 09:00	0.0634	0.0034	0.0084	0.0015	0.0014	0.0018	0.0009	0.0009	0	0	0	0	16.58	0.232	99.768
1	03/07/2021 09:00	0.0469	0.002	0.0048	0.0005	0.0004	0.0014	0.0007	0.0007	0	0	0	0	16.51	0.160	99.840
1	03/08/2021 09:00	0.0474	0.0018	0.0043	0.0001	0.0001	0.001	0.0005	0.0005	0	0	0	0	16.52	0.154	99.846
1	03/09/2021 09:00	0.0691	0.0032	0.0074	0.0009	0.0007	0.002	0.001	0.001	0	0	0	0	16.61	0.238	99.762
1	03/10/2021 09:00	0.0651	0.0028	0.0064	0.0004	0.0003	0.0018	0.0009	0.0009	0	0	0	0	16.60	0.218	99.782
1	03/11/2021 09:00	0.0453	0.0016	0.0037	0	0	0.001	0.0005	0.0005	0	0	0	0	16.51	0.145	99.855
1	03/12/2021 09:00	0.0562	0.0021	0.0048	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.57	0.181	99.819
1	03/13/2021 09:00	0.0533	0.002	0.0044	0.0001	0	0.0012	0.0006	0.0006	0	0	0	0	16.55	0.171	99.829
1	03/14/2021 09:00	0.0486	0.0019	0.0043	0.0001	0.0001	0.0012	0.0006	0.0006	0	0	0	0	16.52	0.159	99.841
1	03/15/2021 09:00	0.0526	0.0021	0.0049	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.54	0.172	99.828
1	03/16/2021 09:00	0.107	0.0055	0.0129	0.0026	0.0025	0.0026	0.0013	0.0013	0	0	0	0	16.77	0.380	99.620
1	03/17/2021 09:00	0.0493	0.0017	0.0047	0.0008	0.0007	0.0008	0.0004	0.0004	0	0	0	0	16.51	0.165	99.835
1	03/18/2021 09:00	0.0261	0.0003	0.0008	0	0	0	0	0	0	0	0	0	16.41	0.074	99.926
1	03/19/2021 09:00	0.0486	0.0018	0.0043	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.53	0.154	99.846
1	03/20/2021 09:00	0.0633	0.0029	0.0069	0.0007	0.0004	0.0014	0.0007	0.0007	0	0	0	0	16.57	0.215	99.785
1	03/21/2021 09:00	0.0613	0.0027	0.0063	0.0003	0.0001	0.0012	0.0006	0.0006	0	0	0	0	16.57	0.203	99.797
1	03/22/2021 09:00	0.1007	0.0036	0.0078	0.001	0.0009	0.0018	0.0009	0.0009	0	0	0	0	16.85	0.320	99.680
1	03/23/2021 09:00	0.1429	0.0076	0.018	0.0035	0.0033	0.0034	0.0017	0.0017	0	0	0	0	16.93	0.506	99.494
1	03/24/2021 09:00	0.1235	0.0072	0.0175	0.0032	0.003	0.0026	0.0013	0.0013	0	0	0	0	16.87	0.448	99.552
1	03/25/2021 09:00	0.1958	0.0139	0.0356	0.0081	0.0084	0.0062	0.0031	0.0031	0	0	0	0	17.00	0.779	99.221
1	03/26/2021 09:00	0.2227	0.0157	0.0399	0.0098	0.0107	0.0096	0.0048	0.0048	0	0	0	0	17.08	0.899	99.101
1	03/27/2021 09:00	0.2753	0.0186	0.0441	0.0089	0.009	0.008	0.004	0.004	0	0	0	0	17.11	1.038	98.962
1	03/28/2021 09:00	0.2028	0.0157	0.0405	0.0089	0.0092	0.0068	0.0034	0.0034	0	0	0	0	17.00	0.829	99.171
1	03/29/2021 09:00	0.1812	0.0129	0.0327	0.0072	0.0074	0.0064	0.0032	0.0032	0	0	0	0	16.99	0.721	99.279
1	03/30/2021 09:00	0.1997	0.0155	0.0393	0.0088	0.0088	0.0072	0.0036	0.0036	0	0	0	0	16.95	0.819	99.181
1	03/31/2021 09:00	0.2113	0.0164	0.0426	0.0094	0.0096	0.0074	0.0037	0.0037	0	0	0	0	16.98	0.869	99.131
1	04/01/2021 09:00	0.1576	0.0095	0.0234	0.0046	0.0047	0.0038	0.0019	0.0019	0	0	0	0	16.95	0.582	99.418
1	04/02/2021 09:00	0.1786	0.0122	0.0304	0.0066	0.0067	0.0064	0.0032	0.0032	0	0	0	0	16.98	0.699	99.301
1	04/03/2021 09:00	0.1047	0.0062	0.0154	0.003	0.0031	0.0034	0.0017	0.0017	0	0	0	0	16.73	0.395	99.605
1	04/04/2021 09:00	0.066	0.0032	0.0076	0.0011	0.0008	0.0018	0.0009	0.0009	0	0	0	0	16.60	0.231	99.769
1	04/05/2021 09:00	0.0991	0.0054	0.013	0.0024	0.0024	0.003	0.0015	0.0015	0	0	0	0	16.75	0.361	99.639
1	04/06/2021 09:00	0.1415	0.0071	0.0164	0.0033	0.0035	0.0042	0.0021	0.0021	0	0	0	0	16.96	0.499	99.501
1	04/07/2021 09:00	0.1491	0.01	0.0252	0.0053	0.0056	0.0048	0.0024	0.0024	0	0	0	0	16.93	0.580	99.420
1	04/08/2021 09:00	0.2554	0.022	0.058	0.0137	0.0149	0.0126	0.0063	0.0063	0	0	0	0	17.09	1.115	98.885
1	04/09/2021 09:00	0.2974	0.0272	0.0726	0.0182	0.0196	0.0176	0.0088	0.0088	0	0	0	0	17.11	1.354	98.646
1	04/10/2021 09:00	0.2892	0.0287	0.0779	0.0195	0.0208	0.021	0.0105	0.0105	0	0	0	0	17.05	1.388	98.612
1	04/11/2021 09:00	0.0245	0.0001	0.0004	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.42	0.072	99.928
1	04/12/2021 09:00	0.0489	0.0026	0.0068	0.0014	0.0015	0.0012	0.0006	0.0006	0	0	0	0	16.50	0.183	99.817
1	04/13/2021 09:00	0.0451	0.0019	0.0045	0.0001	0	0.0008	0.0004	0.0004	0	0	0	0	16.51	0.148	99.852
1	04/14/2021 09:00	0.0461	0.0018	0.0043	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.54	0.149	99.851
1	04/15/2021 09:00	0.0557	0.0026	0.0063	0.0004	0.0001	0.0012	0.0006	0.0006	0	0	0	0	16.57	0.188	99.812
1	04/16/2021 09:00	0.0486	0.0024	0.0055	0.0006	0.0005	0.0012	0.0006	0.0006	0	0	0	0	16.53	0.168	99.832

EPNG Eunice

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	04/17/2021 09:00	0.0576	0.0021	0.0045	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.60	0.180	99.820
1	04/18/2021 09:00	0.0307	0.0007	0.0018	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.44	0.093	99.907
1	04/19/2021 09:00	0.023	0.0001	0	0	0.0001	0	0	0	0	0	0	0	16.40	0.063	99.937
1	04/20/2021 09:00	0.0237	0	0	0.0001	0.0001	0	0	0	0	0	0	0	16.41	0.065	99.935
1	04/21/2021 09:00	0.1141	0.0087	0.0126	0.0015	0.0012	0.0012	0.0006	0.0006	0	0	0	0	16.49	0.398	99.602
1	04/22/2021 09:00	0.3221	0.0291	0.0429	0.0034	0.0023	0.0012	0.0006	0.0006	0	0	0	0	16.69	1.133	98.867
1	04/23/2021 09:00	0.0465	0.0003	0.0003	0	0	0	0	0	0	0	0	0	16.55	0.126	99.874
1	04/24/2021 09:00	0.1577	0.0093	0.0214	0.004	0.0039	0.0028	0.0014	0.0014	0	0	0	0	16.89	0.565	99.435
1	04/25/2021 09:00	0.1845	0.0141	0.0342	0.0068	0.0068	0.0052	0.0026	0.0026	0	0	0	0	17.03	0.727	99.273
1	04/26/2021 09:00	0.193	0.014	0.0342	0.0068	0.0068	0.0052	0.0026	0.0026	0	0	0	0	17.05	0.747	99.253
1	04/27/2021 09:00	0.1884	0.0135	0.0329	0.0067	0.0068	0.0052	0.0026	0.0026	0	0	0	0	17.05	0.729	99.271
1	04/28/2021 09:00	0.1113	0.0076	0.0182	0.0033	0.0032	0.0032	0.0016	0.0016	0	0	0	0	16.71	0.428	99.572
1	04/29/2021 09:00	0.036	0.0016	0.0039	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.43	0.119	99.881
1	04/30/2021 09:00	0.0356	0.0015	0.0036	0.0001	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.44	0.118	99.882
1	05/01/2021 09:00	0.0492	0.0024	0.0056	0.0003	0.0002	0.0012	0.0006	0.0006	0	0	0	0	16.50	0.168	99.832
1	05/02/2021 09:00	0.0423	0.002	0.0047	0	0	0.001	0.0005	0.0005	0	0	0	0	16.47	0.142	99.858
1	05/03/2021 09:00	0.035	0.0013	0.0035	0.0002	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.43	0.115	99.885
1	05/04/2021 09:00	0.0312	0.0011	0.0027	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.41	0.099	99.901
1	05/05/2021 09:00	0.0476	0.0026	0.0063	0.0005	0.0002	0.0012	0.0006	0.0006	0	0	0	0	16.48	0.168	99.832
1	05/06/2021 09:00	0.0422	0.0019	0.0045	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.47	0.140	99.860
1	05/07/2021 09:00	0.0969	0.0065	0.016	0.0033	0.0033	0.0034	0.0017	0.0017	0	0	0	0	16.71	0.380	99.620
1	05/08/2021 09:00	0.0749	0.0046	0.0113	0.002	0.002	0.0024	0.0012	0.0012	0	0	0	0	16.62	0.284	99.716
1	05/09/2021 09:00	0.0486	0.0024	0.0055	0.0006	0.0005	0.0012	0.0006	0.0006	0	0	0	0	16.53	0.168	99.832
1	05/10/2021 09:00	0.0486	0.0024	0.0055	0.0006	0.0005	0.0012	0.0006	0.0006	0	0	0	0	16.53	0.168	99.832
1	05/11/2021 09:00	0.0429	0.0028	0.0067	0.0011	0.001	0.0012	0.0006	0.0006	0	0	0	0	16.44	0.164	99.836
1	05/12/2021 09:00	0.046	0.0026	0.0064	0.0004	0.0002	0.001	0.0005	0.0005	0	0	0	0	16.48	0.163	99.837
1	05/13/2021 09:00	0.0537	0.0033	0.0082	0.0014	0.0013	0.0016	0.0008	0.0008	0	0	0	0	16.51	0.204	99.796
1	05/14/2021 09:00	0.0846	0.0062	0.0155	0.0033	0.0034	0.0032	0.0016	0.0016	0	0	0	0	16.63	0.346	99.654
1	05/15/2021 09:00	0.0394	0.0018	0.0047	0.0005	0.0003	0.0012	0.0006	0.0006	0	0	0	0	16.46	0.138	99.862
1	05/16/2021 09:00	0.0537	0.0024	0.0057	0.0007	0.0003	0.0012	0.0006	0.0006	0	0	0	0	16.54	0.182	99.818
1	05/17/2021 09:00	0.0529	0.0027	0.0065	0.0005	0.0001	0.0014	0.0007	0.0007	0	0	0	0	16.53	0.183	99.817
1	05/18/2021 09:00	0.0425	0.0025	0.0061	0.0004	0.0002	0.001	0.0005	0.0005	0	0	0	0	16.45	0.152	99.848
1	05/19/2021 09:00	0.0376	0.0022	0.0055	0.0001	0	0.0008	0.0004	0.0004	0	0	0	0	16.44	0.133	99.867
1	05/20/2021 09:00	0.0669	0.0046	0.0113	0.0023	0.0023	0.0022	0.0011	0.0011	0	0	0	0	16.57	0.265	99.735
1	05/21/2021 09:00	0.0773	0.0055	0.0136	0.0029	0.003	0.0032	0.0016	0.0016	0	0	0	0	16.63	0.314	99.686
1	05/22/2021 09:00	0.0801	0.0056	0.0137	0.003	0.003	0.003	0.0015	0.0015	0	0	0	0	16.64	0.321	99.679
1	05/23/2021 09:00	0.0989	0.006	0.0145	0.0032	0.0033	0.0032	0.0016	0.0016	0	0	0	0	16.67	0.378	99.622
1	05/24/2021 09:00	0.0791	0.0058	0.0143	0.0031	0.0032	0.0032	0.0016	0.0016	0	0	0	0	16.62	0.324	99.676
1	05/25/2021 09:00	0.0636	0.0042	0.0105	0.0021	0.0021	0.0024	0.0012	0.0012	0	0	0	0	16.55	0.252	99.748
1	05/26/2021 09:00	0.0313	0.001	0.0026	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.55	0.099	99.901
1	05/27/2021 09:00	0.0332	0.0019	0.005	0.0003	0.0002	0.001	0.0005	0.0005	0	0	0	0	16.52	0.120	99.880
1	05/28/2021 09:00	0.0524	0.0034	0.0085	0.0015	0.0011	0.0018	0.0009	0.0009	0	0	0	0	16.54	0.202	99.798
1	05/29/2021 09:00	0.0737	0.0055	0.0138	0.0029	0.0029	0.0028	0.0014	0.0014	0	0	0	0	16.60	0.303	99.697
1	05/30/2021 09:00	0.0851	0.0059	0.0147	0.0031	0.0032	0.0034	0.0017	0.0017	0	0	0	0	16.66	0.342	99.658
1	05/31/2021 09:00	0.045	0.0024	0.006	0.0007	0.0004	0.0012	0.0006	0.0006	0	0	0	0	16.48	0.161	99.839
1	06/01/2021 09:00	0.0258	0.0011	0.003	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.46	0.087	99.913
1	06/02/2021 09:00	0.0333	0.0017	0.0043	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.45	0.115	99.885
1	06/03/2021 09:00	0.0354	0.0022	0.0055	0.0006	0.0004	0.0014	0.0007	0.0007	0	0	0	0	16.45	0.134	99.866
1	06/04/2021 09:00	0.0468	0.0028	0.0072	0.0012	0.0011	0.0016	0.0008	0.0008	0	0	0	0	16.51	0.179	99.821
1	06/05/2021 09:00	0.0583	0.0043	0.0109	0.0023	0.0023	0.0024	0.0012	0.0012	0	0	0	0	16.51	0.242	99.758
1	06/06/2021 09:00	0.0506	0.0029	0.0073	0.0012	0.0012	0.0016	0.0008	0.0008	0	0	0	0	16.51	0.190	99.810
1	06/07/2021 09:00	0.1236	0.0046	0.0108	0.002	0.0019	0.002	0.001	0.001	0	0	0	0	16.65	0.408	99.592
1	06/08/2021 09:00	0.0506	0.003	0.0076	0.0013	0.001	0.0014	0.0007	0.0007	0	0	0	0	16.49	0.190	99.810
1	06/09/2021 09:00	0.0335	0.0013	0.0034	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.49	0.109	99.891
1	06/10/2021 09:00	0.051	0.0025	0.0062	0.0006	0.0005	0.0014	0.0007	0.0007	0	0	0	0	16.54	0.179	99.821

EPNG Eunice

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nonnn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	06/11/2021 09:00	0.064	0.0017	0.0035	0.0001	0.0001	0.0008	0.0004	0.0004	0	0	0	0	16.62	0.193	99.807
1	06/12/2021 09:00	0.0319	0.0009	0.0022	0.0001	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.49	0.100	99.900
1	06/13/2021 09:00	0.0539	0.0024	0.0058	0.0006	0.0003	0.0014	0.0007	0.0007	0	0	0	0	16.54	0.184	99.816
1	06/14/2021 09:00	0.0866	0.0024	0.0053	0.0002	0.0002	0.0012	0.0006	0.0006	0	0	0	0	16.61	0.265	99.735
1	06/15/2021 09:00	0.0449	0.0019	0.0047	0.0001	0	0.001	0.0005	0.0005	0	0	0	0	16.50	0.149	99.851
1	06/16/2021 09:00	0.0426	0.0015	0.0036	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.50	0.136	99.864
1	06/17/2021 09:00	0.0374	0.0011	0.0028	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.48	0.117	99.883
1	06/18/2021 09:00	0.0361	0.0012	0.0028	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.46	0.114	99.886
1	06/19/2021 09:00	0.0364	0.0012	0.0029	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.46	0.115	99.885
1	06/20/2021 09:00	0.0468	0.0011	0.0024	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.53	0.140	99.860
1	06/21/2021 09:00	0.0397	0.0013	0.0029	0.0004	0.0004	0.0006	0.0003	0.0003	0	0	0	0	16.50	0.128	99.872
1	06/22/2021 09:00	0.0329	0.0005	0.0021	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.46	0.098	99.902
1	06/23/2021 09:00	0.0375	0.0012	0.0031	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.47	0.119	99.881
1	06/24/2021 09:00	0.0677	0.0019	0.004	0.0001	0	0.0008	0.0004	0.0004	0	0	0	0	16.58	0.205	99.795
1	06/25/2021 09:00	0.0449	0.0019	0.0044	0.0001	0	0.001	0.0005	0.0005	0	0	0	0	16.51	0.148	99.852
1	06/26/2021 09:00	0.037	0.0013	0.0032	0.0002	0.0001	0.0006	0.0003	0.0003	0	0	0	0	16.47	0.119	99.881
1	06/27/2021 09:00	0.0309	0.0008	0.0023	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.43	0.096	99.904
1	06/28/2021 09:00	0.0305	0.0007	0.0021	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.43	0.094	99.906
1	06/29/2021 09:00	0.0266	0.0003	0.0019	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.42	0.081	99.919
1	06/30/2021 09:00	0.021	0	0.0014	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.41	0.062	99.938
1	07/01/2021 09:00	0.0309	0.0009	0.0026	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.45	0.098	99.902
1	07/02/2021 09:00	0.0484	0.0023	0.0057	0.0005	0.0003	0.0016	0.0008	0.0008	0	0	0	0	16.51	0.169	99.831
1	07/03/2021 09:00	0.0625	0.0027	0.006	0.0007	0.0005	0.0026	0.0013	0.0013	0	0	0	0	16.57	0.216	99.784
1	07/04/2021 09:00	0.0623	0.0026	0.0058	0.0005	0.0002	0.0024	0.0012	0.0012	0	0	0	0	16.58	0.211	99.789
1	07/05/2021 09:00	0.0391	0.0013	0.0031	0	0	0.001	0.0005	0.0005	0	0	0	0	16.45	0.126	99.874
1	07/06/2021 09:00	0.0486	0.0016	0.0036	0.0001	0	0.0014	0.0007	0.0007	0	0	0	0	16.49	0.156	99.844
1	07/07/2021 09:00	0.051	0.002	0.0047	0.0002	0.0001	0.0016	0.0008	0.0008	0	0	0	0	16.51	0.170	99.830
1	07/08/2021 09:00	0.0382	0.0011	0.0026	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.46	0.122	99.878
1	07/09/2021 09:00	0.0337	0.0003	0.0009	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.44	0.098	99.902
1	07/10/2021 09:00	0.0355	0.0008	0.002	0	0	0.001	0.0005	0.0005	0	0	0	0	16.45	0.110	99.890
1	07/11/2021 09:00	0.0351	0.0009	0.0022	0	0	0.001	0.0005	0.0005	0	0	0	0	16.44	0.110	99.890
1	07/12/2021 09:00	0.0434	0.0017	0.0036	0	0	0.002	0.001	0.001	0	0	0	0	16.47	0.145	99.855
1	07/13/2021 09:00	0.0578	0.0029	0.0066	0.0009	0.0006	0.0028	0.0014	0.0014	0	0	0	0	16.54	0.209	99.791
1	07/14/2021 09:00	0.0679	0.0038	0.0087	0.0015	0.0015	0.0036	0.0018	0.0018	0	0	0	0	16.59	0.256	99.744
1	07/15/2021 09:00	0.0675	0.0033	0.0076	0.0013	0.0012	0.0032	0.0016	0.0016	0	0	0	0	16.61	0.245	99.755
Annual Average =															0.206	99.794

EPNG Monument

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	07/16/2020 09:00	0.2771	0.0046	0.0073	0.0005	0.0005	0.0092	0.0046	0.0046	0	0	0	0	17.52	0.786	99.214
1	07/17/2020 09:00	0.4488	0.012	0.0195	0.0014	0.0012	0.0094	0.0047	0.0047	0	0	0	0	17.62	1.284	98.716
1	07/18/2020 09:00	0.3847	0.0126	0.0267	0.0053	0.0053	0.0142	0.0071	0.0071	0	0	0	0	17.67	1.202	98.798
1	07/19/2020 09:00	0.3245	0.0083	0.0182	0.0071	0.0075	0.0114	0.0057	0.0057	0	0	0	0	17.58	1.017	98.983
1	07/20/2020 09:00	0.2926	0.0053	0.009	0.001	0.0011	0.0116	0.0058	0.0058	0	0	0	0	17.53	0.849	99.151
1	07/21/2020 09:00	0.2899	0.0047	0.0071	0.0004	0.0003	0.0106	0.0053	0.0053	0	0	0	0	17.53	0.823	99.177
1	07/22/2020 09:00	0.2755	0.0043	0.0068	0.0006	0.0006	0.0106	0.0053	0.0053	0	0	0	0	17.53	0.787	99.213
1	07/23/2020 09:00	0.2376	0.0039	0.0063	0.0005	0.0005	0.0106	0.0053	0.0053	0	0	0	0	17.47	0.690	99.310
1	07/24/2020 09:00	0.2667	0.006	0.0121	0.0042	0.0062	0.0168	0.0084	0.0084	0	0	0	0	17.51	0.857	99.143
1	07/25/2020 09:00	0.3427	0.0162	0.0474	0.0119	0.01	0.0122	0.0061	0.0061	0	0	0	0	17.55	1.222	98.778
1	07/26/2020 09:00	0.2617	0.0044	0.0074	0.0008	0.0008	0.0094	0.0047	0.0047	0	0	0	0	17.50	0.752	99.248
1	07/27/2020 09:00	0.2603	0.0044	0.007	0.0005	0.0006	0.009	0.0045	0.0045	0	0	0	0	17.51	0.742	99.258
1	07/28/2020 09:00	0.3025	0.0047	0.0076	0.0007	0.0007	0.0094	0.0047	0.0047	0	0	0	0	17.61	0.850	99.150
1	07/29/2020 09:00	0.3028	0.0066	0.0126	0.0022	0.0023	0.0112	0.0056	0.0056	0	0	0	0	17.57	0.897	99.103
1	07/30/2020 09:00	0.2954	0.0052	0.0084	0.0008	0.0008	0.0092	0.0046	0.0046	0	0	0	0	17.55	0.839	99.161
1	07/31/2020 09:00	0.268	0.0053	0.0095	0.0014	0.0014	0.0104	0.0052	0.0052	0	0	0	0	17.50	0.787	99.213
1	08/01/2020 09:00	0.2567	0.0045	0.0072	0.0005	0.0005	0.0092	0.0046	0.0046	0	0	0	0	17.48	0.736	99.264
1	08/02/2020 09:00	0.2549	0.0045	0.0071	0.0005	0.0005	0.0088	0.0044	0.0044	0	0	0	0	17.47	0.730	99.270
1	08/03/2020 09:00	0.2816	0.0055	0.0101	0.0016	0.0017	0.0094	0.0047	0.0047	0	0	0	0	17.55	0.819	99.181
1	08/04/2020 09:00	0.2878	0.0052	0.0089	0.0009	0.001	0.0096	0.0048	0.0048	0	0	0	0	17.56	0.824	99.176
1	08/05/2020 09:00	0.3025	0.0057	0.0098	0.0013	0.0013	0.0086	0.0043	0.0043	0	0	0	0	17.57	0.863	99.137
1	08/06/2020 09:00	0.3078	0.0062	0.0115	0.0017	0.0018	0.0112	0.0056	0.0056	0	0	0	0	17.57	0.900	99.100
1	08/07/2020 09:00	0.2805	0.0045	0.0069	0.0005	0.0005	0.0092	0.0046	0.0046	0	0	0	0	17.52	0.793	99.207
1	08/08/2020 09:00	0.29	0.0046	0.0074	0.0006	0.0007	0.0078	0.0039	0.0039	0	0	0	0	17.54	0.812	99.188
1	08/09/2020 09:00	0.2824	0.0045	0.0076	0.0007	0.0008	0.0088	0.0044	0.0044	0	0	0	0	17.55	0.799	99.201
1	08/10/2020 09:00	0.3067	0.005	0.0081	0.0007	0.0007	0.0094	0.0047	0.0047	0	0	0	0	17.55	0.866	99.134
1	08/11/2020 09:00	0.2354	0.0038	0.0068	0.0009	0.0009	0.0084	0.0042	0.0042	0	0	0	0	17.45	0.679	99.321
1	08/12/2020 09:00	1.5926	0.1685	0.4233	0.0972	0.0945	0.0946	0.0473	0.0473	0	0	0	0	18.34	6.902	93.098
1	08/13/2020 09:00	0.2121	0.0031	0.0059	0.0007	0.0007	0.0086	0.0043	0.0043	0	0	0	0	17.50	0.613	99.387
1	08/14/2020 09:00	0.159	0.0029	0.0059	0.0007	0.0007	0.0092	0.0046	0.0046	0	0	0	0	17.42	0.483	99.517
1	08/15/2020 09:00	0.1799	0.004	0.0084	0.0012	0.0012	0.0096	0.0048	0.0048	0	0	0	0	17.40	0.555	99.445
1	08/16/2020 09:00	0.17	0.0035	0.0069	0.0008	0.0008	0.0094	0.0047	0.0047	0	0	0	0	17.33	0.521	99.479
1	08/17/2020 09:00	0.1829	0.0043	0.0089	0.0015	0.0012	0.0096	0.0048	0.0048	0	0	0	0	17.39	0.567	99.433
1	08/18/2020 09:00	0.1688	0.0043	0.0089	0.0013	0.001	0.0096	0.0048	0.0048	0	0	0	0	17.32	0.531	99.469
1	08/19/2020 09:00	0.1821	0.0044	0.0091	0.0015	0.0013	0.0094	0.0047	0.0047	0	0	0	0	17.30	0.568	99.432
1	08/20/2020 09:00	0.1772	0.0037	0.0071	0.0009	0.0008	0.0084	0.0042	0.0042	0	0	0	0	17.27	0.538	99.462
1	08/21/2020 09:00	0.2037	0.0043	0.008	0.0008	0.0008	0.009	0.0045	0.0045	0	0	0	0	17.31	0.612	99.388
1	08/22/2020 09:00	0.2088	0.0042	0.0077	0.0009	0.0009	0.0082	0.0041	0.0041	0	0	0	0	17.31	0.620	99.380
1	08/23/2020 09:00	0.2023	0.0029	0.0048	0.0002	0.0002	0.0082	0.0041	0.0041	0	0	0	0	17.37	0.582	99.418
1	08/24/2020 09:00	0.1862	0.0038	0.0076	0.0011	0.0011	0.0098	0.0049	0.0049	0	0	0	0	17.35	0.569	99.431
1	08/25/2020 09:00	0.177	0.0037	0.007	0.0007	0.0006	0.0092	0.0046	0.0046	0	0	0	0	17.22	0.541	99.459
1	08/26/2020 09:00	0.1973	0.004	0.0075	0.0009	0.0009	0.0094	0.0047	0.0047	0	0	0	0	17.31	0.596	99.404
1	08/27/2020 09:00	0.1682	0.0034	0.0063	0.0005	0.0005	0.0092	0.0046	0.0046	0	0	0	0	17.28	0.512	99.488
1	08/28/2020 09:00	0.1697	0.0033	0.0065	0.0008	0.0008	0.0094	0.0047	0.0047	0	0	0	0	17.26	0.520	99.480
1	08/29/2020 09:00	0.1646	0.003	0.005	0.0002	0.0002	0.0084	0.0042	0.0042	0	0	0	0	17.22	0.492	99.508
1	08/30/2020 09:00	0.1833	0.0035	0.0061	0.0005	0.0004	0.009	0.0045	0.0045	0	0	0	0	17.24	0.550	99.450
1	08/31/2020 09:00	0.1759	0.0036	0.0067	0.0007	0.0007	0.009	0.0045	0.0045	0	0	0	0	17.23	0.536	99.464
1	09/01/2020 09:00	0.1642	0.0039	0.0081	0.0013	0.0013	0.0094	0.0047	0.0047	0	0	0	0	17.22	0.519	99.481
1	09/02/2020 09:00	0.1805	0.0035	0.0067	0.0007	0.0008	0.0094	0.0047	0.0047	0	0	0	0	17.31	0.547	99.453
1	09/03/2020 09:00	0.2004	0.0044	0.0089	0.0015	0.0015	0.0092	0.0046	0.0046	0	0	0	0	17.33	0.613	99.387
1	09/04/2020 09:00	0.1846	0.0039	0.0074	0.0009	0.0009	0.0084	0.0042	0.0042	0	0	0	0	17.29	0.558	99.442
1	09/05/2020 09:00	0.1942	0.0045	0.0095	0.0016	0.0017	0.0092	0.0046	0.0046	0	0	0	0	17.29	0.602	99.398
1	09/06/2020 09:00	0.188	0.0039	0.0073	0.0007	0.0008	0.0088	0.0044	0.0044	0	0	0	0	17.31	0.567	99.433
1	09/07/2020 09:00	0.2092	0.0047	0.0094	0.0017	0.0018	0.0098	0.0049	0.0049	0	0	0	0	17.35	0.642	99.358
1	09/08/2020 09:00	0.2303	0.0052	0.0098	0.0014	0.0014	0.0108	0.0054	0.0054	0	0	0	0	17.30	0.703	99.297

EPNG Monument

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	09/09/2020 09:00	0.1508	0.0042	0.0092	0.0018	0.0018	0.0114	0.0057	0.0057	0	0	0	0	17.24	0.503	99.497
1	09/10/2020 09:00	0.1562	0.004	0.0086	0.0018	0.0018	0.0078	0.0039	0.0039	0	0	0	0	17.28	0.495	99.505
1	09/11/2020 09:00	0.1644	0.0042	0.0087	0.0012	0.0011	0.0092	0.0046	0.0046	0	0	0	0	17.31	0.517	99.483
1	09/12/2020 09:00	0.1796	0.0044	0.0088	0.0011	0.0011	0.0092	0.0046	0.0046	0	0	0	0	17.36	0.555	99.445
1	09/13/2020 09:00	0.1838	0.0044	0.0091	0.0016	0.0017	0.0096	0.0048	0.0048	0	0	0	0	17.36	0.574	99.426
1	09/14/2020 09:00	0.1633	0.0034	0.0065	0.0006	0.0006	0.009	0.0045	0.0045	0	0	0	0	17.32	0.499	99.501
1	09/15/2020 09:00	0.1733	0.0037	0.0074	0.0011	0.0011	0.009	0.0045	0.0045	0	0	0	0	17.36	0.531	99.469
1	09/16/2020 09:00	0.1863	0.0044	0.0088	0.0012	0.0012	0.0092	0.0046	0.0046	0	0	0	0	17.36	0.573	99.427
1	09/17/2020 09:00	0.162	0.0033	0.0066	0.0008	0.0007	0.009	0.0045	0.0045	0	0	0	0	17.26	0.498	99.502
1	09/18/2020 09:00	0.1651	0.0037	0.0073	0.001	0.001	0.0092	0.0046	0.0046	0	0	0	0	17.32	0.511	99.489
1	09/19/2020 09:00	0.1741	0.004	0.0079	0.0011	0.0012	0.0098	0.0049	0.0049	0	0	0	0	17.35	0.541	99.459
1	09/20/2020 09:00	0.1777	0.0039	0.0075	0.0011	0.0011	0.0086	0.0043	0.0043	0	0	0	0	17.35	0.542	99.458
1	09/21/2020 09:00	0.1849	0.0046	0.0097	0.0015	0.0015	0.009	0.0045	0.0045	0	0	0	0	17.37	0.574	99.426
1	09/22/2020 09:00	0.1845	0.0033	0.006	0.0005	0.0005	0.009	0.0045	0.0045	0	0	0	0	17.37	0.548	99.452
1	09/23/2020 09:00	0.1936	0.0047	0.0098	0.0016	0.0016	0.0096	0.0048	0.0048	0	0	0	0	17.37	0.601	99.399
1	09/24/2020 09:00	0.1925	0.0044	0.0088	0.0013	0.0013	0.0086	0.0043	0.0043	0	0	0	0	17.37	0.586	99.414
1	09/25/2020 09:00	0.1986	0.0042	0.0082	0.0013	0.0013	0.008	0.004	0.004	0	0	0	0	17.39	0.595	99.405
1	09/26/2020 09:00	0.205	0.0036	0.0064	0.0006	0.0006	0.0084	0.0042	0.0042	0	0	0	0	17.39	0.600	99.400
1	09/27/2020 09:00	0.1805	0.0034	0.0062	0.0006	0.0006	0.0088	0.0044	0.0044	0	0	0	0	17.36	0.539	99.461
1	09/28/2020 09:00	0.1901	0.0048	0.0102	0.0017	0.0018	0.0096	0.0048	0.0048	0	0	0	0	17.37	0.595	99.405
1	09/29/2020 09:00	0.1752	0.0038	0.0073	0.0009	0.0008	0.009	0.0045	0.0045	0	0	0	0	17.36	0.534	99.466
1	09/30/2020 09:00	0.2151	0.0042	0.0076	0.0008	0.0009	0.008	0.004	0.004	0	0	0	0	17.41	0.631	99.369
1	10/01/2020 09:00	0.1769	0.0038	0.0073	0.0009	0.0009	0.0098	0.0049	0.0049	0	0	0	0	17.38	0.542	99.458
1	10/02/2020 09:00	0.1578	0.003	0.0053	0.0004	0.0004	0.009	0.0045	0.0045	0	0	0	0	17.30	0.478	99.522
1	10/03/2020 09:00	0.1542	0.0028	0.0048	0.0002	0.0002	0.0094	0.0047	0.0047	0	0	0	0	17.30	0.467	99.533
1	10/04/2020 09:00	0.1488	0.0028	0.0051	0.0004	0.0004	0.0092	0.0046	0.0046	0	0	0	0	17.28	0.456	99.544
1	10/05/2020 09:00	0.1718	0.0032	0.0058	0.0005	0.0004	0.0096	0.0048	0.0048	0	0	0	0	17.35	0.518	99.482
1	10/06/2020 09:00	0.1856	0.0038	0.0064	0.0003	0.0002	0.0096	0.0048	0.0048	0	0	0	0	17.32	0.557	99.443
1	10/07/2020 09:00	0.663	0.0348	0.0645	0.0042	0.0026	0.01	0.005	0.005	0	0	0	0	17.59	2.067	97.933
1	10/08/2020 09:00	0.4048	0.0175	0.0323	0.002	0.0013	0.009	0.0045	0.0045	0	0	0	0	17.45	1.247	98.753
1	10/09/2020 09:00	0.1443	0.0029	0.0054	0.0005	0.0005	0.0088	0.0044	0.0044	0	0	0	0	17.24	0.445	99.555
1	10/10/2020 09:00	0.148	0.0029	0.0052	0.0004	0.0004	0.008	0.004	0.004	0	0	0	0	17.24	0.449	99.551
1	10/11/2020 09:00	0.1673	0.0031	0.0055	0.0005	0.0005	0.0088	0.0044	0.0044	0	0	0	0	17.33	0.503	99.497
1	10/12/2020 09:00	0.1358	0.0027	0.0052	0.0006	0.0006	0.0088	0.0044	0.0044	0	0	0	0	17.20	0.424	99.576
1	10/13/2020 09:00	0.1393	0.0028	0.0053	0.0005	0.0005	0.0082	0.0041	0.0041	0	0	0	0	17.20	0.430	99.570
1	10/14/2020 09:00	0.1276	0.0024	0.0046	0.0003	0.0003	0.0088	0.0044	0.0044	0	0	0	0	17.18	0.398	99.602
1	10/15/2020 09:00	0.1277	0.0024	0.0046	0.0003	0.0003	0.0086	0.0043	0.0043	0	0	0	0	17.18	0.397	99.603
1	10/16/2020 09:00	0.14	0.0029	0.0055	0.0005	0.0005	0.0094	0.0047	0.0047	0	0	0	0	17.22	0.438	99.562
1	10/17/2020 09:00	0.1518	0.0029	0.0054	0.0005	0.0005	0.0082	0.0041	0.0041	0	0	0	0	17.24	0.461	99.539
1	10/18/2020 09:00	0.1602	0.0029	0.0051	0.0003	0.0004	0.0088	0.0044	0.0044	0	0	0	0	17.26	0.483	99.517
1	10/19/2020 09:00	0.1523	0.0028	0.0049	0.0003	0.0002	0.0086	0.0043	0.0043	0	0	0	0	17.24	0.461	99.539
1	10/20/2020 09:00	0.1674	0.0033	0.006	0.0005	0.0005	0.009	0.0045	0.0045	0	0	0	0	17.29	0.507	99.493
1	10/21/2020 09:00	0.1565	0.0026	0.0045	0.0002	0.0002	0.0086	0.0043	0.0043	0	0	0	0	17.21	0.470	99.530
1	10/22/2020 09:00	0.1709	0.003	0.0051	0.0003	0.0003	0.0082	0.0041	0.0041	0	0	0	0	17.30	0.506	99.494
1	10/23/2020 09:00	0.1662	0.0029	0.0048	0.0003	0.0003	0.009	0.0045	0.0045	0	0	0	0	17.28	0.497	99.503
1	10/24/2020 09:00	0.1662	0.0029	0.0048	0.0003	0.0003	0.009	0.0045	0.0045	0	0	0	0	17.28	0.497	99.503
1	10/25/2020 09:00	0.1588	0.0027	0.0043	0.0001	0.0001	0.0088	0.0044	0.0044	0	0	0	0	17.27	0.474	99.526
1	10/26/2020 09:00	0.1645	0.0029	0.0051	0.0004	0.0004	0.0084	0.0042	0.0042	0	0	0	0	17.37	0.489	99.511
1	10/27/2020 09:00	0.128	0.0025	0.0048	0.0004	0.0004	0.0084	0.0042	0.0042	0	0	0	0	17.35	0.395	99.605
1	10/28/2020 09:00	0.1486	0.0022	0.0036	0.0001	0.0001	0.0094	0.0047	0.0047	0	0	0	0	17.34	0.445	99.555
1	10/29/2020 09:00	0.1603	0.0037	0.0077	0.001	0.0009	0.0088	0.0044	0.0044	0	0	0	0	17.30	0.499	99.501
1	10/30/2020 09:00	0.1515	0.0026	0.0042	0.0002	0.0002	0.0082	0.0041	0.0041	0	0	0	0	17.24	0.453	99.547
1	10/31/2020 09:00	0.1613	0.0033	0.006	0.0005	0.0005	0.008	0.004	0.004	0	0	0	0	17.27	0.487	99.513
1	11/01/2020 09:00	0.1495	0.0029	0.0053	0.0005	0.0005	0.0082	0.0041	0.0041	0	0	0	0	17.27	0.454	99.546
1	11/02/2020 09:00	0.1639	0.0029	0.005	0.0003	0.0002	0.0076	0.0038	0.0038	0	0	0	0	17.25	0.486	99.514

EPNG Monument

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	11/03/2020 09:00	0.1721	0.0035	0.0066	0.0006	0.0006	0.0084	0.0042	0.0042	0	0	0	0	17.27	0.520	99.480
1	11/04/2020 09:00	0.1721	0.003	0.0054	0.0004	0.0005	0.008	0.004	0.004	0	0	0	0	17.29	0.511	99.489
1	11/05/2020 09:00	0.1808	0.0031	0.005	0.0002	0.0002	0.0072	0.0036	0.0036	0	0	0	0	17.26	0.527	99.473
1	11/06/2020 09:00	0.1776	0.003	0.0051	0.0003	0.0003	0.0062	0.0031	0.0031	0	0	0	0	17.29	0.514	99.486
1	11/07/2020 09:00	0.1855	0.0033	0.0054	0.0003	0.0002	0.008	0.004	0.004	0	0	0	0	17.29	0.544	99.456
1	11/08/2020 09:00	0.1894	0.0034	0.0061	0.0005	0.0005	0.0078	0.0039	0.0039	0	0	0	0	17.34	0.556	99.444
1	11/09/2020 09:00	0.1591	0.0033	0.0062	0.0006	0.0006	0.0084	0.0042	0.0042	0	0	0	0	17.26	0.486	99.514
1	11/10/2020 09:00	0.1472	0.0032	0.0062	0.0006	0.0005	0.0064	0.0032	0.0032	0	0	0	0	17.25	0.445	99.555
1	11/11/2020 09:00	0.166	0.0035	0.0066	0.0006	0.0005	0.0068	0.0034	0.0034	0	0	0	0	17.29	0.496	99.504
1	11/12/2020 09:00	0.177	0.0035	0.0064	0.0006	0.0005	0.0064	0.0032	0.0032	0	0	0	0	17.30	0.521	99.479
1	11/13/2020 09:00	0.1765	0.0034	0.0055	0.0002	0.0002	0.0074	0.0037	0.0037	0	0	0	0	17.27	0.519	99.481
1	11/14/2020 09:00	0.1723	0.003	0.0047	0.0001	0.0001	0.0072	0.0036	0.0036	0	0	0	0	17.28	0.502	99.498
1	11/15/2020 09:00	0.1734	0.003	0.0046	0.0001	0.0001	0.0076	0.0038	0.0038	0	0	0	0	17.28	0.507	99.493
1	11/16/2020 09:00	0.187	0.0036	0.0062	0.0005	0.0005	0.0064	0.0032	0.0032	0	0	0	0	17.33	0.545	99.455
1	11/17/2020 09:00	0.1864	0.0036	0.0061	0.0005	0.0005	0.007	0.0035	0.0035	0	0	0	0	17.33	0.546	99.454
1	11/18/2020 09:00	0.166	0.0031	0.0053	0.0003	0.0003	0.007	0.0035	0.0035	0	0	0	0	17.24	0.490	99.510
1	11/19/2020 09:00	0.1615	0.0028	0.0047	0.0002	0.0002	0.0076	0.0038	0.0038	0	0	0	0	17.23	0.478	99.522
1	11/20/2020 09:00	0.148	0.0026	0.0044	0.0002	0.0002	0.0082	0.0041	0.0041	0	0	0	0	17.22	0.445	99.555
1	11/21/2020 09:00	0.1685	0.0029	0.0045	0.0001	0.0001	0.0082	0.0041	0.0041	0	0	0	0	17.27	0.497	99.503
1	11/22/2020 09:00	0.1808	0.0033	0.005	0.0001	0	0.008	0.004	0.004	0	0	0	0	17.27	0.530	99.470
1	11/23/2020 09:00	0.1797	0.003	0.0045	0	0	0.008	0.004	0.004	0	0	0	0	17.28	0.524	99.476
1	11/24/2020 09:00	0.1849	0.0035	0.0057	0.0003	0.0003	0.008	0.004	0.004	0	0	0	0	17.27	0.546	99.454
1	11/25/2020 09:00	0.1823	0.0033	0.005	0.0001	0	0.0076	0.0038	0.0038	0	0	0	0	17.25	0.532	99.468
1	11/26/2020 09:00	0.1915	0.0033	0.005	0.0001	0.0001	0.008	0.004	0.004	0	0	0	0	17.28	0.557	99.443
1	11/27/2020 09:00	0.1781	0.0033	0.0055	0.0003	0.0003	0.0066	0.0033	0.0033	0	0	0	0	17.28	0.519	99.481
1	11/28/2020 09:00	0.1916	0.0045	0.0089	0.0011	0.0011	0.0068	0.0034	0.0034	0	0	0	0	17.33	0.575	99.425
1	11/29/2020 09:00	0.16	0.0031	0.0053	0.0003	0.0003	0.0074	0.0037	0.0037	0	0	0	0	17.25	0.477	99.523
1	11/30/2020 09:00	0.1735	0.0038	0.0073	0.0009	0.0009	0.0058	0.0029	0.0029	0	0	0	0	17.26	0.517	99.483
1	12/01/2020 09:00	0.1921	0.0041	0.0077	0.001	0.0009	0.0064	0.0032	0.0032	0	0	0	0	17.34	0.568	99.432
1	12/02/2020 09:00	0.1685	0.0044	0.0089	0.0016	0.0016	0.008	0.004	0.004	0	0	0	0	17.26	0.529	99.471
1	12/03/2020 09:00	0.1777	0.0044	0.0089	0.0015	0.0015	0.0052	0.0026	0.0026	0	0	0	0	17.26	0.537	99.463
1	12/04/2020 09:00	0.2197	0.0045	0.0077	0.0008	0.0007	0.0066	0.0033	0.0033	0	0	0	0	17.29	0.641	99.359
1	12/05/2020 09:00	0.2206	0.004	0.0062	0.0003	0.0003	0.0086	0.0043	0.0043	0	0	0	0	17.29	0.642	99.358
1	12/06/2020 09:00	0.2253	0.0042	0.0068	0.0005	0.0005	0.0106	0.0053	0.0053	0	0	0	0	17.31	0.668	99.332
1	12/07/2020 09:00	0.1605	0.0029	0.0047	0.0002	0.0002	0.011	0.0055	0.0055	0	0	0	0	17.21	0.494	99.506
1	12/08/2020 09:00	0.169	0.0033	0.0058	0.0004	0.0004	0.0096	0.0048	0.0048	0	0	0	0	17.23	0.515	99.485
1	12/09/2020 09:00	0.1858	0.0043	0.0083	0.001	0.001	0.0086	0.0043	0.0043	0	0	0	0	17.28	0.568	99.432
1	12/10/2020 09:00	0.1837	0.0043	0.0082	0.0009	0.0008	0.0074	0.0037	0.0037	0	0	0	0	17.27	0.555	99.445
1	12/11/2020 09:00	0.1907	0.0048	0.0096	0.0015	0.0015	0.0092	0.0046	0.0046	0	0	0	0	17.26	0.594	99.406
1	12/12/2020 09:00	0.1966	0.005	0.0098	0.0015	0.0014	0.0082	0.0041	0.0041	0	0	0	0	17.27	0.605	99.395
1	12/13/2020 09:00	0.194	0.0045	0.0085	0.0013	0.0013	0.0084	0.0042	0.0042	0	0	0	0	17.27	0.592	99.408
1	12/14/2020 09:00	0.2002	0.0045	0.0082	0.0011	0.0011	0.0076	0.0038	0.0038	0	0	0	0	17.27	0.601	99.399
1	12/15/2020 09:00	0.1936	0.0053	0.0108	0.0021	0.0021	0.0082	0.0041	0.0041	0	0	0	0	17.27	0.607	99.393
1	12/16/2020 09:00	0.1812	0.0045	0.0089	0.0014	0.0013	0.0084	0.0042	0.0042	0	0	0	0	17.24	0.562	99.438
1	12/17/2020 09:00	0.2026	0.0049	0.0096	0.0016	0.0015	0.0074	0.0037	0.0037	0	0	0	0	17.26	0.616	99.384
1	12/18/2020 09:00	0.1898	0.0046	0.0092	0.0015	0.0015	0.0078	0.0039	0.0039	0	0	0	0	17.25	0.583	99.417
1	12/19/2020 09:00	0.2048	0.0059	0.0125	0.0027	0.0027	0.0094	0.0047	0.0047	0	0	0	0	17.27	0.654	99.346
1	12/20/2020 09:00	0.1757	0.0048	0.0098	0.0018	0.0017	0.0072	0.0036	0.0036	0	0	0	0	17.23	0.549	99.451
1	12/21/2020 09:00	0.2007	0.0059	0.0126	0.0024	0.0023	0.0082	0.0041	0.0041	0	0	0	0	17.29	0.634	99.366
1	12/22/2020 09:00	0.1985	0.0056	0.0117	0.0019	0.0017	0.007	0.0035	0.0035	0	0	0	0	17.33	0.613	99.387
1	12/23/2020 09:00	0.1725	0.0054	0.0119	0.0026	0.0026	0.0074	0.0037	0.0037	0	0	0	0	17.27	0.557	99.443
1	12/24/2020 09:00	0.1774	0.0047	0.0097	0.0018	0.0018	0.0074	0.0037	0.0037	0	0	0	0	17.28	0.553	99.447
1	12/25/2020 09:00	0.204	0.0058	0.0123	0.0024	0.0023	0.0082	0.0041	0.0041	0	0	0	0	17.33	0.640	99.360
1	12/26/2020 09:00	0.2145	0.006	0.0121	0.0021	0.002	0.0076	0.0038	0.0038	0	0	0	0	17.36	0.660	99.340
1	12/27/2020 09:00	0.2383	0.0069	0.0143	0.0026	0.0025	0.0078	0.0039	0.0039	0	0	0	0	17.39	0.735	99.265

EPNG Monument

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	12/28/2020 09:00	0.2097	0.0039	0.0064	0.0005	0.0004	0.0072	0.0036	0.0036	0	0	0	0	17.31	0.608	99.392
1	12/29/2020 09:00	0.2083	0.0042	0.0077	0.001	0.001	0.0078	0.0039	0.0039	0	0	0	0	17.33	0.617	99.383
1	12/30/2020 09:00	0.2045	0.0064	0.0133	0.0025	0.0024	0.0086	0.0043	0.0043	0	0	0	0	17.30	0.651	99.349
1	12/31/2020 09:00	0.1769	0.0058	0.0123	0.0026	0.0025	0.0072	0.0036	0.0036	0	0	0	0	17.24	0.571	99.429
1	01/01/2021 09:00	0.186	0.0062	0.0132	0.0027	0.0027	0.0086	0.0043	0.0043	0	0	0	0	17.25	0.606	99.394
1	01/02/2021 09:00	0.1846	0.0054	0.0115	0.0023	0.0022	0.008	0.004	0.004	0	0	0	0	17.23	0.588	99.412
1	01/03/2021 09:00	0.1897	0.0059	0.0126	0.0023	0.0022	0.0076	0.0038	0.0038	0	0	0	0	17.23	0.605	99.395
1	01/04/2021 09:00	0.1507	0.0049	0.0107	0.0019	0.0017	0.0068	0.0034	0.0034	0	0	0	0	17.16	0.489	99.511
1	01/05/2021 09:00	0.1767	0.0058	0.0127	0.0024	0.0024	0.0078	0.0039	0.0039	0	0	0	0	17.22	0.574	99.426
1	01/06/2021 09:00	0.1833	0.0043	0.0084	0.0015	0.0013	0.0062	0.0031	0.0031	0	0	0	0	17.22	0.555	99.445
1	01/07/2021 09:00	0.2086	0.0057	0.012	0.0022	0.0021	0.009	0.0045	0.0045	0	0	0	0	17.26	0.655	99.345
1	01/08/2021 09:00	0.209	0.0054	0.0107	0.0018	0.0017	0.0086	0.0043	0.0043	0	0	0	0	17.30	0.644	99.356
1	01/09/2021 09:00	0.2104	0.006	0.0122	0.0023	0.0022	0.0092	0.0046	0.0046	0	0	0	0	17.31	0.662	99.338
1	01/10/2021 09:00	0.1711	0.0047	0.0096	0.0015	0.0014	0.0084	0.0042	0.0042	0	0	0	0	17.23	0.540	99.460
1	01/11/2021 09:00	0.2893	0.0072	0.0131	0.002	0.0019	0.008	0.004	0.004	0	0	0	0	17.39	0.857	99.143
1	01/12/2021 09:00	0.3089	0.0082	0.0153	0.0025	0.0023	0.0092	0.0046	0.0046	0	0	0	0	17.41	0.926	99.074
1	01/13/2021 09:00	0.2801	0.0068	0.0123	0.002	0.0019	0.0082	0.0041	0.0041	0	0	0	0	17.36	0.832	99.168
1	01/14/2021 09:00	0.3124	0.0079	0.0142	0.0022	0.0021	0.0086	0.0043	0.0043	0	0	0	0	17.38	0.927	99.073
1	01/15/2021 09:00	0.198	0.0056	0.0113	0.0022	0.0022	0.0086	0.0043	0.0043	0	0	0	0	17.21	0.626	99.374
1	01/16/2021 09:00	0.181	0.0058	0.0122	0.0022	0.0021	0.009	0.0045	0.0045	0	0	0	0	17.19	0.588	99.412
1	01/17/2021 09:00	0.1768	0.0057	0.0121	0.0022	0.0022	0.0088	0.0044	0.0044	0	0	0	0	17.18	0.577	99.423
1	01/18/2021 09:00	0.1833	0.0058	0.0127	0.0025	0.0025	0.0082	0.0041	0.0041	0	0	0	0	17.20	0.594	99.406
1	01/19/2021 09:00	0.1786	0.0059	0.0127	0.0025	0.0025	0.0086	0.0043	0.0043	0	0	0	0	17.20	0.585	99.415
1	01/20/2021 09:00	0.1558	0.0039	0.0073	0.0009	0.0008	0.0104	0.0052	0.0052	0	0	0	0	17.09	0.500	99.500
1	01/21/2021 09:00	0.1542	0.0036	0.0068	0.0008	0.0008	0.0072	0.0036	0.0036	0	0	0	0	17.13	0.475	99.525
1	01/22/2021 09:00	0.1761	0.0052	0.0112	0.0021	0.002	0.009	0.0045	0.0045	0	0	0	0	17.18	0.570	99.430
1	01/23/2021 09:00	0.1782	0.0052	0.0113	0.0022	0.0022	0.0092	0.0046	0.0046	0	0	0	0	17.21	0.577	99.423
1	01/24/2021 09:00	0.1803	0.0057	0.0121	0.0022	0.0022	0.0104	0.0052	0.0052	0	0	0	0	17.21	0.593	99.407
1	01/25/2021 09:00	0.1699	0.0051	0.011	0.0022	0.0021	0.0086	0.0043	0.0043	0	0	0	0	17.18	0.552	99.448
1	01/26/2021 09:00	0.1808	0.0054	0.0116	0.0022	0.0022	0.0096	0.0048	0.0048	0	0	0	0	17.22	0.587	99.413
1	01/27/2021 09:00	0.209	0.0063	0.0133	0.0028	0.0028	0.0086	0.0043	0.0043	0	0	0	0	17.25	0.667	99.333
1	01/28/2021 09:00	0.2119	0.0063	0.013	0.0025	0.0025	0.0094	0.0047	0.0047	0	0	0	0	17.23	0.675	99.325
1	01/29/2021 09:00	0.2007	0.0054	0.0108	0.002	0.0019	0.0094	0.0047	0.0047	0	0	0	0	17.23	0.632	99.368
1	01/30/2021 09:00	0.2204	0.0065	0.0135	0.0027	0.0026	0.0086	0.0043	0.0043	0	0	0	0	17.29	0.695	99.305
1	01/31/2021 09:00	0.2046	0.0058	0.0116	0.0018	0.0017	0.0068	0.0034	0.0034	0	0	0	0	17.25	0.630	99.370
1	02/01/2021 09:00	0.1899	0.0055	0.0115	0.0021	0.002	0.0096	0.0048	0.0048	0	0	0	0	17.22	0.609	99.391
1	02/02/2021 09:00	0.1969	0.0052	0.0107	0.002	0.002	0.0082	0.0041	0.0041	0	0	0	0	17.22	0.616	99.384
1	02/03/2021 09:00	0.2646	0.0061	0.0107	0.0012	0.0012	0.0082	0.0041	0.0041	0	0	0	0	17.31	0.781	99.219
1	02/04/2021 09:00	0.2033	0.0051	0.0098	0.0015	0.0015	0.0078	0.0039	0.0039	0	0	0	0	17.23	0.622	99.378
1	02/05/2021 09:00	0.2063	0.0056	0.0112	0.002	0.002	0.0084	0.0042	0.0042	0	0	0	0	17.24	0.643	99.357
1	02/06/2021 09:00	0.2273	0.0072	0.0152	0.0031	0.003	0.0104	0.0052	0.0052	0	0	0	0	17.29	0.733	99.267
1	02/07/2021 09:00	0.2241	0.0063	0.0128	0.0023	0.0023	0.0076	0.0038	0.0038	0	0	0	0	17.29	0.693	99.307
1	02/08/2021 09:00	0.2188	0.006	0.012	0.0022	0.002	0.0078	0.0039	0.0039	0	0	0	0	17.26	0.676	99.324
1	02/09/2021 09:00	0.2254	0.0067	0.0135	0.0024	0.0023	0.0084	0.0042	0.0042	0	0	0	0	17.26	0.706	99.294
1	02/10/2021 09:00	0.1834	0.0046	0.0089	0.0013	0.0012	0.0086	0.0043	0.0043	0	0	0	0	17.21	0.569	99.431
1	02/11/2021 09:00	0.435	0.0108	0.0177	0.0021	0.0012	0.008	0.004	0.004	0	0	0	0	17.53	1.242	98.758
1	02/12/2021 09:00	0.4884	0.0111	0.0173	0.0018	0.0014	0.0076	0.0038	0.0038	0	0	0	0	17.58	1.370	98.630
1	02/13/2021 09:00	0.3562	0.0083	0.0147	0.0021	0.002	0.0096	0.0048	0.0048	0	0	0	0	17.48	1.039	98.961
1	02/14/2021 09:00	0.3803	0.007	0.0113	0.0017	0.0017	0.0088	0.0044	0.0044	0	0	0	0	17.56	1.073	98.927
1	02/15/2021 09:00	0.304	0.0061	0.0111	0.0019	0.002	0.01	0.005	0.005	0	0	0	0	17.48	0.889	99.111
1	02/16/2021 09:00	0.4522	0.0104	0.0167	0.0018	0.0015	0.0066	0.0033	0.0033	0	0	0	0	17.65	1.265	98.735
1	02/17/2021 09:00	0.4271	0.0106	0.0178	0.0023	0.0018	0.0074	0.0037	0.0037	0	0	0	0	17.55	1.220	98.780
1	02/18/2021 09:00	0.3964	0.0087	0.0143	0.0018	0.0017	0.008	0.004	0.004	0	0	0	0	17.55	1.126	98.874
1	02/19/2021 09:00	0.465	0.0109	0.0184	0.0025	0.0023	0.008	0.004	0.004	0	0	0	0	17.62	1.320	98.680
1	02/20/2021 09:00	0.4524	0.0097	0.0151	0.0011	0.001	0.0068	0.0034	0.0034	0	0	0	0	17.50	1.265	98.735

EPNG Monument

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	02/21/2021 09:00	0.2862	0.0068	0.0127	0.0021	0.0021	0.0074	0.0037	0.0037	0	0	0	0	17.32	0.849	99.151
1	02/22/2021 09:00	0.3236	0.0079	0.0139	0.0017	0.0016	0.0064	0.0032	0.0032	0	0	0	0	17.36	0.941	99.059
1	02/23/2021 09:00	0.3584	0.0083	0.0135	0.0013	0.0012	0.006	0.003	0.003	0	0	0	0	17.38	1.022	98.978
1	02/24/2021 09:00	0.1801	0.0048	0.0097	0.0015	0.0014	0.005	0.0025	0.0025	0	0	0	0	17.18	0.549	99.451
1	02/25/2021 09:00	0.2004	0.0052	0.0099	0.0012	0.0011	0.007	0.0035	0.0035	0	0	0	0	17.21	0.609	99.391
1	02/26/2021 09:00	0.9059	0.023	0.0357	0.0042	0.0036	0.0074	0.0037	0.0037	0	0	0	0	17.88	2.492	97.508
1	02/27/2021 09:00	0.3599	0.0089	0.0163	0.0025	0.0024	0.0066	0.0033	0.0033	0	0	0	0	17.47	1.045	98.955
1	02/28/2021 09:00	0.2348	0.0067	0.0137	0.0024	0.0023	0.0074	0.0037	0.0037	0	0	0	0	17.33	0.722	99.278
1	03/01/2021 09:00	0.3038	0.0176	0.0399	0.008	0.0075	0.0102	0.0051	0.0051	0	0	0	0	17.30	1.083	98.917
1	03/02/2021 09:00	0.2251	0.0063	0.0125	0.0022	0.0022	0.008	0.004	0.004	0	0	0	0	17.28	0.696	99.304
1	03/03/2021 09:00	0.2117	0.005	0.0097	0.0014	0.0014	0.007	0.0035	0.0035	0	0	0	0	17.28	0.636	99.364
1	03/04/2021 09:00	0.2205	0.006	0.0124	0.0024	0.0024	0.0088	0.0044	0.0044	0	0	0	0	17.31	0.688	99.312
1	03/05/2021 09:00	0.2285	0.0056	0.0104	0.0015	0.0014	0.0076	0.0038	0.0038	0	0	0	0	17.27	0.687	99.313
1	03/06/2021 09:00	0.253	0.006	0.0107	0.0012	0.0012	0.0094	0.0047	0.0047	0	0	0	0	17.30	0.758	99.242
1	03/07/2021 09:00	0.2618	0.0059	0.01	0.0011	0.001	0.0084	0.0042	0.0042	0	0	0	0	17.32	0.770	99.230
1	03/08/2021 09:00	0.284	0.007	0.0131	0.002	0.0021	0.01	0.005	0.005	0	0	0	0	17.37	0.855	99.145
1	03/09/2021 09:00	0.2783	0.0068	0.0128	0.002	0.002	0.0088	0.0044	0.0044	0	0	0	0	17.37	0.832	99.168
1	03/10/2021 09:00	0.2228	0.0058	0.0113	0.0019	0.0019	0.011	0.0055	0.0055	0	0	0	0	17.25	0.698	99.302
1	03/11/2021 09:00	0.2091	0.0045	0.0079	0.0008	0.0007	0.0102	0.0051	0.0051	0	0	0	0	17.23	0.634	99.366
1	03/12/2021 09:00	0.2279	0.005	0.0088	0.001	0.0009	0.01	0.005	0.005	0	0	0	0	17.26	0.687	99.313
1	03/13/2021 09:00	0.2307	0.0056	0.0105	0.0015	0.0014	0.0102	0.0051	0.0051	0	0	0	0	17.27	0.706	99.294
1	03/14/2021 09:00	0.2342	0.0064	0.0126	0.0022	0.0022	0.0106	0.0053	0.0053	0	0	0	0	17.27	0.733	99.267
1	03/15/2021 09:00	0.2836	0.0072	0.0136	0.0021	0.002	0.0096	0.0048	0.0048	0	0	0	0	17.37	0.854	99.146
1	03/16/2021 09:00	0.2898	0.0076	0.0144	0.0022	0.0021	0.01	0.005	0.005	0	0	0	0	17.39	0.876	99.124
1	03/17/2021 09:00	0.2672	0.0071	0.0135	0.0022	0.0021	0.0082	0.0041	0.0041	0	0	0	0	17.32	0.808	99.192
1	03/18/2021 09:00	0.2737	0.0075	0.0146	0.0024	0.0023	0.0096	0.0048	0.0048	0	0	0	0	17.33	0.838	99.162
1	03/19/2021 09:00	0.2607	0.0068	0.0128	0.0021	0.002	0.008	0.004	0.004	0	0	0	0	17.32	0.786	99.214
1	03/20/2021 09:00	0.2779	0.0076	0.0144	0.0023	0.0023	0.009	0.0045	0.0045	0	0	0	0	17.34	0.844	99.156
1	03/21/2021 09:00	0.2525	0.0067	0.0129	0.002	0.002	0.0088	0.0044	0.0044	0	0	0	0	17.31	0.769	99.231
1	03/22/2021 09:00	0.2067	0.0061	0.0124	0.0022	0.0021	0.011	0.0055	0.0055	0	0	0	0	17.23	0.664	99.336
1	03/23/2021 09:00	0.231	0.0063	0.0127	0.0023	0.0023	0.01	0.005	0.005	0	0	0	0	17.31	0.721	99.279
1	03/24/2021 09:00	0.2378	0.0079	0.0171	0.0035	0.0035	0.0106	0.0053	0.0053	0	0	0	0	17.29	0.773	99.227
1	03/25/2021 09:00	0.2869	0.0084	0.017	0.0034	0.0034	0.0102	0.0051	0.0051	0	0	0	0	17.37	0.892	99.108
1	03/26/2021 09:00	0.3114	0.01	0.0211	0.005	0.0052	0.0126	0.0063	0.0063	0	0	0	0	17.41	0.997	99.003
1	03/27/2021 09:00	0.2738	0.0072	0.0139	0.0026	0.0025	0.007	0.0035	0.0035	0	0	0	0	17.36	0.822	99.178
1	03/28/2021 09:00	0.2936	0.0085	0.017	0.003	0.0029	0.0092	0.0046	0.0046	0	0	0	0	17.37	0.901	99.099
1	03/29/2021 09:00	0.3117	0.0084	0.016	0.0026	0.0025	0.0082	0.0041	0.0041	0	0	0	0	17.42	0.932	99.068
1	03/30/2021 09:00	0.25	0.0069	0.0138	0.0023	0.0023	0.009	0.0045	0.0045	0	0	0	0	17.30	0.771	99.229
1	03/31/2021 09:00	0.2758	0.008	0.016	0.0031	0.003	0.0098	0.0049	0.0049	0	0	0	0	17.33	0.856	99.144
1	04/01/2021 09:00	0.3066	0.0095	0.0195	0.0041	0.004	0.011	0.0055	0.0055	0	0	0	0	17.38	0.963	99.037
1	04/02/2021 09:00	0.3066	0.0095	0.0195	0.0041	0.004	0.011	0.0055	0.0055	0	0	0	0	17.38	0.963	99.037
1	04/03/2021 09:00	0.3066	0.0095	0.0195	0.0041	0.004	0.011	0.0055	0.0055	0	0	0	0	17.38	0.963	99.037
1	04/04/2021 09:00	0.3066	0.0095	0.0195	0.0041	0.004	0.011	0.0055	0.0055	0	0	0	0	17.38	0.963	99.037
1	04/05/2021 09:00	0.3362	0.0095	0.0186	0.0039	0.0039	0.0104	0.0052	0.0052	0	0	0	0	17.44	1.027	98.973
1	04/06/2021 09:00	0.2969	0.0079	0.0152	0.0029	0.0028	0.007	0.0035	0.0035	0	0	0	0	17.43	0.886	99.114
1	04/07/2021 09:00	0.2632	0.0075	0.0147	0.0026	0.0025	0.009	0.0045	0.0045	0	0	0	0	17.37	0.808	99.192
1	04/08/2021 09:00	0.2895	0.0071	0.0131	0.0019	0.0018	0.009	0.0045	0.0045	0	0	0	0	17.40	0.861	99.139
1	04/09/2021 09:00	0.3079	0.0082	0.0158	0.0027	0.0027	0.0098	0.0049	0.0049	0	0	0	0	17.43	0.930	99.070
1	04/10/2021 09:00	0.2862	0.0077	0.0146	0.0022	0.002	0.008	0.004	0.004	0	0	0	0	17.39	0.858	99.142
1	04/11/2021 09:00	0.3051	0.0082	0.0157	0.0027	0.0027	0.0086	0.0043	0.0043	0	0	0	0	17.40	0.918	99.082
1	04/12/2021 09:00	0.2935	0.0076	0.014	0.0021	0.002	0.009	0.0045	0.0045	0	0	0	0	17.38	0.879	99.121
1	04/13/2021 09:00	0.2681	0.0074	0.0143	0.0024	0.0023	0.0104	0.0052	0.0052	0	0	0	0	17.37	0.825	99.175
1	04/14/2021 09:00	0.2899	0.0078	0.0144	0.0022	0.0021	0.0098	0.0049	0.0049	0	0	0	0	17.40	0.875	99.125
1	04/15/2021 09:00	0.3177	0.0095	0.0187	0.0037	0.0036	0.0108	0.0054	0.0054	0	0	0	0	17.43	0.981	99.019
1	04/16/2021 09:00	0.3026	0.0079	0.0151	0.0028	0.0026	0.009	0.0045	0.0045	0	0	0	0	17.39	0.911	99.089

EPNG Monument

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	04/17/2021 09:00	0.301	0.0092	0.0183	0.0032	0.0032	0.0118	0.0059	0.0059	0	0	0	0	17.38	0.941	99.059
1	04/18/2021 09:00	0.3262	0.0102	0.0208	0.0045	0.0045	0.013	0.0065	0.0065	0	0	0	0	17.43	1.030	98.970
1	04/19/2021 09:00	0.3849	0.0102	0.0184	0.0028	0.0026	0.0104	0.0052	0.0052	0	0	0	0	17.46	1.141	98.859
1	04/20/2021 09:00	0.2609	0.0065	0.0119	0.0016	0.0014	0.0092	0.0046	0.0046	0	0	0	0	17.29	0.786	99.214
1	04/21/2021 09:00	0.2342	0.0062	0.0122	0.0021	0.0019	0.009	0.0045	0.0045	0	0	0	0	17.27	0.721	99.279
1	04/22/2021 09:00	0.2949	0.0071	0.0133	0.002	0.0019	0.0096	0.0048	0.0048	0	0	0	0	17.46	0.876	99.124
1	04/23/2021 09:00	2.5338	0.0974	0.1427	0.0118	0.0093	0.0116	0.0058	0.0058	0	0	0	0	18.73	6.844	93.156
1	04/24/2021 09:00	0.6265	0.0334	0.0677	0.0115	0.01	0.0114	0.0057	0.0057	0	0	0	0	17.64	2.043	97.957
1	04/25/2021 09:00	0.3351	0.0155	0.0319	0.0049	0.0042	0.008	0.004	0.004	0	0	0	0	17.37	1.087	98.913
1	04/26/2021 09:00	0.3739	0.0369	0.0882	0.0197	0.0192	0.0168	0.0084	0.0084	0	0	0	0	17.25	1.624	98.376
1	04/27/2021 09:00	0.8283	0.0637	0.1287	0.0179	0.0147	0.0152	0.0076	0.0076	0	0	0	0	17.76	2.892	97.108
1	04/28/2021 09:00	0.2597	0.0078	0.016	0.003	0.0029	0.0086	0.0043	0.0043	0	0	0	0	17.39	0.805	99.195
1	04/29/2021 09:00	0.2357	0.0061	0.0119	0.0018	0.0018	0.0106	0.0053	0.0053	0	0	0	0	17.33	0.728	99.272
1	04/30/2021 09:00	0.2144	0.006	0.0119	0.0018	0.0018	0.0102	0.0051	0.0051	0	0	0	0	17.30	0.673	99.327
1	05/01/2021 09:00	0.2559	0.0079	0.0161	0.0029	0.0029	0.0108	0.0054	0.0054	0	0	0	0	17.37	0.808	99.192
1	05/02/2021 09:00	0.2462	0.0061	0.0118	0.0018	0.0017	0.009	0.0045	0.0045	0	0	0	0	17.36	0.745	99.255
1	05/03/2021 09:00	0.2864	0.0066	0.0123	0.0018	0.0018	0.009	0.0045	0.0045	0	0	0	0	17.48	0.845	99.155
1	05/04/2021 09:00	0.2831	0.0064	0.012	0.0018	0.0017	0.009	0.0045	0.0045	0	0	0	0	17.48	0.834	99.166
1	05/05/2021 09:00	0.2831	0.0064	0.012	0.0018	0.0017	0.009	0.0045	0.0045	0	0	0	0	17.48	0.834	99.166
1	05/06/2021 09:00	0.2831	0.0064	0.012	0.0018	0.0017	0.009	0.0045	0.0045	0	0	0	0	17.48	0.834	99.166
1	05/07/2021 09:00	0.4532	0.0163	0.0254	0.0035	0.0033	0.0094	0.0047	0.0047	0	0	0	0	17.60	1.347	98.653
1	05/08/2021 09:00	0.2538	0.0052	0.0091	0.0009	0.0008	0.0124	0.0062	0.0062	0	0	0	0	17.38	0.760	99.240
1	05/09/2021 09:00	0.2389	0.006	0.0115	0.0019	0.0018	0.0098	0.0049	0.0049	0	0	0	0	17.31	0.732	99.268
1	05/10/2021 09:00	0.3122	0.0083	0.0153	0.0023	0.0021	0.0124	0.0062	0.0062	0	0	0	0	17.42	0.949	99.051
1	05/11/2021 09:00	0.3205	0.0108	0.0214	0.0034	0.0031	0.0128	0.0064	0.0064	0	0	0	0	17.41	1.009	98.991
1	05/12/2021 09:00	0.271	0.0088	0.0182	0.0033	0.003	0.0114	0.0057	0.0057	0	0	0	0	17.38	0.861	99.139
1	05/13/2021 09:00	0.2354	0.0071	0.0143	0.0025	0.0024	0.012	0.006	0.006	0	0	0	0	17.33	0.751	99.249
1	05/14/2021 09:00	0.2463	0.0089	0.0202	0.0052	0.0055	0.015	0.0075	0.0075	0	0	0	0	17.35	0.843	99.157
1	05/15/2021 09:00	0.2691	0.0116	0.0285	0.009	0.0097	0.02	0.01	0.01	0	0	0	0	17.40	0.992	99.008
1	05/16/2021 09:00	0.2961	0.0088	0.0189	0.0051	0.0054	0.0136	0.0068	0.0068	0	0	0	0	17.45	0.951	99.049
1	05/17/2021 09:00	0.2614	0.0092	0.0214	0.0064	0.0068	0.0166	0.0083	0.0083	0	0	0	0	17.38	0.903	99.097
1	05/18/2021 09:00	0.2372	0.0073	0.0158	0.0037	0.0039	0.012	0.006	0.006	0	0	0	0	17.36	0.771	99.229
1	05/19/2021 09:00	0.2899	0.0109	0.0257	0.0074	0.0079	0.018	0.009	0.009	0	0	0	0	17.43	1.008	98.992
1	05/20/2021 09:00	0.3054	0.009	0.0201	0.0059	0.0063	0.014	0.007	0.007	0	0	0	0	17.44	0.989	99.011
1	05/21/2021 09:00	0.3297	0.0119	0.0288	0.0089	0.0095	0.0208	0.0104	0.0104	0	0	0	0	17.47	1.146	98.854
1	05/22/2021 09:00	0.2683	0.0105	0.0249	0.0074	0.0077	0.0174	0.0087	0.0087	0	0	0	0	17.42	0.946	99.054
1	05/23/2021 09:00	0.2832	0.0115	0.029	0.0093	0.0101	0.0226	0.0113	0.0113	0	0	0	0	17.42	1.044	98.956
1	05/24/2021 09:00	0.2837	0.0107	0.0266	0.0083	0.0089	0.0174	0.0087	0.0087	0	0	0	0	17.39	1.002	98.998
1	05/25/2021 09:00	0.2853	0.0124	0.0316	0.0105	0.0114	0.0204	0.0102	0.0102	0	0	0	0	17.38	1.063	98.937
1	05/26/2021 09:00	0.2843	0.0106	0.0265	0.0083	0.0091	0.0172	0.0086	0.0086	0	0	0	0	17.40	1.002	98.998
1	05/27/2021 09:00	0.2965	0.0154	0.0409	0.0137	0.015	0.0256	0.0128	0.0128	0	0	0	0	17.46	1.181	98.819
1	05/28/2021 09:00	0.2679	0.0129	0.0348	0.0126	0.0138	0.0214	0.0107	0.0107	0	0	0	0	17.41	1.053	98.947
1	05/29/2021 09:00	0.26	0.0121	0.0312	0.0106	0.0116	0.02	0.01	0.01	0	0	0	0	17.37	0.996	99.004
1	05/30/2021 09:00	0.2731	0.0108	0.0266	0.0086	0.0094	0.017	0.0085	0.0085	0	0	0	0	17.41	0.975	99.025
1	05/31/2021 09:00	0.2772	0.0146	0.0389	0.0136	0.0151	0.0226	0.0113	0.0113	0	0	0	0	17.40	1.112	98.888
1	06/01/2021 09:00	0.2852	0.0121	0.0302	0.0087	0.0094	0.0174	0.0087	0.0087	0	0	0	0	17.42	1.024	98.976
1	06/02/2021 09:00	0.2902	0.0153	0.0407	0.0131	0.0139	0.0222	0.0111	0.0111	0	0	0	0	17.41	1.144	98.856
1	06/03/2021 09:00	0.3004	0.0118	0.0295	0.0094	0.0102	0.0174	0.0087	0.0087	0	0	0	0	17.43	1.065	98.935
1	06/04/2021 09:00	0.3053	0.0142	0.0366	0.0123	0.0135	0.0216	0.0108	0.0108	0	0	0	0	17.42	1.156	98.844
1	06/05/2021 09:00	0.3038	0.0114	0.0286	0.0093	0.0101	0.0176	0.0088	0.0088	0	0	0	0	17.41	1.071	98.929
1	06/06/2021 09:00	0.3493	0.0129	0.0334	0.0111	0.0122	0.0232	0.0116	0.0116	0	0	0	0	17.42	1.250	98.750
1	06/07/2021 09:00	0.3265	0.0107	0.0268	0.0086	0.0093	0.0166	0.0083	0.0083	0	0	0	0	17.39	1.110	98.890
1	06/08/2021 09:00	0.3309	0.0116	0.0289	0.0086	0.0092	0.0208	0.0104	0.0104	0	0	0	0	17.43	1.149	98.851
1	06/09/2021 09:00	0.3184	0.0068	0.0147	0.0037	0.0038	0.0094	0.0047	0.0047	0	0	0	0	17.37	0.958	99.042
1	06/10/2021 09:00	0.3909	0.0104	0.0231	0.006	0.0064	0.0172	0.0086	0.0086	0	0	0	0	17.48	1.234	98.766

EPNG Monument

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	06/11/2021 09:00	0.5264	0.0135	0.0278	0.0069	0.0071	0.0164	0.0082	0.0082	0	0	0	0	17.64	1.590	98.410
1	06/12/2021 09:00	0.3905	0.0125	0.0294	0.0089	0.0098	0.021	0.0105	0.0105	0	0	0	0	17.51	1.303	98.697
1	06/13/2021 09:00	0.3699	0.0115	0.0269	0.0076	0.008	0.0158	0.0079	0.0079	0	0	0	0	17.48	1.203	98.797
1	06/14/2021 09:00	1.3971	0.0847	0.1696	0.0276	0.0259	0.026	0.013	0.013	0	0	0	0	18.10	4.557	95.443
1	06/15/2021 09:00	0.6195	0.0261	0.0539	0.0108	0.0108	0.019	0.0095	0.0095	0	0	0	0	17.67	1.990	98.010
1	06/16/2021 09:00	0.3371	0.0119	0.0286	0.0084	0.0088	0.018	0.009	0.009	0	0	0	0	17.48	1.145	98.855
1	06/17/2021 09:00	0.3219	0.0093	0.0208	0.006	0.0064	0.0156	0.0078	0.0078	0	0	0	0	17.44	1.043	98.957
1	06/18/2021 09:00	0.3553	0.0118	0.0278	0.0082	0.0089	0.019	0.0095	0.0095	0	0	0	0	17.48	1.192	98.808
1	06/19/2021 09:00	0.3496	0.0108	0.0246	0.0072	0.0078	0.017	0.0085	0.0085	0	0	0	0	17.47	1.146	98.854
1	06/20/2021 09:00	0.4475	0.0156	0.0386	0.012	0.0127	0.021	0.0105	0.0105	0	0	0	0	17.57	1.507	98.493
1	06/21/2021 09:00	0.3773	0.0144	0.0362	0.012	0.0131	0.0228	0.0114	0.0114	0	0	0	0	17.49	1.335	98.665
1	06/22/2021 09:00	0.3406	0.0143	0.0366	0.0123	0.0136	0.0242	0.0121	0.0121	0	0	0	0	17.49	1.254	98.746
1	06/23/2021 09:00	0.3569	0.0112	0.0253	0.0071	0.0077	0.0184	0.0092	0.0092	0	0	0	0	17.53	1.170	98.830
1	06/24/2021 09:00	0.3579	0.0142	0.0356	0.0113	0.0122	0.025	0.0125	0.0125	0	0	0	0	17.53	1.285	98.715
1	06/25/2021 09:00	0.3589	0.0115	0.0266	0.0077	0.0082	0.0184	0.0092	0.0092	0	0	0	0	17.51	1.186	98.814
1	06/26/2021 09:00	0.4304	0.0198	0.0488	0.014	0.0146	0.0272	0.0136	0.0136	0	0	0	0	17.57	1.558	98.442
1	06/27/2021 09:00	0.2983	0.0098	0.0225	0.0067	0.0073	0.017	0.0085	0.0085	0	0	0	0	17.41	1.005	98.995
1	06/28/2021 09:00	0.2626	0.0129	0.0335	0.0112	0.0122	0.0234	0.0117	0.0117	0	0	0	0	17.36	1.036	98.964
1	06/29/2021 09:00	0.2431	0.0101	0.0256	0.0081	0.0088	0.0212	0.0106	0.0106	0	0	0	0	17.36	0.913	99.087
1	06/30/2021 09:00	0.2641	0.0137	0.036	0.0118	0.0127	0.0256	0.0128	0.0128	0	0	0	0	17.36	1.066	98.934
1	07/01/2021 09:00	0.3609	0.0114	0.0255	0.0074	0.0079	0.0176	0.0088	0.0088	0	0	0	0	17.49	1.182	98.818
1	07/02/2021 09:00	0.283	0.0127	0.0316	0.0097	0.0107	0.0228	0.0114	0.0114	0	0	0	0	17.37	1.065	98.935
1	07/03/2021 09:00	0.2389	0.0093	0.0227	0.0067	0.0073	0.0184	0.0092	0.0092	0	0	0	0	17.33	0.865	99.135
1	07/04/2021 09:00	0.2531	0.0103	0.0263	0.0093	0.0105	0.0218	0.0109	0.0109	0	0	0	0	17.35	0.956	99.044
1	07/05/2021 09:00	0.245	0.008	0.0196	0.0067	0.0075	0.0168	0.0084	0.0084	0	0	0	0	17.34	0.858	99.142
1	07/06/2021 09:00	0.2596	0.01	0.0246	0.0072	0.0078	0.0182	0.0091	0.0091	0	0	0	0	17.36	0.928	99.072
1	07/07/2021 09:00	0.2816	0.0104	0.0251	0.0073	0.0079	0.0186	0.0093	0.0093	0	0	0	0	17.36	0.990	99.010
1	07/08/2021 09:00	0.3168	0.0121	0.0293	0.0084	0.0093	0.021	0.0105	0.0105	0	0	0	0	17.38	1.120	98.880
1	07/09/2021 09:00	0.2649	0.0088	0.0216	0.0067	0.0073	0.0186	0.0093	0.0093	0	0	0	0	17.36	0.925	99.075
1	07/10/2021 09:00	0.3004	0.0108	0.0265	0.0081	0.0089	0.0216	0.0108	0.0108	0	0	0	0	17.41	1.063	98.937
1	07/11/2021 09:00	0.2548	0.0095	0.0232	0.0073	0.0079	0.0174	0.0087	0.0087	0	0	0	0	17.36	0.907	99.093
1	07/12/2021 09:00	0.2558	0.01	0.0252	0.0079	0.0087	0.018	0.009	0.009	0	0	0	0	17.40	0.924	99.076
1	07/13/2021 09:00	0.2541	0.007	0.0145	0.0031	0.003	0.012	0.006	0.006	0	0	0	0	17.33	0.804	99.196
1	07/14/2021 09:00	0.2588	0.007	0.0146	0.0035	0.0039	0.0142	0.0071	0.0071	0	0	0	0	17.32	0.833	99.167
1	07/15/2021 09:00	0.3044	0.0098	0.0225	0.006	0.0064	0.0156	0.0078	0.0078	0	0	0	0	17.43	1.006	98.994
														Annual Average =	0.820	99.180

EPNG Rio Vista

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	07/16/2020 09:00	0.0435	0.0081	0.0132	0.0068	0.0052	0.0188	0.0094	0.0094	0	0	0	0	16.68	0.338	99.662
1	07/17/2020 09:00	0.0371	0.0073	0.012	0.0063	0.0049	0.0176	0.0088	0.0088	0	0	0	0	16.61	0.306	99.694
1	07/18/2020 09:00	0.0387	0.0079	0.0128	0.0061	0.0048	0.0166	0.0083	0.0083	0	0	0	0	16.57	0.309	99.691
1	07/19/2020 09:00	0.0432	0.0083	0.0132	0.0064	0.0049	0.0166	0.0083	0.0083	0	0	0	0	16.59	0.325	99.675
1	07/20/2020 09:00	0.0496	0.0083	0.0132	0.0064	0.0049	0.0178	0.0089	0.0089	0	0	0	0	16.65	0.347	99.653
1	07/21/2020 09:00	0.0455	0.0086	0.0139	0.007	0.0053	0.0176	0.0088	0.0088	0	0	0	0	16.66	0.343	99.657
1	07/22/2020 09:00	0.0459	0.0079	0.0135	0.007	0.0053	0.0184	0.0092	0.0092	0	0	0	0	16.69	0.344	99.656
1	07/23/2020 09:00	0.0679	0.0084	0.014	0.0075	0.0057	0.0206	0.0103	0.0103	0	0	0	0	16.73	0.420	99.580
1	07/24/2020 09:00	0.6979	0.0301	0.0339	0.0143	0.0115	0.0526	0.0263	0.0263	0	0	0	0	17.43	2.346	97.654
1	07/25/2020 09:00	0.1571	0.007	0.0114	0.0067	0.0054	0.0252	0.0126	0.0126	0	0	0	0	16.86	0.655	99.345
1	07/26/2020 09:00	0.0798	0.0096	0.0155	0.0077	0.0057	0.0202	0.0101	0.0101	0	0	0	0	16.75	0.459	99.541
1	07/27/2020 09:00	0.0651	0.0102	0.0163	0.0077	0.0056	0.019	0.0095	0.0095	0	0	0	0	16.71	0.419	99.581
1	07/28/2020 09:00	0.0578	0.0104	0.0169	0.0078	0.0058	0.019	0.0095	0.0095	0	0	0	0	16.73	0.404	99.596
1	07/29/2020 09:00	0.0648	0.0097	0.0162	0.0085	0.0065	0.0216	0.0108	0.0108	0	0	0	0	16.75	0.436	99.564
1	07/30/2020 09:00	0.0448	0.0086	0.014	0.0073	0.0058	0.0196	0.0098	0.0098	0	0	0	0	16.65	0.356	99.644
1	07/31/2020 09:00	0.0452	0.0089	0.0145	0.0074	0.0057	0.0202	0.0101	0.0101	0	0	0	0	16.63	0.363	99.637
1	08/01/2020 09:00	0.0419	0.0086	0.0143	0.0075	0.0059	0.0192	0.0096	0.0096	0	0	0	0	16.61	0.349	99.651
1	08/02/2020 09:00	0.0504	0.0079	0.0129	0.0075	0.0063	0.0234	0.0117	0.0117	0	0	0	0	16.62	0.388	99.612
1	08/03/2020 09:00	0.0453	0.0088	0.014	0.0065	0.005	0.0196	0.0098	0.0098	0	0	0	0	16.65	0.351	99.649
1	08/04/2020 09:00	0.0822	0.0106	0.0167	0.008	0.006	0.019	0.0095	0.0095	0	0	0	0	16.72	0.470	99.530
1	08/05/2020 09:00	0.0453	0.0093	0.0149	0.0069	0.0052	0.0178	0.0089	0.0089	0	0	0	0	16.63	0.349	99.651
1	08/06/2020 09:00	0.0413	0.0082	0.0134	0.0064	0.0048	0.0166	0.0083	0.0083	0	0	0	0	16.63	0.320	99.680
1	08/07/2020 09:00	0.0451	0.0091	0.0143	0.0067	0.005	0.0166	0.0083	0.0083	0	0	0	0	16.63	0.338	99.662
1	08/08/2020 09:00	0.0429	0.0089	0.0142	0.0066	0.005	0.0164	0.0082	0.0082	0	0	0	0	16.64	0.330	99.670
1	08/09/2020 09:00	0.0417	0.0085	0.0139	0.0067	0.005	0.016	0.008	0.008	0	0	0	0	16.66	0.322	99.678
1	08/10/2020 09:00	0.0515	0.0085	0.0138	0.007	0.0053	0.0164	0.0082	0.0082	0	0	0	0	16.71	0.351	99.649
1	08/11/2020 09:00	0.0486	0.0086	0.0135	0.0063	0.0048	0.0168	0.0084	0.0084	0	0	0	0	16.66	0.341	99.659
1	08/12/2020 09:00	0.0985	0.0103	0.0169	0.008	0.006	0.0198	0.0099	0.0099	0	0	0	0	16.83	0.513	99.487
1	08/13/2020 09:00	0.1209	0.0114	0.0186	0.0088	0.0065	0.0216	0.0108	0.0108	0	0	0	0	16.86	0.596	99.404
1	08/14/2020 09:00	0.1376	0.013	0.0221	0.0112	0.0086	0.027	0.0135	0.0135	0	0	0	0	16.88	0.703	99.297
1	08/15/2020 09:00	0.0447	0.0084	0.0134	0.0061	0.0044	0.0146	0.0073	0.0073	0	0	0	0	16.68	0.315	99.685
1	08/16/2020 09:00	0.0498	0.0096	0.0154	0.0074	0.0058	0.0188	0.0094	0.0094	0	0	0	0	16.68	0.373	99.627
1	08/17/2020 09:00	0.0483	0.0092	0.0146	0.0071	0.0055	0.019	0.0095	0.0095	0	0	0	0	16.67	0.364	99.636
1	08/18/2020 09:00	0.0486	0.0094	0.015	0.0073	0.0056	0.02	0.01	0.01	0	0	0	0	16.69	0.372	99.628
1	08/19/2020 09:00	0.0527	0.0097	0.0156	0.0076	0.0057	0.0198	0.0099	0.0099	0	0	0	0	16.72	0.386	99.614
1	08/20/2020 09:00	0.0659	0.0097	0.016	0.008	0.006	0.0212	0.0106	0.0106	0	0	0	0	16.79	0.431	99.569
1	08/21/2020 09:00	0.0494	0.0089	0.0145	0.007	0.0053	0.0186	0.0093	0.0093	0	0	0	0	16.74	0.360	99.640
1	08/22/2020 09:00	0.0526	0.0086	0.0143	0.0072	0.0054	0.0184	0.0092	0.0092	0	0	0	0	16.76	0.367	99.633
1	08/23/2020 09:00	0.0439	0.0086	0.0139	0.0068	0.0051	0.0176	0.0088	0.0088	0	0	0	0	16.70	0.336	99.664
1	08/24/2020 09:00	0.0452	0.009	0.0142	0.0069	0.0053	0.0174	0.0087	0.0087	0	0	0	0	16.68	0.343	99.657
1	08/25/2020 09:00	0.0662	0.01	0.0152	0.0074	0.0055	0.019	0.0095	0.0095	0	0	0	0	16.89	0.412	99.588
1	08/26/2020 09:00	0.059	0.0096	0.0155	0.0076	0.0058	0.0204	0.0102	0.0102	0	0	0	0	16.68	0.407	99.593
1	08/27/2020 09:00	0.0458	0.0081	0.0134	0.0067	0.0051	0.0184	0.0092	0.0092	0	0	0	0	16.67	0.342	99.658
1	08/28/2020 09:00	0.0475	0.0085	0.014	0.0069	0.0052	0.0176	0.0088	0.0088	0	0	0	0	16.69	0.347	99.653
1	08/29/2020 09:00	0.0456	0.0086	0.0141	0.0069	0.0052	0.0168	0.0084	0.0084	0	0	0	0	16.69	0.339	99.661
1	08/30/2020 09:00	0.0453	0.0085	0.0135	0.0059	0.0043	0.0122	0.0061	0.0061	0	0	0	0	16.67	0.304	99.696
1	08/31/2020 09:00	0.049	0.0098	0.0157	0.0075	0.0057	0.017	0.0085	0.0085	0	0	0	0	16.67	0.364	99.636
1	09/01/2020 09:00	0.0436	0.0089	0.0144	0.007	0.0053	0.016	0.008	0.008	0	0	0	0	16.62	0.334	99.666
1	09/02/2020 09:00	0.0458	0.0093	0.015	0.0072	0.0055	0.0166	0.0083	0.0083	0	0	0	0	16.61	0.348	99.652
1	09/03/2020 09:00	0.0435	0.0093	0.0151	0.0073	0.0056	0.0178	0.0089	0.0089	0	0	0	0	16.62	0.349	99.651
1	09/04/2020 09:00	0.2247	0.01	0.0158	0.0082	0.0064	0.025	0.0125	0.0125	0	0	0	0	17.15	0.852	99.148
1	09/05/2020 09:00	0.2269	0.0088	0.0139	0.0079	0.0063	0.0258	0.0129	0.0129	0	0	0	0	17.16	0.849	99.151
1	09/06/2020 09:00	0.2174	0.0087	0.0138	0.0076	0.0061	0.0266	0.0133	0.0133	0	0	0	0	17.15	0.827	99.173
1	09/07/2020 09:00	0.2138	0.0086	0.0135	0.0074	0.0059	0.0258	0.0129	0.0129	0	0	0	0	17.16	0.810	99.190
1	09/08/2020 09:00	0.1759	0.0082	0.0131	0.0075	0.006	0.0218	0.0109	0.0109	0	0	0	0	17.12	0.692	99.308
1	09/09/2020 09:00	0.2222	0.0085	0.0132	0.0067	0.005	0.023	0.0115	0.0115	0	0	0	0	17.15	0.810	99.190
1	09/10/2020 09:00	0.1922	0.0088	0.0143	0.0075	0.0058	0.0232	0.0116	0.0116	0	0	0	0	17.13	0.746	99.254
1	09/11/2020 09:00	0.157	0.0093	0.0149	0.0079	0.0061	0.0244	0.0122	0.0122	0	0	0	0	16.96	0.675	99.325

EPNG Rio Vista

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	09/12/2020 09:00	0.0591	0.0076	0.0122	0.0056	0.0044	0.0124	0.0062	0.0062	0	0	0	0	16.67	0.333	99.667
1	09/13/2020 09:00	0.0545	0.0083	0.013	0.0059	0.0046	0.0126	0.0063	0.0063	0	0	0	0	16.60	0.330	99.670
1	09/14/2020 09:00	0.4091	0.0515	0.0712	0.0185	0.0122	0.018	0.009	0.009	0	0	0	0	17.07	1.696	98.304
1	09/15/2020 09:00	0.6153	0.0183	0.0349	0.023	0.0176	0.048	0.024	0.024	0	0	0	0	17.76	2.100	97.900
1	09/16/2020 09:00	0.8271	0.0168	0.0336	0.0276	0.0218	0.0694	0.0347	0.0347	0	0	0	0	17.84	2.745	97.255
1	09/17/2020 09:00	0.9021	0.0104	0.0241	0.0286	0.0226	0.0552	0.0276	0.0276	0	0	0	0	17.84	2.816	97.184
1	09/18/2020 09:00	0.81	0.048	0.0643	0.0271	0.0205	0.0446	0.0223	0.0223	0	0	0	0	17.46	2.836	97.164
1	09/19/2020 09:00	0.1621	0.0071	0.0102	0.005	0.0041	0.026	0.013	0.013	0	0	0	0	16.83	0.657	99.343
1	09/20/2020 09:00	0.1234	0.0057	0.0086	0.004	0.0032	0.0224	0.0112	0.0112	0	0	0	0	16.71	0.522	99.478
1	09/21/2020 09:00	0.1118	0.0072	0.0113	0.0058	0.0047	0.0252	0.0126	0.0126	0	0	0	0	16.71	0.535	99.465
1	09/22/2020 09:00	0.1092	0.0069	0.0112	0.0059	0.0047	0.0216	0.0108	0.0108	0	0	0	0	16.72	0.508	99.492
1	09/23/2020 09:00	0.0801	0.0072	0.0112	0.0057	0.0046	0.0194	0.0097	0.0097	0	0	0	0	16.64	0.422	99.578
1	09/24/2020 09:00	0.0506	0.0063	0.0102	0.0052	0.0043	0.016	0.008	0.008	0	0	0	0	16.65	0.316	99.684
1	09/25/2020 09:00	0.0536	0.0067	0.0104	0.0053	0.0043	0.0164	0.0082	0.0082	0	0	0	0	16.67	0.328	99.672
1	09/26/2020 09:00	0.0426	0.0059	0.0094	0.0048	0.0039	0.016	0.008	0.008	0	0	0	0	16.61	0.287	99.713
1	09/27/2020 09:00	0.0523	0.0064	0.0098	0.0051	0.0041	0.018	0.009	0.009	0	0	0	0	16.64	0.328	99.672
1	09/28/2020 09:00	0.0409	0.0064	0.0098	0.0047	0.0038	0.0164	0.0082	0.0082	0	0	0	0	16.58	0.288	99.712
1	09/29/2020 09:00	0.042	0.0062	0.0097	0.005	0.004	0.0196	0.0098	0.0098	0	0	0	0	16.60	0.308	99.692
1	09/30/2020 09:00	0.0448	0.0058	0.0092	0.0048	0.004	0.0606	0.0303	0.0303	0	0	0	0	16.69	0.521	99.479
1	10/01/2020 09:00	0.0318	0.0053	0.0078	0.003	0.0024	0.0536	0.0268	0.0268	0	0	0	0	16.52	0.434	99.566
1	10/02/2020 09:00	0.0309	0.0051	0.0075	0.0027	0.0021	0.0098	0.0049	0.0049	0	0	0	0	16.46	0.200	99.800
1	10/03/2020 09:00	0.0417	0.0066	0.0087	0.003	0.0022	0.0164	0.0082	0.0082	0	0	0	0	16.49	0.274	99.726
1	10/04/2020 09:00	0.1016	0.0155	0.0154	0.0046	0.0028	0.0626	0.0313	0.0313	0	0	0	0	16.68	0.732	99.268
1	10/05/2020 09:00	0.0927	0.0146	0.0146	0.0044	0.0027	0.062	0.031	0.031	0	0	0	0	16.65	0.699	99.301
1	10/06/2020 09:00	0.2751	0.0264	0.0328	0.0112	0.0085	0.074	0.037	0.037	0	0	0	0	17.03	1.372	98.628
1	10/07/2020 09:00	0.0436	0.0067	0.0119	0.0065	0.0054	0.0704	0.0352	0.0352	0	0	0	0	16.74	0.593	99.407
1	10/08/2020 09:00	0.0406	0.0065	0.0103	0.0046	0.0034	0.0704	0.0352	0.0352	0	0	0	0	16.64	0.565	99.435
1	10/09/2020 09:00	0.0892	0.0134	0.0154	0.0053	0.0036	0.0674	0.0337	0.0337	0	0	0	0	16.69	0.723	99.277
1	10/10/2020 09:00	0.0896	0.0136	0.0144	0.0046	0.0029	0.066	0.033	0.033	0	0	0	0	16.70	0.707	99.293
1	10/11/2020 09:00	0.1069	0.0164	0.0167	0.0051	0.0032	0.0638	0.0319	0.0319	0	0	0	0	16.70	0.763	99.237
1	10/12/2020 09:00	0.1182	0.0174	0.0175	0.0053	0.0033	0.0624	0.0312	0.0312	0	0	0	0	16.68	0.794	99.206
1	10/13/2020 09:00	0.1193	0.017	0.0172	0.0053	0.0033	0.0662	0.0331	0.0331	0	0	0	0	16.69	0.813	99.187
1	10/14/2020 09:00	0.1119	0.0157	0.0158	0.0049	0.003	0.0652	0.0326	0.0326	0	0	0	0	16.68	0.777	99.223
1	10/15/2020 09:00	0.1071	0.0153	0.0152	0.0047	0.0029	0.0636	0.0318	0.0318	0	0	0	0	16.70	0.750	99.250
1	10/16/2020 09:00	0.0972	0.0148	0.0149	0.0045	0.0028	0.064	0.032	0.032	0	0	0	0	16.72	0.721	99.279
1	10/17/2020 09:00	0.1089	0.0166	0.0167	0.0051	0.0032	0.0646	0.0323	0.0323	0	0	0	0	16.75	0.771	99.229
1	10/18/2020 09:00	0.1072	0.0162	0.0162	0.0048	0.0029	0.0642	0.0321	0.0321	0	0	0	0	16.74	0.758	99.242
1	10/19/2020 09:00	0.104	0.0155	0.0154	0.001	0.0006	0.0242	0.0121	0.0121	0	0	0	0	16.71	0.514	99.486
1	10/20/2020 09:00	0.0954	0.0142	0.0144	0	0	0.0142	0.0071	0.0071	0	0	0	0	16.71	0.424	99.576
1	10/21/2020 09:00	0.0898	0.0134	0.0136	0	0	0.0132	0.0066	0.0066	0	0	0	0	16.72	0.399	99.601
1	10/22/2020 09:00	0.0959	0.0145	0.0145	0	0	0.014	0.007	0.007	0	0	0	0	16.72	0.426	99.574
1	10/23/2020 09:00	0.1058	0.0159	0.0158	0	0	0.0124	0.0062	0.0062	0	0	0	0	16.69	0.454	99.546
1	10/24/2020 09:00	0.1276	0.0194	0.0194	0.0001	0	0.0142	0.0071	0.0071	0	0	0	0	16.69	0.546	99.454
1	10/25/2020 09:00	0.1196	0.0181	0.0183	0.0005	0.0001	0.0138	0.0069	0.0069	0	0	0	0	16.69	0.517	99.483
1	10/26/2020 09:00	0.0921	0.0138	0.0142	0	0	0.0098	0.0049	0.0049	0	0	0	0	16.67	0.392	99.608
1	10/27/2020 09:00	0.0749	0.0112	0.0116	0	0	0.0086	0.0043	0.0043	0	0	0	0	16.66	0.322	99.678
1	10/28/2020 09:00	0.0807	0.0119	0.0122	0	0	0.0088	0.0044	0.0044	0	0	0	0	16.67	0.343	99.657
1	10/29/2020 09:00	0.0903	0.0135	0.0136	0	0	0.0104	0.0052	0.0052	0	0	0	0	16.68	0.387	99.613
1	10/30/2020 09:00	0.1161	0.0176	0.0174	0.0001	0	0.0124	0.0062	0.0062	0	0	0	0	16.70	0.493	99.507
1	10/31/2020 09:00	0.1264	0.0193	0.019	0	0	0.013	0.0065	0.0065	0	0	0	0	16.71	0.534	99.466
1	11/01/2020 09:00	0.1281	0.0184	0.0181	0	0	0.013	0.0065	0.0065	0	0	0	0	16.81	0.529	99.471
1	11/02/2020 09:00	0.1314	0.0169	0.0169	0.0041	0.0026	0.0134	0.0067	0.0067	0	0	0	0	16.93	0.555	99.445
1	11/03/2020 09:00	0.1422	0.0173	0.0171	0.0052	0.0032	0.0138	0.0069	0.0069	0	0	0	0	16.97	0.593	99.407
1	11/04/2020 09:00	0.1364	0.018	0.0178	0.0055	0.0034	0.0142	0.0071	0.0071	0	0	0	0	16.94	0.588	99.412
1	11/05/2020 09:00	0.1297	0.0183	0.0181	0.0055	0.0035	0.0144	0.0072	0.0072	0	0	0	0	16.90	0.576	99.424
1	11/06/2020 09:00	0.1351	0.0175	0.0175	0.0054	0.0033	0.0148	0.0074	0.0074	0	0	0	0	16.97	0.583	99.417
1	11/07/2020 09:00	0.1347	0.0158	0.0158	0.0049	0.003	0.0136	0.0068	0.0068	0	0	0	0	17.01	0.560	99.440
1	11/08/2020 09:00	0.1232	0.015	0.0152	0.0047	0.0029	0.0126	0.0063	0.0063	0	0	0	0	16.95	0.521	99.479

EPNG Rio Vista

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	11/09/2020 09:00	0.1086	0.0148	0.015	0.0045	0.0028	0.0102	0.0051	0.0051	0	0	0	0	16.83	0.471	99.529
1	11/10/2020 09:00	0.1073	0.0141	0.0141	0.0043	0.0026	0.0098	0.0049	0.0049	0	0	0	0	16.88	0.457	99.543
1	11/11/2020 09:00	0.12	0.0149	0.0149	0.0045	0.0027	0.0102	0.0051	0.0051	0	0	0	0	16.95	0.497	99.503
1	11/12/2020 09:00	0.1169	0.0152	0.0152	0.0046	0.0028	0.0108	0.0054	0.0054	0	0	0	0	16.96	0.495	99.505
1	11/13/2020 09:00	0.1156	0.0149	0.0148	0.0045	0.0028	0.0112	0.0056	0.0056	0	0	0	0	16.95	0.491	99.509
1	11/14/2020 09:00	0.1179	0.0152	0.0152	0.0047	0.0028	0.0108	0.0054	0.0054	0	0	0	0	16.92	0.499	99.501
1	11/15/2020 09:00	0.1173	0.0159	0.0158	0.0048	0.0029	0.0112	0.0056	0.0056	0	0	0	0	16.85	0.507	99.493
1	11/16/2020 09:00	0.1136	0.0156	0.0157	0.0047	0.003	0.0116	0.0058	0.0058	0	0	0	0	16.90	0.496	99.504
1	11/17/2020 09:00	0.1159	0.016	0.016	0.0048	0.003	0.0126	0.0063	0.0063	0	0	0	0	16.95	0.509	99.491
1	11/18/2020 09:00	0.1328	0.0192	0.0188	0.0057	0.0036	0.0144	0.0072	0.0072	0	0	0	0	16.94	0.589	99.411
1	11/19/2020 09:00	0.1368	0.0202	0.0198	0.006	0.0038	0.0146	0.0073	0.0073	0	0	0	0	16.90	0.611	99.389
1	11/20/2020 09:00	0.1325	0.0199	0.0196	0.006	0.0038	0.0148	0.0074	0.0074	0	0	0	0	16.87	0.600	99.400
1	11/21/2020 09:00	0.1279	0.0193	0.019	0.0058	0.0037	0.0146	0.0073	0.0073	0	0	0	0	16.83	0.583	99.417
1	11/22/2020 09:00	0.1279	0.0191	0.019	0.0058	0.0035	0.0148	0.0074	0.0074	0	0	0	0	16.81	0.583	99.417
1	11/23/2020 09:00	0.1247	0.0186	0.0186	0.0056	0.0036	0.0148	0.0074	0.0074	0	0	0	0	16.78	0.572	99.428
1	11/24/2020 09:00	0.1159	0.0172	0.0172	0.0053	0.0033	0.013	0.0065	0.0065	0	0	0	0	16.82	0.526	99.474
1	11/25/2020 09:00	0.1078	0.016	0.0161	0.0048	0.003	0.0122	0.0061	0.0061	0	0	0	0	16.84	0.489	99.511
1	11/26/2020 09:00	0.1061	0.0159	0.0159	0.0048	0.003	0.0118	0.0059	0.0059	0	0	0	0	16.81	0.482	99.518
1	11/27/2020 09:00	0.1091	0.0158	0.0158	0.0048	0.003	0.0114	0.0057	0.0057	0	0	0	0	16.85	0.486	99.514
1	11/28/2020 09:00	0.112	0.0156	0.0156	0.0047	0.0029	0.0108	0.0054	0.0054	0	0	0	0	16.85	0.489	99.511
1	11/29/2020 09:00	0.1273	0.0175	0.0178	0.0053	0.0033	0.0112	0.0056	0.0056	0	0	0	0	16.81	0.550	99.450
1	11/30/2020 09:00	0.121	0.017	0.0173	0.0052	0.0032	0.011	0.0055	0.0055	0	0	0	0	16.81	0.528	99.472
1	12/01/2020 09:00	0.1155	0.0141	0.0147	0.0044	0.0026	0.0092	0.0046	0.0046	0	0	0	0	16.93	0.476	99.524
1	12/02/2020 09:00	0.1153	0.0135	0.0141	0.0041	0.0025	0.0082	0.0041	0.0041	0	0	0	0	16.98	0.464	99.536
1	12/03/2020 09:00	0.1182	0.0135	0.0139	0.004	0.0024	0.0086	0.0043	0.0043	0	0	0	0	16.97	0.472	99.528
1	12/04/2020 09:00	0.1775	0.0109	0.0119	0.0036	0.0023	0.009	0.0045	0.0045	0	0	0	0	17.00	0.609	99.391
1	12/05/2020 09:00	0.2474	0.008	0.0093	0.0029	0.0018	0.0092	0.0046	0.0046	0	0	0	0	17.04	0.766	99.234
1	12/06/2020 09:00	0.2365	0.0091	0.0102	0.0031	0.002	0.0096	0.0048	0.0048	0	0	0	0	17.03	0.749	99.251
1	12/07/2020 09:00	0.1399	0.0142	0.0144	0.0042	0.0026	0.0094	0.0047	0.0047	0	0	0	0	16.93	0.539	99.461
1	12/08/2020 09:00	0.1323	0.0146	0.0148	0.0043	0.0027	0.0108	0.0054	0.0054	0	0	0	0	16.92	0.531	99.469
1	12/09/2020 09:00	0.1201	0.0156	0.0157	0.0046	0.0028	0.0104	0.0052	0.0052	0	0	0	0	16.91	0.505	99.495
1	12/10/2020 09:00	0.1197	0.0161	0.0161	0.0047	0.0029	0.0122	0.0061	0.0061	0	0	0	0	16.90	0.518	99.482
1	12/11/2020 09:00	0.1155	0.0152	0.0154	0.0045	0.0028	0.0118	0.0059	0.0059	0	0	0	0	16.90	0.498	99.502
1	12/12/2020 09:00	0.1137	0.0138	0.014	0.0041	0.0025	0.0096	0.0048	0.0048	0	0	0	0	16.90	0.469	99.531
1	12/13/2020 09:00	0.113	0.0136	0.0136	0.0039	0.0024	0.008	0.004	0.004	0	0	0	0	16.89	0.456	99.544
1	12/14/2020 09:00	0.1092	0.0142	0.0144	0.0042	0.0025	0.009	0.0045	0.0045	0	0	0	0	16.88	0.458	99.542
1	12/15/2020 09:00	0.1144	0.0156	0.0157	0.0046	0.0028	0.009	0.0045	0.0045	0	0	0	0	16.88	0.484	99.516
1	12/16/2020 09:00	0.1123	0.0151	0.0154	0.0045	0.0027	0.0092	0.0046	0.0046	0	0	0	0	16.88	0.476	99.524
1	12/17/2020 09:00	0.1096	0.0144	0.0147	0.0043	0.0026	0.0104	0.0052	0.0052	0	0	0	0	16.90	0.469	99.531
1	12/18/2020 09:00	0.1075	0.0137	0.0138	0.004	0.0025	0.0096	0.0048	0.0048	0	0	0	0	16.92	0.451	99.549
1	12/19/2020 09:00	0.1042	0.0135	0.0135	0.0039	0.0024	0.0088	0.0044	0.0044	0	0	0	0	16.92	0.436	99.564
1	12/20/2020 09:00	0.1107	0.0133	0.0135	0.0039	0.0024	0.0086	0.0043	0.0043	0	0	0	0	16.92	0.451	99.549
1	12/21/2020 09:00	0.1055	0.0127	0.0129	0.0037	0.0022	0.0084	0.0042	0.0042	0	0	0	0	16.93	0.431	99.569
1	12/22/2020 09:00	0.1101	0.0134	0.0137	0.0039	0.0024	0.0092	0.0046	0.0046	0	0	0	0	16.93	0.454	99.546
1	12/23/2020 09:00	0.1099	0.0135	0.0137	0.0039	0.0024	0.0078	0.0039	0.0039	0	0	0	0	16.92	0.447	99.553
1	12/24/2020 09:00	0.1113	0.0133	0.0134	0.0038	0.0023	0.0072	0.0036	0.0036	0	0	0	0	16.93	0.444	99.556
1	12/25/2020 09:00	0.1155	0.0139	0.014	0.004	0.0025	0.0084	0.0042	0.0042	0	0	0	0	16.92	0.467	99.533
1	12/26/2020 09:00	0.1216	0.0149	0.0151	0.0043	0.0026	0.0086	0.0043	0.0043	0	0	0	0	16.90	0.494	99.506
1	12/27/2020 09:00	0.1178	0.0149	0.0151	0.0043	0.0026	0.0088	0.0044	0.0044	0	0	0	0	16.90	0.485	99.515
1	12/28/2020 09:00	0.113	0.0141	0.0142	0.0042	0.0025	0.01	0.005	0.005	0	0	0	0	16.90	0.472	99.528
1	12/29/2020 09:00	0.1138	0.0138	0.0138	0.004	0.0024	0.0088	0.0044	0.0044	0	0	0	0	16.91	0.464	99.536
1	12/30/2020 09:00	0.1152	0.0139	0.014	0.004	0.0025	0.0086	0.0043	0.0043	0	0	0	0	16.92	0.468	99.532
1	12/31/2020 09:00	0.1163	0.0139	0.0138	0.0041	0.0024	0.0088	0.0044	0.0044	0	0	0	0	16.94	0.470	99.530
1	01/01/2021 09:00	0.1218	0.0153	0.0147	0.0042	0.0026	0.008	0.004	0.004	0	0	0	0	16.92	0.490	99.510
1	01/02/2021 09:00	0.1214	0.0149	0.0141	0.004	0.0024	0.0078	0.0039	0.0039	0	0	0	0	16.92	0.483	99.517
1	01/03/2021 09:00	0.1147	0.0141	0.0135	0.0038	0.0023	0.0074	0.0037	0.0037	0	0	0	0	16.91	0.458	99.542
1	01/04/2021 09:00	0.1198	0.0147	0.0142	0.004	0.0024	0.0076	0.0038	0.0038	0	0	0	0	16.92	0.478	99.522
1	01/05/2021 09:00	0.1214	0.0151	0.0148	0.0042	0.0026	0.0082	0.0041	0.0041	0	0	0	0	16.92	0.490	99.510

EPNG Rio Vista

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	01/06/2021 09:00	0.1161	0.0148	0.0145	0.0042	0.0026	0.008	0.004	0.004	0	0	0	0	16.94	0.472	99.528
1	01/07/2021 09:00	0.1193	0.015	0.0148	0.0042	0.0026	0.008	0.004	0.004	0	0	0	0	16.97	0.482	99.518
1	01/08/2021 09:00	0.1233	0.0152	0.0151	0.0043	0.0027	0.0084	0.0042	0.0042	0	0	0	0	16.97	0.496	99.504
1	01/09/2021 09:00	0.1258	0.0156	0.0154	0.0044	0.0028	0.0084	0.0042	0.0042	0	0	0	0	16.96	0.507	99.493
1	01/10/2021 09:00	0.1263	0.0159	0.0156	0.0045	0.0028	0.0098	0.0049	0.0049	0	0	0	0	16.96	0.517	99.483
1	01/11/2021 09:00	0.127	0.0157	0.0155	0.0045	0.0027	0.0086	0.0043	0.0043	0	0	0	0	16.93	0.512	99.488
1	01/12/2021 09:00	0.1404	0.0163	0.0161	0.0046	0.0029	0.008	0.004	0.004	0	0	0	0	16.91	0.550	99.450
1	01/13/2021 09:00	0.1268	0.016	0.0161	0.0047	0.0029	0.0084	0.0042	0.0042	0	0	0	0	16.88	0.517	99.483
1	01/14/2021 09:00	0.1196	0.0156	0.0154	0.0047	0.0028	0.0094	0.0047	0.0047	0	0	0	0	16.89	0.499	99.501
1	01/15/2021 09:00	0.1217	0.0156	0.0154	0.0046	0.0029	0.01	0.005	0.005	0	0	0	0	16.89	0.508	99.492
1	01/16/2021 09:00	0.1222	0.0156	0.0155	0.0046	0.0029	0.0114	0.0057	0.0057	0	0	0	0	16.90	0.516	99.484
1	01/17/2021 09:00	0.1138	0.0156	0.0156	0.0048	0.0029	0.0108	0.0054	0.0054	0	0	0	0	16.91	0.492	99.508
1	01/18/2021 09:00	0.1273	0.0164	0.0164	0.0049	0.0031	0.012	0.006	0.006	0	0	0	0	16.93	0.540	99.460
1	01/19/2021 09:00	0.1621	0.0215	0.0207	0.0063	0.0039	0.0108	0.0054	0.0054	0	0	0	0	16.96	0.664	99.336
1	01/20/2021 09:00	0.1514	0.017	0.0172	0.0051	0.0032	0.0102	0.0051	0.0051	0	0	0	0	16.99	0.597	99.403
1	01/21/2021 09:00	0.1443	0.0157	0.0162	0.0048	0.003	0.01	0.005	0.005	0	0	0	0	16.99	0.568	99.432
1	01/22/2021 09:00	0.1304	0.0163	0.0166	0.0049	0.0031	0.012	0.006	0.006	0	0	0	0	16.92	0.548	99.452
1	01/23/2021 09:00	0.1337	0.0169	0.0173	0.0052	0.0032	0.0124	0.0062	0.0062	0	0	0	0	16.92	0.565	99.435
1	01/24/2021 09:00	0.1273	0.0165	0.0165	0.0049	0.003	0.0122	0.0061	0.0061	0	0	0	0	16.90	0.541	99.459
1	01/25/2021 09:00	0.1211	0.0161	0.0161	0.0048	0.003	0.012	0.006	0.006	0	0	0	0	16.87	0.522	99.478
1	01/26/2021 09:00	0.1222	0.0158	0.0156	0.0045	0.0027	0.0094	0.0047	0.0047	0	0	0	0	16.84	0.507	99.493
1	01/27/2021 09:00	0.119	0.0149	0.0148	0.0042	0.0025	0.0082	0.0041	0.0041	0	0	0	0	16.83	0.485	99.515
1	01/28/2021 09:00	0.114	0.0146	0.0144	0.0042	0.0026	0.0086	0.0043	0.0043	0	0	0	0	16.85	0.472	99.528
1	01/29/2021 09:00	0.1162	0.0151	0.0149	0.0044	0.0026	0.0104	0.0052	0.0052	0	0	0	0	16.88	0.490	99.510
1	01/30/2021 09:00	0.1152	0.0147	0.0146	0.0042	0.0026	0.0094	0.0047	0.0047	0	0	0	0	16.87	0.479	99.521
1	01/31/2021 09:00	0.1259	0.0152	0.0151	0.0043	0.0026	0.0088	0.0044	0.0044	0	0	0	0	16.88	0.508	99.492
1	02/01/2021 09:00	0.1321	0.0158	0.0157	0.0045	0.0027	0.0108	0.0054	0.0054	0	0	0	0	16.92	0.538	99.462
1	02/02/2021 09:00	0.124	0.0159	0.0161	0.0047	0.0029	0.0124	0.0062	0.0062	0	0	0	0	16.95	0.528	99.472
1	02/03/2021 09:00	0.1235	0.0159	0.0161	0.0048	0.0029	0.0128	0.0064	0.0064	0	0	0	0	16.96	0.529	99.471
1	02/04/2021 09:00	0.1228	0.0153	0.0154	0.0044	0.0027	0.01	0.005	0.005	0	0	0	0	16.92	0.507	99.493
1	02/05/2021 09:00	0.1028	0.0129	0.0136	0.0042	0.0027	0.0108	0.0054	0.0054	0	0	0	0	16.78	0.447	99.553
1	02/06/2021 09:00	0.0734	0.0094	0.0108	0.0036	0.0025	0.0114	0.0057	0.0057	0	0	0	0	16.60	0.351	99.649
1	02/07/2021 09:00	0.054	0.0071	0.0091	0.0032	0.0023	0.0118	0.0059	0.0059	0	0	0	0	16.48	0.287	99.713
1	02/08/2021 09:00	0.0433	0.0057	0.0079	0.0029	0.0021	0.0124	0.0062	0.0062	0	0	0	0	16.43	0.251	99.749
1	02/09/2021 09:00	0.0422	0.0049	0.0072	0.0027	0.0019	0.0128	0.0064	0.0064	0	0	0	0	16.42	0.244	99.756
1	02/10/2021 09:00	0.0793	0.0049	0.007	0.0025	0.0017	0.012	0.006	0.006	0	0	0	0	16.55	0.334	99.666
1	02/11/2021 09:00	0.1207	0.0052	0.0071	0.0025	0.0017	0.0122	0.0061	0.0061	0	0	0	0	16.66	0.444	99.556
1	02/12/2021 09:00	0.1626	0.0054	0.0071	0.0025	0.0018	0.012	0.006	0.006	0	0	0	0	16.78	0.551	99.449
1	02/13/2021 09:00	0.1881	0.0058	0.0072	0.0026	0.0019	0.0122	0.0061	0.0061	0	0	0	0	16.83	0.620	99.380
1	02/14/2021 09:00	0.3368	0.0256	0.0277	0.0068	0.0044	0.0142	0.0071	0.0071	0	0	0	0	16.94	1.180	98.820
1	02/15/2021 09:00	0.4161	0.0368	0.04	0.0093	0.0058	0.0164	0.0082	0.0082	0	0	0	0	17.01	1.488	98.512
1	02/16/2021 09:00	0.4087	0.0345	0.0358	0.0085	0.0053	0.0152	0.0076	0.0076	0	0	0	0	17.01	1.436	98.564
1	02/17/2021 09:00	0.5146	0.0456	0.0441	0.0102	0.0063	0.0156	0.0078	0.0078	0	0	0	0	17.09	1.782	98.218
1	02/18/2021 09:00	0.5158	0.0434	0.0415	0.0096	0.0059	0.0156	0.0078	0.0078	0	0	0	0	17.09	1.764	98.236
1	02/19/2021 09:00	0.5827	0.0471	0.0432	0.01	0.0062	0.0162	0.0081	0.0081	0	0	0	0	17.14	1.955	98.045
1	02/20/2021 09:00	0.5788	0.0372	0.0337	0.0072	0.0046	0.015	0.0075	0.0075	0	0	0	0	17.13	1.856	98.144
1	02/21/2021 09:00	0.42	0.0282	0.0258	0.0059	0.0038	0.0132	0.0066	0.0066	0	0	0	0	17.10	1.374	98.626
1	02/22/2021 09:00	0.2774	0.0233	0.0225	0.006	0.0039	0.0148	0.0074	0.0074	0	0	0	0	17.07	0.989	99.011
1	02/23/2021 09:00	0.2332	0.02	0.0195	0.0053	0.0034	0.0142	0.0071	0.0071	0	0	0	0	17.05	0.846	99.154
1	02/24/2021 09:00	0.3333	0.0239	0.0226	0.0056	0.0036	0.014	0.007	0.007	0	0	0	0	17.08	1.128	98.872
1	02/25/2021 09:00	0.3976	0.0236	0.022	0.0053	0.0034	0.0128	0.0064	0.0064	0	0	0	0	17.10	1.281	98.719
1	02/26/2021 09:00	0.4101	0.022	0.0205	0.0051	0.0034	0.0128	0.0064	0.0064	0	0	0	0	17.11	1.302	98.698
1	02/27/2021 09:00	0.425	0.0199	0.0186	0.0047	0.0032	0.0128	0.0064	0.0064	0	0	0	0	17.12	1.323	98.677
1	02/28/2021 09:00	0.2405	0.0175	0.017	0.0047	0.0031	0.0124	0.0062	0.0062	0	0	0	0	17.04	0.836	99.164
1	03/01/2021 09:00	0.1541	0.015	0.0149	0.0042	0.0026	0.0112	0.0056	0.0056	0	0	0	0	17.00	0.588	99.412
1	03/02/2021 09:00	0.174	0.0155	0.0153	0.0041	0.0027	0.0106	0.0053	0.0053	0	0	0	0	17.01	0.639	99.361
1	03/03/2021 09:00	0.1942	0.0161	0.0159	0.0044	0.0028	0.0122	0.0061	0.0061	0	0	0	0	17.02	0.705	99.295
1	03/04/2021 09:00	0.2119	0.0164	0.0164	0.0046	0.0031	0.0128	0.0064	0.0064	0	0	0	0	17.03	0.758	99.242

EPNG Rio Vista

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	03/05/2021 09:00	0.2666	0.0171	0.017	0.0048	0.0033	0.014	0.007	0.007	0	0	0	0	17.06	0.911	99.089
1	03/06/2021 09:00	0.286	0.0171	0.017	0.0047	0.0033	0.014	0.007	0.007	0	0	0	0	17.06	0.960	99.040
1	03/07/2021 09:00	0.2978	0.0175	0.0174	0.0049	0.0034	0.014	0.007	0.007	0	0	0	0	17.07	0.994	99.006
1	03/08/2021 09:00	0.3032	0.0176	0.0177	0.0051	0.0035	0.0146	0.0073	0.0073	0	0	0	0	17.07	1.013	98.987
1	03/09/2021 09:00	0.318	0.0177	0.0181	0.0053	0.0037	0.0146	0.0073	0.0073	0	0	0	0	17.08	1.055	98.945
1	03/10/2021 09:00	0.3282	0.0175	0.0179	0.0052	0.0035	0.0136	0.0068	0.0068	0	0	0	0	17.08	1.073	98.927
1	03/11/2021 09:00	0.3338	0.0174	0.0176	0.0051	0.0034	0.013	0.0065	0.0065	0	0	0	0	17.08	1.083	98.917
1	03/12/2021 09:00	0.337	0.0171	0.0176	0.005	0.0035	0.0128	0.0064	0.0064	0	0	0	0	17.08	1.089	98.911
1	03/13/2021 09:00	0.3384	0.0169	0.0173	0.005	0.0034	0.0122	0.0061	0.0061	0	0	0	0	17.08	1.087	98.913
1	03/14/2021 09:00	0.3392	0.0169	0.0173	0.0051	0.0035	0.0124	0.0062	0.0062	0	0	0	0	17.07	1.091	98.909
1	03/15/2021 09:00	0.3394	0.0168	0.0173	0.005	0.0035	0.0134	0.0067	0.0067	0	0	0	0	17.07	1.096	98.904
1	03/16/2021 09:00	0.3392	0.0166	0.0173	0.0052	0.0035	0.0134	0.0067	0.0067	0	0	0	0	17.07	1.096	98.904
1	03/17/2021 09:00	0.3377	0.0163	0.0172	0.0051	0.0035	0.0134	0.0067	0.0067	0	0	0	0	17.07	1.091	98.909
1	03/18/2021 09:00	0.3359	0.0163	0.0171	0.005	0.0035	0.0134	0.0067	0.0067	0	0	0	0	17.06	1.085	98.915
1	03/19/2021 09:00	0.3366	0.0164	0.0174	0.0053	0.0037	0.0142	0.0071	0.0071	0	0	0	0	17.06	1.095	98.905
1	03/20/2021 09:00	0.3349	0.0162	0.0174	0.0053	0.0038	0.0144	0.0072	0.0072	0	0	0	0	17.06	1.091	98.909
1	03/21/2021 09:00	0.3337	0.0162	0.0174	0.0054	0.0039	0.015	0.0075	0.0075	0	0	0	0	17.06	1.092	98.908
1	03/22/2021 09:00	0.3269	0.0156	0.0168	0.0052	0.0038	0.0142	0.0071	0.0071	0	0	0	0	17.05	1.066	98.934
1	03/23/2021 09:00	0.3187	0.0151	0.0163	0.005	0.0035	0.0134	0.0067	0.0067	0	0	0	0	17.04	1.036	98.964
1	03/24/2021 09:00	0.3109	0.0148	0.016	0.005	0.0035	0.0132	0.0066	0.0066	0	0	0	0	17.03	1.013	98.987
1	03/25/2021 09:00	0.3118	0.0147	0.016	0.005	0.0035	0.0134	0.0067	0.0067	0	0	0	0	17.03	1.016	98.984
1	03/26/2021 09:00	0.3124	0.0146	0.016	0.005	0.0036	0.0136	0.0068	0.0068	0	0	0	0	17.03	1.019	98.981
1	03/27/2021 09:00	0.3094	0.0143	0.0157	0.0049	0.0035	0.0132	0.0066	0.0066	0	0	0	0	17.03	1.006	98.994
1	03/28/2021 09:00	0.3079	0.0142	0.0156	0.0049	0.0036	0.0136	0.0068	0.0068	0	0	0	0	17.02	1.004	98.996
1	03/29/2021 09:00	0.3038	0.0143	0.0157	0.0051	0.0038	0.0146	0.0073	0.0073	0	0	0	0	17.02	1.001	98.999
1	03/30/2021 09:00	0.3036	0.0141	0.0158	0.0052	0.0039	0.0148	0.0074	0.0074	0	0	0	0	17.02	1.002	98.998
1	03/31/2021 09:00	0.2991	0.0135	0.0151	0.0049	0.0036	0.0108	0.0054	0.0054	0	0	0	0	17.02	0.964	99.036
1	04/01/2021 09:00	0.2162	0.0076	0.0101	0.0047	0.0032	0.016	0.008	0.008	0	0	0	0	16.88	0.741	99.259
1	04/02/2021 09:00	0.2056	0.0097	0.014	0.007	0.0055	0.0208	0.0104	0.0104	0	0	0	0	16.88	0.779	99.221
1	04/03/2021 09:00	0.1927	0.0069	0.0095	0.0043	0.0034	0.0158	0.0079	0.0079	0	0	0	0	16.86	0.674	99.326
1	04/04/2021 09:00	0.231	0.0085	0.0107	0.0047	0.0036	0.0154	0.0077	0.0077	0	0	0	0	16.89	0.783	99.217
1	04/05/2021 09:00	0.2017	0.0078	0.0111	0.0047	0.0033	0.015	0.0075	0.0075	0	0	0	0	16.87	0.703	99.297
1	04/06/2021 09:00	0.2077	0.0065	0.0092	0.0044	0.0028	0.0126	0.0063	0.0063	0	0	0	0	16.87	0.692	99.308
1	04/07/2021 09:00	0.2206	0.0074	0.0111	0.0058	0.0045	0.0196	0.0098	0.0098	0	0	0	0	16.89	0.784	99.216
1	04/08/2021 09:00	0.2168	0.0072	0.0095	0.0043	0.0029	0.0148	0.0074	0.0074	0	0	0	0	16.90	0.729	99.271
1	04/09/2021 09:00	0.232	0.0078	0.0103	0.0042	0.0026	0.0128	0.0064	0.0064	0	0	0	0	16.90	0.762	99.238
1	04/10/2021 09:00	0.246	0.0088	0.0134	0.0063	0.0049	0.0168	0.0084	0.0084	0	0	0	0	16.92	0.851	99.149
1	04/11/2021 09:00	0.2323	0.0065	0.0087	0.004	0.0031	0.0174	0.0087	0.0087	0	0	0	0	16.91	0.777	99.223
1	04/12/2021 09:00	0.2082	0.0063	0.0085	0.0039	0.0028	0.0158	0.0079	0.0079	0	0	0	0	16.87	0.705	99.295
1	04/13/2021 09:00	0.2515	0.0078	0.0118	0.0062	0.0047	0.0164	0.0082	0.0082	0	0	0	0	16.90	0.854	99.146
1	04/14/2021 09:00	0.2233	0.007	0.0091	0.0042	0.0032	0.0188	0.0094	0.0094	0	0	0	0	16.89	0.766	99.234
1	04/15/2021 09:00	0.221	0.0079	0.0106	0.0048	0.0031	0.0154	0.0077	0.0077	0	0	0	0	16.83	0.756	99.244
1	04/16/2021 09:00	0.2289	0.0073	0.0097	0.0043	0.003	0.0144	0.0072	0.0072	0	0	0	0	16.90	0.760	99.240
1	04/17/2021 09:00	0.2386	0.0072	0.0094	0.0038	0.0022	0.0128	0.0064	0.0064	0	0	0	0	16.90	0.770	99.230
1	04/18/2021 09:00	0.2203	0.0061	0.0082	0.0037	0.0025	0.0138	0.0069	0.0069	0	0	0	0	16.91	0.721	99.279
1	04/19/2021 09:00	0.2757	0.0132	0.0189	0.0085	0.0065	0.0216	0.0108	0.0108	0	0	0	0	16.97	1.000	99.000
1	04/20/2021 09:00	0.3715	0.034	0.0484	0.0186	0.0138	0.032	0.016	0.016	0	0	0	0	17.13	1.533	98.467
1	04/21/2021 09:00	0.5013	0.0622	0.0901	0.0351	0.0268	0.052	0.026	0.026	0	0	0	0	17.28	2.309	97.691
1	04/22/2021 09:00	0.3549	0.0333	0.0463	0.0177	0.0132	0.035	0.0175	0.0175	0	0	0	0	17.14	1.489	98.511
1	04/23/2021 09:00	0.2911	0.0159	0.0204	0.008	0.006	0.0216	0.0108	0.0108	0	0	0	0	17.09	1.043	98.957
1	04/24/2021 09:00	0.2794	0.0173	0.0243	0.0104	0.0086	0.0264	0.0132	0.0132	0	0	0	0	17.13	1.074	98.926
1	04/25/2021 09:00	0.2868	0.0128	0.0163	0.0068	0.0054	0.0198	0.0099	0.0099	0	0	0	0	17.11	0.989	99.011
1	04/26/2021 09:00	0.2971	0.0122	0.0166	0.0067	0.0048	0.0176	0.0088	0.0088	0	0	0	0	16.95	1.010	98.990
1	04/27/2021 09:00	0.2702	0.0096	0.0137	0.0067	0.005	0.0166	0.0083	0.0083	0	0	0	0	16.94	0.918	99.082
1	04/28/2021 09:00	0.3681	0.0098	0.011	0.0045	0.0035	0.0184	0.0092	0.0092	0	0	0	0	17.00	1.153	98.847
1	04/29/2021 09:00	0.3631	0.0124	0.0149	0.006	0.0045	0.0182	0.0091	0.0091	0	0	0	0	17.08	1.167	98.833
1	04/30/2021 09:00	0.3126	0.0087	0.0101	0.0044	0.0032	0.0166	0.0083	0.0083	0	0	0	0	16.94	0.995	99.005
1	05/01/2021 09:00	0.2808	0.0103	0.0137	0.0061	0.0049	0.0218	0.0109	0.0109	0	0	0	0	16.92	0.972	99.028

EPNG Rio Vista

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	05/02/2021 09:00	0.2509	0.0067	0.0082	0.0036	0.0023	0.0162	0.0081	0.0081	0	0	0	0	16.90	0.814	99.186
1	05/03/2021 09:00	0.2782	0.0082	0.0103	0.0045	0.0031	0.0144	0.0072	0.0072	0	0	0	0	16.94	0.893	99.107
1	05/04/2021 09:00	0.2946	0.0097	0.0136	0.0068	0.0054	0.0184	0.0092	0.0092	0	0	0	0	16.96	0.991	99.009
1	05/05/2021 09:00	0.2757	0.0086	0.011	0.0044	0.0032	0.0184	0.0092	0.0092	0	0	0	0	16.92	0.912	99.088
1	05/06/2021 09:00	0.1829	0.0066	0.0093	0.0046	0.003	0.017	0.0085	0.0085	0	0	0	0	16.80	0.655	99.345
1	05/07/2021 09:00	0.2188	0.0101	0.0147	0.0071	0.0051	0.0178	0.0089	0.0089	0	0	0	0	16.83	0.803	99.197
1	05/08/2021 09:00	0.1567	0.0066	0.0097	0.0049	0.0035	0.02	0.01	0.01	0	0	0	0	16.75	0.608	99.392
1	05/09/2021 09:00	0.0638	0.0055	0.0091	0.0042	0.003	0.0158	0.0079	0.0079	0	0	0	0	16.53	0.335	99.665
1	05/10/2021 09:00	0.0612	0.0066	0.0106	0.0051	0.0035	0.0158	0.0079	0.0079	0	0	0	0	16.52	0.344	99.656
1	05/11/2021 09:00	0.0888	0.0072	0.0117	0.0057	0.0043	0.02	0.01	0.01	0	0	0	0	16.64	0.448	99.552
1	05/12/2021 09:00	0.0707	0.0052	0.0091	0.0048	0.0033	0.016	0.008	0.008	0	0	0	0	16.59	0.356	99.644
1	05/13/2021 09:00	0.0686	0.006	0.011	0.0064	0.0053	0.022	0.011	0.011	0	0	0	0	16.58	0.407	99.593
1	05/14/2021 09:00	0.0702	0.0055	0.0086	0.004	0.0028	0.0174	0.0087	0.0087	0	0	0	0	16.57	0.356	99.644
1	05/15/2021 09:00	0.0568	0.0059	0.0103	0.0051	0.0039	0.017	0.0085	0.0085	0	0	0	0	16.54	0.336	99.664
1	05/16/2021 09:00	0.0634	0.0069	0.0117	0.0066	0.0052	0.0238	0.0119	0.0119	0	0	0	0	16.55	0.410	99.590
1	05/17/2021 09:00	0.0507	0.0057	0.0093	0.0043	0.0031	0.017	0.0085	0.0085	0	0	0	0	16.50	0.309	99.691
1	05/18/2021 09:00	0.0489	0.0053	0.0088	0.004	0.0027	0.0144	0.0072	0.0072	0	0	0	0	16.49	0.285	99.715
1	05/19/2021 09:00	0.0625	0.0086	0.0157	0.008	0.0065	0.0196	0.0098	0.0098	0	0	0	0	16.55	0.417	99.583
1	05/20/2021 09:00	0.063	0.0059	0.0093	0.0042	0.003	0.0132	0.0066	0.0066	0	0	0	0	16.55	0.321	99.679
1	05/21/2021 09:00	0.0539	0.005	0.0087	0.0048	0.0035	0.0134	0.0067	0.0067	0	0	0	0	16.53	0.298	99.702
1	05/22/2021 09:00	0.0674	0.0096	0.0156	0.0074	0.0055	0.0166	0.0083	0.0083	0	0	0	0	16.51	0.412	99.588
1	05/23/2021 09:00	0.0444	0.005	0.0087	0.0047	0.0034	0.0166	0.0083	0.0083	0	0	0	0	16.48	0.289	99.711
1	05/24/2021 09:00	0.2567	0.0396	0.0588	0.0218	0.0162	0.0328	0.0164	0.0164	0	0	0	0	16.71	1.353	98.647
1	05/25/2021 09:00	0.0679	0.0079	0.0133	0.0069	0.0058	0.0194	0.0097	0.0097	0	0	0	0	16.56	0.411	99.589
1	05/26/2021 09:00	0.0432	0.0048	0.0077	0.0038	0.0026	0.013	0.0065	0.0065	0	0	0	0	16.44	0.256	99.744
1	05/27/2021 09:00	0.1161	0.0169	0.0256	0.0103	0.0075	0.0194	0.0097	0.0097	0	0	0	0	16.55	0.637	99.363
1	05/28/2021 09:00	0.0558	0.0064	0.0103	0.0058	0.0045	0.0178	0.0089	0.0089	0	0	0	0	16.50	0.346	99.654
1	05/29/2021 09:00	0.0475	0.0048	0.0083	0.0045	0.0032	0.0134	0.0067	0.0067	0	0	0	0	16.48	0.277	99.723
1	05/30/2021 09:00	0.0617	0.0082	0.0138	0.0068	0.0052	0.0164	0.0082	0.0082	0	0	0	0	16.51	0.380	99.620
1	05/31/2021 09:00	0.0698	0.009	0.0139	0.0064	0.005	0.0184	0.0092	0.0092	0	0	0	0	16.49	0.414	99.586
1	06/01/2021 09:00	0.0438	0.005	0.0085	0.0046	0.0032	0.0136	0.0068	0.0068	0	0	0	0	16.46	0.270	99.730
1	06/02/2021 09:00	0.0547	0.0071	0.0116	0.005	0.0036	0.0148	0.0074	0.0074	0	0	0	0	16.47	0.328	99.672
1	06/03/2021 09:00	0.0482	0.0054	0.0097	0.007	0.0058	0.0222	0.0111	0.0111	0	0	0	0	16.50	0.354	99.646
1	06/04/2021 09:00	0.0481	0.0047	0.0077	0.0041	0.003	0.0162	0.0081	0.0081	0	0	0	0	16.50	0.288	99.712
1	06/05/2021 09:00	0.0458	0.0049	0.0084	0.0046	0.0035	0.016	0.008	0.008	0	0	0	0	16.48	0.289	99.711
1	06/06/2021 09:00	0.0429	0.005	0.0086	0.0047	0.0032	0.0168	0.0084	0.0084	0	0	0	0	16.46	0.286	99.714
1	06/07/2021 09:00	0.0652	0.0057	0.0088	0.0039	0.0027	0.011	0.0055	0.0055	0	0	0	0	16.50	0.312	99.688
1	06/08/2021 09:00	0.0521	0.0061	0.0103	0.0055	0.0042	0.017	0.0085	0.0085	0	0	0	0	16.48	0.329	99.671
1	06/09/2021 09:00	0.0594	0.0063	0.01	0.0048	0.0037	0.0144	0.0072	0.0072	0	0	0	0	16.52	0.328	99.672
1	06/10/2021 09:00	0.0442	0.0054	0.0092	0.0044	0.0032	0.0122	0.0061	0.0061	0	0	0	0	16.47	0.267	99.733
1	06/11/2021 09:00	0.0453	0.0061	0.0099	0.0043	0.0031	0.0126	0.0063	0.0063	0	0	0	0	16.46	0.276	99.724
1	06/12/2021 09:00	0.0686	0.0098	0.0162	0.0081	0.0067	0.0196	0.0098	0.0098	0	0	0	0	16.50	0.442	99.558
1	06/13/2021 09:00	0.0737	0.0068	0.0108	0.0053	0.004	0.0148	0.0074	0.0074	0	0	0	0	16.52	0.376	99.624
1	06/14/2021 09:00	0.0557	0.0059	0.0098	0.0041	0.0029	0.013	0.0065	0.0065	0	0	0	0	16.52	0.302	99.698
1	06/15/2021 09:00	0.0875	0.0059	0.0085	0.0037	0.0028	0.0132	0.0066	0.0066	0	0	0	0	16.56	0.381	99.619
1	06/16/2021 09:00	0.0748	0.0099	0.0161	0.0076	0.0061	0.0176	0.0088	0.0088	0	0	0	0	16.55	0.442	99.558
1	06/17/2021 09:00	0.0633	0.0065	0.01	0.0046	0.0036	0.0184	0.0092	0.0092	0	0	0	0	16.52	0.359	99.641
1	06/18/2021 09:00	0.0687	0.0052	0.008	0.0036	0.0026	0.013	0.0065	0.0065	0	0	0	0	16.58	0.324	99.676
1	06/19/2021 09:00	0.161	0.022	0.0345	0.0143	0.0108	0.0264	0.0132	0.0132	0	0	0	0	16.71	0.866	99.134
1	06/20/2021 09:00	0.1337	0.0195	0.0301	0.012	0.0092	0.0284	0.0142	0.0142	0	0	0	0	16.62	0.767	99.233
1	06/21/2021 09:00	0.1933	0.029	0.0429	0.0162	0.0122	0.0296	0.0148	0.0148	0	0	0	0	16.66	1.039	98.961
1	06/22/2021 09:00	0.0957	0.0127	0.0203	0.0095	0.0078	0.0244	0.0122	0.0122	0	0	0	0	16.58	0.572	99.428
1	06/23/2021 09:00	0.0513	0.0064	0.011	0.0052	0.0039	0.016	0.008	0.008	0	0	0	0	16.47	0.322	99.678
1	06/24/2021 09:00	0.0648	0.0072	0.0109	0.0043	0.0031	0.0148	0.0074	0.0074	0	0	0	0	16.49	0.347	99.653
1	06/25/2021 09:00	0.0427	0.0057	0.0103	0.0061	0.0047	0.021	0.0105	0.0105	0	0	0	0	16.45	0.328	99.672
1	06/26/2021 09:00	0.0413	0.0051	0.0084	0.0045	0.0033	0.0152	0.0076	0.0076	0	0	0	0	16.42	0.273	99.727
1	06/27/2021 09:00	0.0559	0.0081	0.0128	0.0056	0.0041	0.0166	0.0083	0.0083	0	0	0	0	16.41	0.354	99.646
1	06/28/2021 09:00	0.0789	0.0132	0.0201	0.0079	0.0062	0.0182	0.0091	0.0091	0	0	0	0	16.41	0.488	99.512

EPNG Rio Vista

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	06/29/2021 09:00	0.0547	0.0093	0.0154	0.0084	0.0068	0.0234	0.0117	0.0117	0	0	0	0	16.40	0.425	99.575
1	06/30/2021 09:00	0.0882	0.0142	0.0226	0.0096	0.0075	0.0218	0.0109	0.0109	0	0	0	0	16.47	0.555	99.445
1	07/01/2021 09:00	0.1047	0.0077	0.011	0.0044	0.0034	0.0162	0.0081	0.0081	0	0	0	0	16.57	0.462	99.538
1	07/02/2021 09:00	0.1329	0.0207	0.0333	0.0141	0.0112	0.0298	0.0149	0.0149	0	0	0	0	16.60	0.807	99.193
1	07/03/2021 09:00	0.0626	0.0067	0.0103	0.0044	0.0036	0.02	0.01	0.01	0	0	0	0	16.52	0.366	99.634
1	07/04/2021 09:00	0.0598	0.0066	0.01	0.0044	0.0035	0.017	0.0085	0.0085	0	0	0	0	16.50	0.342	99.658
1	07/05/2021 09:00	0.0773	0.0105	0.0161	0.0071	0.0056	0.019	0.0095	0.0095	0	0	0	0	16.50	0.455	99.545
1	07/06/2021 09:00	0.0573	0.0058	0.01	0.0053	0.0043	0.0222	0.0111	0.0111	0	0	0	0	16.52	0.366	99.634
1	07/07/2021 09:00	0.068	0.009	0.0143	0.0061	0.0045	0.0196	0.0098	0.0098	0	0	0	0	16.49	0.413	99.587
1	07/08/2021 09:00	0.0899	0.0119	0.0182	0.0086	0.0068	0.0218	0.0109	0.0109	0	0	0	0	16.52	0.527	99.473
1	07/09/2021 09:00	0.0617	0.008	0.0126	0.0059	0.0047	0.0234	0.0117	0.0117	0	0	0	0	16.48	0.407	99.593
1	07/10/2021 09:00	0.1004	0.0113	0.0169	0.007	0.0056	0.0206	0.0103	0.0103	0	0	0	0	16.55	0.529	99.471
1	07/11/2021 09:00	0.0606	0.0068	0.0106	0.0044	0.0034	0.0176	0.0088	0.0088	0	0	0	0	16.50	0.349	99.651
1	07/12/2021 09:00	0.0701	0.0072	0.0117	0.0062	0.005	0.0222	0.0111	0.0111	0	0	0	0	16.54	0.418	99.582
1	07/13/2021 09:00	0.069	0.0088	0.0137	0.0058	0.0043	0.0204	0.0102	0.0102	0	0	0	0	16.53	0.414	99.586
1	07/14/2021 09:00	0.0438	0.0056	0.0096	0.0044	0.0031	0.0172	0.0086	0.0086	0	0	0	0	16.44	0.294	99.706
1	07/15/2021 09:00	0.0518	0.0074	0.0126	0.0068	0.0055	0.0242	0.0121	0.0121	0	0	0	0	16.44	0.390	99.610
														Annual Average =	0.633	99.367

EPNG Washington Ranch

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	07/16/2020 09:00	0.1081	0.0017	0.003	0	0	0	0	0	0	0	0	0	16.81	0.300	99.700
1	07/17/2020 09:00	0.108	0.0017	0.003	0	0	0	0	0	0	0	0	0	16.81	0.300	99.700
1	07/18/2020 09:00	0.1069	0.0017	0.0029	0	0	0	0	0	0	0	0	0	16.81	0.296	99.704
1	07/19/2020 09:00	0.1086	0.0017	0.003	0	0	0	0	0	0	0	0	0	16.82	0.301	99.699
1	07/20/2020 09:00	0.0925	0.0018	0.0034	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.72	0.266	99.734
1	07/21/2020 09:00	0.0876	0.0019	0.0037	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.66	0.256	99.744
1	07/22/2020 09:00	0.1421	0.0026	0.0038	0	0	0	0	0	0	0	0	0	16.78	0.396	99.604
1	07/23/2020 09:00	0.0776	0.0018	0.0039	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.55	0.228	99.772
1	07/24/2020 09:00	0.0845	0.0013	0.0028	0	0	0	0	0	0	0	0	0	16.60	0.239	99.761
1	07/25/2020 09:00	0.0805	0.0006	0.001	0	0	0	0	0	0	0	0	0	16.62	0.219	99.781
1	07/26/2020 09:00	0.0786	0.0015	0.0029	0	0	0	0	0	0	0	0	0	16.61	0.224	99.776
1	07/27/2020 09:00	0.0824	0.0015	0.0029	0	0	0	0	0	0	0	0	0	16.59	0.234	99.766
1	07/28/2020 09:00	0.0802	0.0014	0.0026	0	0	0	0	0	0	0	0	0	16.61	0.227	99.773
1	07/29/2020 09:00	0.0813	0.0013	0.0023	0	0	0	0	0	0	0	0	0	16.61	0.228	99.772
1	07/30/2020 09:00	0.1002	0.0017	0.0028	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.70	0.281	99.719
1	07/31/2020 09:00	0.1227	0.0024	0.0038	0	0	0	0	0	0	0	0	0	16.71	0.345	99.655
1	08/01/2020 09:00	0.1854	0.0032	0.0043	0	0	0.0004	0.0002	0.0002	0	0	0	0	17.12	0.505	99.495
1	08/02/2020 09:00	0.2026	0.0035	0.0049	0	0	0.0001	0	0	0	0	0	0	17.20	0.548	99.452
1	08/03/2020 09:00	0.1671	0.0029	0.0042	0	0	0	0	0	0	0	0	0	17.01	0.457	99.543
1	08/04/2020 09:00	0.1213	0.0023	0.0036	0	0	0	0	0	0	0	0	0	16.75	0.340	99.660
1	08/05/2020 09:00	0.1923	0.0028	0.0037	0	0	0	0	0	0	0	0	0	17.17	0.516	99.484
1	08/06/2020 09:00	0.1833	0.0029	0.0041	0	0	0	0	0	0	0	0	0	17.23	0.493	99.507
1	08/07/2020 09:00	0.1696	0.0022	0.003	0	0	0	0	0	0	0	0	0	17.26	0.451	99.549
1	08/08/2020 09:00	0.162	0.002	0.0024	0	0	0	0	0	0	0	0	0	17.24	0.429	99.571
1	08/09/2020 09:00	0.1757	0.0025	0.0036	0	0	0	0	0	0	0	0	0	17.24	0.470	99.530
1	08/10/2020 09:00	0.1753	0.0024	0.0032	0	0	0	0	0	0	0	0	0	17.28	0.466	99.534
1	08/11/2020 09:00	0.19	0.0025	0.0032	0	0	0.0001	0	0	0	0	0	0	17.30	0.504	99.496
1	08/12/2020 09:00	0.1775	0.0024	0.0033	0	0	0.0002	0.0001	0.0001	0	0	0	0	17.26	0.474	99.526
1	08/13/2020 09:00	0.1742	0.0025	0.0034	0	0	0.0002	0.0001	0.0001	0	0	0	0	17.24	0.467	99.533
1	08/14/2020 09:00	0.1719	0.0024	0.0034	0	0	0.0001	0	0	0	0	0	0	17.23	0.460	99.540
1	08/15/2020 09:00	0.1645	0.0023	0.0033	0	0	0.0001	0	0	0	0	0	0	17.18	0.442	99.558
1	08/16/2020 09:00	0.1625	0.0023	0.0032	0	0	0	0	0	0	0	0	0	17.17	0.436	99.564
1	08/17/2020 09:00	0.1573	0.0023	0.0034	0	0	0	0	0	0	0	0	0	17.12	0.425	99.575
1	08/18/2020 09:00	0.1408	0.0027	0.0046	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.93	0.398	99.602
1	08/19/2020 09:00	0.1381	0.0029	0.005	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.89	0.396	99.604
1	08/20/2020 09:00	0.1382	0.0029	0.005	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.89	0.395	99.605
1	08/21/2020 09:00	0.138	0.0029	0.0049	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.89	0.394	99.606
1	08/22/2020 09:00	0.1382	0.0029	0.005	0	0	0.001	0.0005	0.0005	0	0	0	0	16.89	0.393	99.607
1	08/23/2020 09:00	0.1347	0.0028	0.0048	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.87	0.384	99.616
1	08/24/2020 09:00	0.1264	0.0026	0.0045	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.83	0.363	99.637
1	08/25/2020 09:00	0.1246	0.0026	0.0045	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.82	0.359	99.641
1	08/26/2020 09:00	0.1245	0.0026	0.0045	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.82	0.359	99.641
1	08/27/2020 09:00	0.1244	0.0026	0.0044	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.82	0.358	99.642
1	08/28/2020 09:00	0.1511	0.0024	0.0033	0	0	0.0004	0.0002	0.0002	0	0	0	0	17.03	0.413	99.587
1	08/29/2020 09:00	0.2117	0.0027	0.0032	0	0	0.0002	0.0001	0.0001	0	0	0	0	17.25	0.562	99.438
1	08/30/2020 09:00	0.1667	0.0025	0.0031	0	0	0	0	0	0	0	0	0	17.10	0.449	99.551
1	08/31/2020 09:00	0.0804	0.0012	0.0024	0	0	0	0	0	0	0	0	0	16.63	0.226	99.774
1	09/01/2020 09:00	0.0676	0.001	0.0027	0	0	0	0	0	0	0	0	0	16.55	0.193	99.807
1	09/02/2020 09:00	0.0904	0.0017	0.0034	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.60	0.262	99.738
1	09/03/2020 09:00	0.0914	0.0017	0.0033	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.64	0.261	99.739
1	09/04/2020 09:00	0.0939	0.0017	0.0029	0	0	0	0	0	0	0	0	0	16.68	0.264	99.736
1	09/05/2020 09:00	0.0945	0.0017	0.0029	0	0	0	0	0	0	0	0	0	16.68	0.266	99.734
1	09/06/2020 09:00	0.0569	0.0002	0.0011	0	0	0.0001	0	0	0	0	0	0	16.52	0.157	99.843
1	09/07/2020 09:00	0.0558	0.0002	0.0012	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.51	0.155	99.845
1	09/08/2020 09:00	0.061	0.0003	0.0012	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.51	0.170	99.830

EPNG Washington Ranch

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	09/09/2020 09:00	0.0699	0.0009	0.0023	0	0	0.001	0.0005	0.0005	0	0	0	0	16.53	0.203	99.797
1	09/10/2020 09:00	0.0763	0.002	0.0045	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.55	0.232	99.768
1	09/11/2020 09:00	0.0815	0.0026	0.0054	0	0	0	0	0	0	0	0	0	16.56	0.245	99.755
1	09/12/2020 09:00	0.0792	0.0025	0.0054	0	0	0	0	0	0	0	0	0	16.55	0.239	99.761
1	09/13/2020 09:00	0.0541	0.0008	0.0024	0	0	0	0	0	0	0	0	0	16.49	0.156	99.844
1	09/14/2020 09:00	0.0618	0.0012	0.0029	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.50	0.181	99.819
1	09/15/2020 09:00	0.0653	0.0013	0.0027	0	0	0	0	0	0	0	0	0	16.52	0.188	99.812
1	09/16/2020 09:00	0.0717	0.0014	0.0028	0	0	0	0	0	0	0	0	0	16.56	0.206	99.794
1	09/17/2020 09:00	0.0805	0.0014	0.0026	0	0	0	0	0	0	0	0	0	16.61	0.228	99.772
1	09/18/2020 09:00	0.0856	0.0015	0.0026	0	0	0	0	0	0	0	0	0	16.64	0.241	99.759
1	09/19/2020 09:00	0.087	0.0015	0.0026	0	0	0	0	0	0	0	0	0	16.65	0.245	99.755
1	09/20/2020 09:00	0.0871	0.0015	0.0026	0	0	0	0	0	0	0	0	0	16.65	0.245	99.755
1	09/21/2020 09:00	0.0857	0.0015	0.0026	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.64	0.243	99.757
1	09/22/2020 09:00	0.085	0.0015	0.0026	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.64	0.242	99.758
1	09/23/2020 09:00	0.0851	0.0015	0.0026	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.64	0.241	99.759
1	09/24/2020 09:00	0.0873	0.0015	0.0026	0	0	0	0	0	0	0	0	0	16.65	0.246	99.754
1	09/25/2020 09:00	0.0914	0.0011	0.0021	0	0	0	0	0	0	0	0	0	16.59	0.254	99.746
1	09/26/2020 09:00	0.099	0.0014	0.0022	0	0	0	0	0	0	0	0	0	16.59	0.276	99.724
1	09/27/2020 09:00	0.118	0.0021	0.0032	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.63	0.333	99.667
1	09/28/2020 09:00	0.091	0.0014	0.0023	0.0001	0	0.001	0.0005	0.0005	0	0	0	0	16.53	0.261	99.739
1	09/29/2020 09:00	0.0764	0.0009	0.0016	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.52	0.215	99.785
1	09/30/2020 09:00	0.0893	0.0021	0.0037	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.55	0.261	99.739
1	10/01/2020 09:00	0.1312	0.0022	0.0037	0.0001	0.0001	0.0012	0.0006	0.0006	0	0	0	0	16.92	0.369	99.631
1	10/02/2020 09:00	0.1815	0.0037	0.0063	0.0006	0.0006	0.0012	0.0006	0.0006	0	0	0	0	17.22	0.510	99.490
1	10/03/2020 09:00	0.1762	0.0042	0.0076	0.0011	0.0011	0.0016	0.0008	0.0008	0	0	0	0	17.23	0.508	99.492
1	10/04/2020 09:00	0.1503	0.0035	0.0062	0.0005	0.0006	0.0014	0.0007	0.0007	0	0	0	0	17.18	0.430	99.570
1	10/05/2020 09:00	0.2059	0.0063	0.0119	0.0017	0.0018	0.0024	0.0012	0.0012	0	0	0	0	17.31	0.612	99.388
1	10/06/2020 09:00	0.2155	0.0093	0.0187	0.0031	0.0033	0.0042	0.0021	0.0021	0	0	0	0	17.23	0.694	99.306
1	10/07/2020 09:00	0.2274	0.0071	0.0136	0.002	0.0022	0.0028	0.0014	0.0014	0	0	0	0	17.27	0.682	99.318
1	10/08/2020 09:00	0.2178	0.004	0.0067	0.0005	0.0006	0.001	0.0005	0.0005	0	0	0	0	17.30	0.601	99.399
1	10/09/2020 09:00	0.2159	0.0056	0.0104	0.0013	0.0014	0.0018	0.0009	0.0009	0	0	0	0	17.30	0.624	99.376
1	10/10/2020 09:00	0.2708	0.0118	0.0238	0.0042	0.0046	0.0056	0.0028	0.0028	0	0	0	0	17.38	0.870	99.130
1	10/11/2020 09:00	0.2258	0.0094	0.0195	0.0034	0.0036	0.0048	0.0024	0.0024	0	0	0	0	17.32	0.725	99.275
1	10/12/2020 09:00	0.1619	0.002	0.0023	0.0001	0.0001	0.0004	0.0002	0.0002	0	0	0	0	17.23	0.432	99.568
1	10/13/2020 09:00	0.2443	0.0032	0.0033	0	0	0.0002	0.0001	0.0001	0	0	0	0	17.39	0.642	99.358
1	10/14/2020 09:00	0.1995	0.0018	0.0012	0	0	0.0001	0	0	0	0	0	0	17.37	0.517	99.483
1	10/15/2020 09:00	0.1748	0.0018	0.0018	0	0	0	0	0	0	0	0	0	17.26	0.459	99.541
1	10/16/2020 09:00	0.1594	0.0016	0.0013	0	0	0.0002	0.0001	0.0001	0	0	0	0	17.29	0.417	99.583
1	10/17/2020 09:00	0.2202	0.003	0.0036	0.0002	0.0003	0.0004	0.0002	0.0002	0	0	0	0	17.49	0.581	99.419
1	10/18/2020 09:00	0.1883	0.0029	0.0038	0.0004	0.0004	0.0008	0.0004	0.0004	0	0	0	0	17.37	0.508	99.492
1	10/19/2020 09:00	0.1603	0.0015	0.001	0	0	0.0001	0	0	0	0	0	0	17.24	0.419	99.581
1	10/20/2020 09:00	0.074	0.0028	0.0062	0.0011	0.0012	0.0018	0.0009	0.0009	0	0	0	0	16.66	0.247	99.753
1	10/21/2020 09:00	0.1161	0.0078	0.0172	0.003	0.0032	0.004	0.002	0.002	0	0	0	0	16.62	0.443	99.557
1	10/22/2020 09:00	0.3721	0.0431	0.0981	0.0209	0.0233	0.0226	0.0113	0.0113	0	0	0	0	16.79	1.772	98.228
1	10/23/2020 09:00	0.2814	0.0324	0.0739	0.0156	0.0174	0.0168	0.0084	0.0084	0	0	0	0	16.68	1.344	98.656
1	10/24/2020 09:00	0.0641	0.0017	0.0032	0	0	0.0001	0	0	0	0	0	0	16.51	0.189	99.811
1	10/25/2020 09:00	0.0616	0.0017	0.0033	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.55	0.185	99.815
1	10/26/2020 09:00	0.0544	0.0008	0.0016	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.47	0.156	99.844
1	10/27/2020 09:00	0.1107	0.0073	0.016	0.0025	0.0026	0.0042	0.0021	0.0021	0	0	0	0	16.60	0.420	99.580
1	10/28/2020 09:00	0.1795	0.0094	0.0199	0.0037	0.004	0.0048	0.0024	0.0024	0	0	0	0	16.98	0.623	99.377
1	10/29/2020 09:00	0.1169	0.0027	0.0052	0.0006	0.0007	0.0008	0.0004	0.0004	0	0	0	0	16.78	0.344	99.656
1	10/30/2020 09:00	0.1081	0.0041	0.0085	0.0011	0.0011	0.0014	0.0007	0.0007	0	0	0	0	16.65	0.347	99.653
1	10/31/2020 09:00	0.1373	0.0088	0.0188	0.0035	0.0038	0.0044	0.0022	0.0022	0	0	0	0	16.67	0.514	99.486
1	11/01/2020 09:00	0.1508	0.0123	0.0265	0.0053	0.0056	0.0072	0.0036	0.0036	0	0	0	0	16.67	0.619	99.381
1	11/02/2020 09:00	0.1408	0.0091	0.0182	0.0029	0.003	0.0042	0.0021	0.0021	0	0	0	0	16.64	0.516	99.484

EPNG Washington Ranch

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	11/03/2020 09:00	0.0909	0.0018	0.0032	0	0	0.002	0.001	0.001	0	0	0	0	16.59	0.270	99.730
1	11/04/2020 09:00	0.1195	0.0064	0.0124	0.0006	0.0004	0.003	0.0015	0.0015	0	0	0	0	16.61	0.403	99.597
1	11/05/2020 09:00	0.0688	0.0015	0.0031	0	0	0.0026	0.0013	0.0013	0	0	0	0	16.56	0.213	99.787
1	11/06/2020 09:00	0.0772	0.0027	0.0044	0	0	0.0024	0.0012	0.0012	0	0	0	0	16.53	0.243	99.757
1	11/07/2020 09:00	0.0644	0.0001	0.0012	0	0	0.0022	0.0011	0.0011	0	0	0	0	16.56	0.187	99.813
1	11/08/2020 09:00	0.0673	0.0002	0.0017	0	0	0.002	0.001	0.001	0	0	0	0	16.58	0.196	99.804
1	11/09/2020 09:00	0.0664	0.0002	0.0013	0	0	0.0022	0.0011	0.0011	0	0	0	0	16.58	0.193	99.807
1	11/10/2020 09:00	0.0681	0.0005	0.0012	0	0	0.0026	0.0013	0.0013	0	0	0	0	16.59	0.200	99.800
1	11/11/2020 09:00	0.0715	0.0009	0.0022	0	0	0.0026	0.0013	0.0013	0	0	0	0	16.60	0.214	99.786
1	11/12/2020 09:00	0.0801	0.002	0.0038	0	0	0.003	0.0015	0.0015	0	0	0	0	16.61	0.249	99.751
1	11/13/2020 09:00	0.0836	0.0024	0.0045	0	0	0.0028	0.0014	0.0014	0	0	0	0	16.61	0.261	99.739
1	11/14/2020 09:00	0.0844	0.0024	0.0046	0	0	0.0028	0.0014	0.0014	0	0	0	0	16.61	0.263	99.737
1	11/15/2020 09:00	0.0845	0.0025	0.0047	0	0	0.003	0.0015	0.0015	0	0	0	0	16.61	0.265	99.735
1	11/16/2020 09:00	0.0845	0.0025	0.0047	0	0	0.003	0.0015	0.0015	0	0	0	0	16.61	0.265	99.735
1	11/17/2020 09:00	0.0845	0.0025	0.0047	0	0	0.003	0.0015	0.0015	0	0	0	0	16.61	0.265	99.735
1	11/18/2020 09:00	0.0623	0.0012	0.0024	0	0	0.0026	0.0013	0.0013	0	0	0	0	16.54	0.192	99.808
1	11/19/2020 09:00	0.0648	0.0013	0.0024	0	0	0.0026	0.0013	0.0013	0	0	0	0	16.56	0.199	99.801
1	11/20/2020 09:00	0.0604	0.0007	0.0013	0	0	0.0024	0.0012	0.0012	0	0	0	0	16.55	0.180	99.820
1	11/21/2020 09:00	0.0785	0.0018	0.0024	0	0	0.0024	0.0012	0.0012	0	0	0	0	16.52	0.237	99.763
1	11/22/2020 09:00	0.0796	0.0022	0.003	0	0	0.002	0.001	0.001	0	0	0	0	16.51	0.241	99.759
1	11/23/2020 09:00	0.0579	0	0	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.52	0.161	99.839
1	11/24/2020 09:00	0.0661	0.0011	0.0017	0	0	0.0024	0.0012	0.0012	0	0	0	0	16.52	0.199	99.801
1	11/25/2020 09:00	0.068	0.0014	0.002	0	0	0.0026	0.0013	0.0013	0	0	0	0	16.54	0.207	99.793
1	11/26/2020 09:00	0.0676	0.0014	0.002	0	0	0.0026	0.0013	0.0013	0	0	0	0	16.54	0.206	99.794
1	11/27/2020 09:00	0.0675	0.0014	0.002	0	0	0.0024	0.0012	0.0012	0	0	0	0	16.54	0.204	99.796
1	11/28/2020 09:00	0.07	0.0016	0.0028	0	0	0.0026	0.0013	0.0013	0	0	0	0	16.57	0.215	99.785
1	11/29/2020 09:00	0.0831	0.0026	0.0048	0	0	0.0028	0.0014	0.0014	0	0	0	0	16.61	0.261	99.739
1	11/30/2020 09:00	0.1019	0.0038	0.0073	0	0	0.0034	0.0017	0.0017	0	0	0	0	16.66	0.326	99.674
1	12/01/2020 09:00	0.1229	0.0049	0.0095	0.0001	0	0.004	0.002	0.002	0	0	0	0	16.74	0.395	99.605
1	12/02/2020 09:00	0.1325	0.0051	0.01	0.0003	0.0001	0.0038	0.0019	0.0019	0	0	0	0	16.79	0.421	99.579
1	12/03/2020 09:00	0.141	0.0051	0.0099	0.0002	0.0001	0.004	0.002	0.002	0	0	0	0	16.84	0.443	99.557
1	12/04/2020 09:00	0.1525	0.0052	0.01	0.0001	0	0.0042	0.0021	0.0021	0	0	0	0	16.88	0.472	99.528
1	12/05/2020 09:00	0.1573	0.0054	0.0104	0.001	0.0001	0.0044	0.0022	0.0022	0	0	0	0	16.89	0.492	99.508
1	12/06/2020 09:00	0.1567	0.0055	0.0105	0.0011	0	0.0046	0.0023	0.0023	0	0	0	0	16.89	0.493	99.507
1	12/07/2020 09:00	0.1568	0.0057	0.011	0.0014	0.0008	0.0046	0.0023	0.0023	0	0	0	0	16.88	0.500	99.500
1	12/08/2020 09:00	0.1616	0.0052	0.0098	0	0	0.0044	0.0022	0.0022	0	0	0	0	16.94	0.494	99.506
1	12/09/2020 09:00	0.1642	0.0051	0.0097	0	0	0.0044	0.0022	0.0022	0	0	0	0	16.95	0.500	99.500
1	12/10/2020 09:00	0.1562	0.0035	0.006	0.0001	0.0001	0.0034	0.0017	0.0017	0	0	0	0	17.10	0.453	99.547
1	12/11/2020 09:00	0.1367	0.0016	0.0022	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.24	0.375	99.625
1	12/12/2020 09:00	0.1443	0.0017	0.0021	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.26	0.393	99.607
1	12/13/2020 09:00	0.1328	0.0016	0.002	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.24	0.363	99.637
1	12/14/2020 09:00	0.1381	0.002	0.0027	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.22	0.381	99.619
1	12/15/2020 09:00	0.1485	0.0029	0.0048	0	0	0.003	0.0015	0.0015	0	0	0	0	17.16	0.423	99.577
1	12/16/2020 09:00	0.1519	0.0035	0.0062	0	0	0.0034	0.0017	0.0017	0	0	0	0	17.10	0.442	99.558
1	12/17/2020 09:00	0.1572	0.0042	0.0078	0	0	0.0036	0.0018	0.0018	0	0	0	0	17.04	0.466	99.534
1	12/18/2020 09:00	0.1428	0.0015	0.0017	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.26	0.387	99.613
1	12/19/2020 09:00	0.159	0.0015	0.0014	0	0	0.002	0.001	0.001	0	0	0	0	17.32	0.424	99.576
1	12/20/2020 09:00	0.1505	0.0017	0.0017	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.29	0.406	99.594
1	12/21/2020 09:00	0.1513	0.0016	0.0016	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.28	0.408	99.592
1	12/22/2020 09:00	0.1515	0.0016	0.0018	0	0.0001	0.0022	0.0011	0.0011	0	0	0	0	17.28	0.409	99.591
1	12/23/2020 09:00	0.1533	0.0016	0.0017	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.31	0.413	99.587
1	12/24/2020 09:00	0.1557	0.002	0.0025	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.28	0.424	99.576
1	12/25/2020 09:00	0.1578	0.0024	0.0034	0	0	0.0026	0.0013	0.0013	0	0	0	0	17.23	0.436	99.564
1	12/26/2020 09:00	0.1636	0.0023	0.003	0.0001	0	0.0024	0.0012	0.0012	0	0	0	0	17.27	0.448	99.552
1	12/27/2020 09:00	0.1556	0.0015	0.0009	0	0	0.002	0.001	0.001	0	0	0	0	17.27	0.415	99.585

EPNG Washington Ranch

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	12/28/2020 09:00	0.1435	0.0014	0.0006	0	0	0.002	0.001	0.001	0	0	0	0	17.24	0.384	99.616
1	12/29/2020 09:00	0.1529	0.0014	0.0009	0	0	0.002	0.001	0.001	0	0	0	0	17.27	0.408	99.592
1	12/30/2020 09:00	0.1463	0.0014	0.0011	0	0	0.002	0.001	0.001	0	0	0	0	17.24	0.393	99.607
1	12/31/2020 09:00	0.1664	0.0018	0.0018	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.24	0.450	99.550
1	01/01/2021 09:00	0.1888	0.0019	0.0021	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.22	0.508	99.492
1	01/02/2021 09:00	0.2018	0.0026	0.004	0.0002	0.0002	0.0024	0.0012	0.0012	0	0	0	0	17.25	0.552	99.448
1	01/03/2021 09:00	0.1845	0.0019	0.0022	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.24	0.497	99.503
1	01/04/2021 09:00	0.1788	0.0018	0.0022	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.24	0.483	99.517
1	01/05/2021 09:00	0.155	0.0017	0.002	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.23	0.421	99.579
1	01/06/2021 09:00	0.1701	0.0018	0.0021	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.24	0.459	99.541
1	01/07/2021 09:00	0.1796	0.002	0.0024	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.24	0.485	99.515
1	01/08/2021 09:00	0.1782	0.0022	0.0029	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.22	0.486	99.514
1	01/09/2021 09:00	0.1697	0.0026	0.0037	0	0	0.0026	0.0013	0.0013	0	0	0	0	17.20	0.470	99.530
1	01/10/2021 09:00	0.1655	0.0031	0.0049	0	0	0.0026	0.0013	0.0013	0	0	0	0	17.16	0.466	99.534
1	01/11/2021 09:00	0.1647	0.0037	0.0063	0	0	0.0034	0.0017	0.0017	0	0	0	0	17.10	0.476	99.524
1	01/12/2021 09:00	0.1655	0.0041	0.0074	0	0	0.0036	0.0018	0.0018	0	0	0	0	17.06	0.485	99.515
1	01/13/2021 09:00	0.1653	0.0044	0.0079	0	0	0.0038	0.0019	0.0019	0	0	0	0	17.03	0.489	99.511
1	01/14/2021 09:00	0.1649	0.0045	0.0083	0	0	0.004	0.002	0.002	0	0	0	0	17.00	0.492	99.508
1	01/15/2021 09:00	0.1653	0.0047	0.0087	0	0	0.004	0.002	0.002	0	0	0	0	16.98	0.495	99.505
1	01/16/2021 09:00	0.1558	0.0023	0.0035	0	0	0.0028	0.0014	0.0014	0	0	0	0	17.19	0.433	99.567
1	01/17/2021 09:00	0.1534	0.0014	0.0014	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.27	0.412	99.588
1	01/18/2021 09:00	0.1513	0.0015	0.0016	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.27	0.408	99.592
1	01/19/2021 09:00	0.1468	0.0013	0.0013	0	0	0.002	0.001	0.001	0	0	0	0	17.27	0.393	99.607
1	01/20/2021 09:00	0.167	0.0017	0.0018	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.27	0.449	99.551
1	01/21/2021 09:00	0.1646	0.0022	0.003	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.23	0.450	99.550
1	01/22/2021 09:00	0.1621	0.0016	0.0018	0	0	0.002	0.001	0.001	0	0	0	0	17.27	0.435	99.565
1	01/23/2021 09:00	0.1553	0.0016	0.0018	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.27	0.419	99.581
1	01/24/2021 09:00	0.1602	0.0018	0.0021	0	0	0.002	0.001	0.001	0	0	0	0	17.26	0.432	99.568
1	01/25/2021 09:00	0.1609	0.0019	0.0023	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.27	0.437	99.563
1	01/26/2021 09:00	0.1551	0.0018	0.0024	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.24	0.423	99.577
1	01/27/2021 09:00	0.1558	0.0026	0.0042	0	0	0.0028	0.0014	0.0014	0	0	0	0	17.15	0.438	99.562
1	01/28/2021 09:00	0.1571	0.0021	0.0029	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.22	0.431	99.569
1	01/29/2021 09:00	0.2023	0.0036	0.006	0	0	0.002	0.001	0.001	0	0	0	0	17.32	0.557	99.443
1	01/30/2021 09:00	0.1824	0.0033	0.0058	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.30	0.506	99.494
1	01/31/2021 09:00	0.1803	0.0032	0.0053	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.31	0.499	99.501
1	02/01/2021 09:00	0.1807	0.0032	0.0053	0	0	0.002	0.001	0.001	0	0	0	0	17.31	0.499	99.501
1	02/02/2021 09:00	0.1629	0.0023	0.0035	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.27	0.446	99.554
1	02/03/2021 09:00	0.1391	0.0014	0.0018	0.0001	0.0001	0.0024	0.0012	0.0012	0	0	0	0	17.24	0.379	99.621
1	02/04/2021 09:00	0.1589	0.0016	0.0017	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.30	0.427	99.573
1	02/05/2021 09:00	0.1568	0.0018	0.0021	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.27	0.425	99.575
1	02/06/2021 09:00	0.1446	0.0016	0.0021	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.24	0.394	99.606
1	02/07/2021 09:00	0.1593	0.0021	0.0032	0	0	0.0024	0.0012	0.0012	0	0	0	0	17.26	0.437	99.563
1	02/08/2021 09:00	0.1736	0.0033	0.0056	0	0	0.003	0.0015	0.0015	0	0	0	0	17.19	0.490	99.510
1	02/09/2021 09:00	0.1665	0.0038	0.0068	0	0	0.0036	0.0018	0.0018	0	0	0	0	17.08	0.484	99.516
1	02/10/2021 09:00	0.1649	0.0043	0.0079	0	0	0.0038	0.0019	0.0019	0	0	0	0	17.00	0.489	99.511
1	02/11/2021 09:00	0.1652	0.0046	0.0086	0	0	0.004	0.002	0.002	0	0	0	0	16.96	0.495	99.505
1	02/12/2021 09:00	0.166	0.0049	0.0091	0	0	0.004	0.002	0.002	0	0	0	0	16.93	0.501	99.499
1	02/13/2021 09:00	0.1668	0.005	0.0094	0	0	0.004	0.002	0.002	0	0	0	0	16.92	0.504	99.496
1	02/14/2021 09:00	0.1673	0.005	0.0095	0	0	0.0038	0.0019	0.0019	0	0	0	0	16.92	0.505	99.495
1	02/15/2021 09:00	0.1695	0.0052	0.0099	0	0	0.0038	0.0019	0.0019	0	0	0	0	16.91	0.513	99.487
1	02/16/2021 09:00	0.171	0.0053	0.0101	0.0001	0	0.0038	0.0019	0.0019	0	0	0	0	16.91	0.519	99.481
1	02/17/2021 09:00	0.1729	0.0055	0.0105	0.0006	0	0.0039	0.0019	0.0019	0	0	0	0	16.90	0.529	99.471
1	02/18/2021 09:00	0.1743	0.0056	0.0108	0.0013	0	0.004	0.002	0.002	0	0	0	0	16.90	0.537	99.463
1	02/19/2021 09:00	0.1763	0.0058	0.0111	0.0016	0	0.0042	0.0021	0.0021	0	0	0	0	16.90	0.546	99.454
1	02/20/2021 09:00	0.1759	0.0059	0.0113	0.0016	0.0002	0.0044	0.0022	0.0022	0	0	0	0	16.90	0.548	99.452

EPNG Washington Ranch

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	02/21/2021 09:00	0.1229	0.0034	0.0052	0.0002	0.0001	0.0024	0.0012	0.0012	0	0	0	0	16.70	0.368	99.632
1	02/22/2021 09:00	0.1233	0.0023	0.0032	0	0	0.002	0.001	0.001	0	0	0	0	16.92	0.351	99.649
1	02/23/2021 09:00	0.139	0.0027	0.004	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.11	0.390	99.610
1	02/24/2021 09:00	0.1261	0.0021	0.0031	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.19	0.350	99.650
1	02/25/2021 09:00	0.1267	0.0023	0.0036	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.16	0.355	99.645
1	02/26/2021 09:00	0.1316	0.0029	0.0047	0	0	0.002	0.001	0.001	0	0	0	0	17.08	0.376	99.624
1	02/27/2021 09:00	0.1333	0.0028	0.0044	0	0	0.002	0.001	0.001	0	0	0	0	17.06	0.379	99.621
1	02/28/2021 09:00	0.1367	0.0031	0.005	0	0	0.0022	0.0011	0.0011	0	0	0	0	16.99	0.394	99.606
1	03/01/2021 09:00	0.1373	0.0034	0.0058	0	0	0.0022	0.0011	0.0011	0	0	0	0	16.91	0.401	99.599
1	03/02/2021 09:00	0.1472	0.0042	0.0076	0	0	0.0028	0.0014	0.0014	0	0	0	0	16.85	0.440	99.560
1	03/03/2021 09:00	0.1571	0.0047	0.009	0	0	0.0032	0.0016	0.0016	0	0	0	0	16.86	0.474	99.526
1	03/04/2021 09:00	0.1488	0.0033	0.0057	0.0001	0	0.0024	0.0012	0.0012	0	0	0	0	17.05	0.428	99.572
1	03/05/2021 09:00	0.1384	0.0018	0.0022	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.19	0.376	99.624
1	03/06/2021 09:00	0.1379	0.002	0.0027	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.15	0.378	99.622
1	03/07/2021 09:00	0.1364	0.0019	0.0024	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.17	0.372	99.628
1	03/08/2021 09:00	0.1456	0.0018	0.0021	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.26	0.392	99.608
1	03/09/2021 09:00	0.1996	0.0032	0.0046	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.39	0.539	99.461
1	03/10/2021 09:00	0.1856	0.0033	0.0051	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.31	0.510	99.490
1	03/11/2021 09:00	0.1806	0.0044	0.0077	0	0	0.003	0.0015	0.0015	0	0	0	0	17.14	0.521	99.479
1	03/12/2021 09:00	0.1694	0.0045	0.0081	0	0	0.0032	0.0016	0.0016	0	0	0	0	17.05	0.497	99.503
1	03/13/2021 09:00	0.1701	0.0045	0.008	0.0001	0.0001	0.003	0.0015	0.0015	0	0	0	0	17.06	0.498	99.502
1	03/14/2021 09:00	0.1687	0.0057	0.009	0.0004	0.0002	0.0036	0.0018	0.0018	0	0	0	0	16.99	0.509	99.491
1	03/15/2021 09:00	0.169	0.0053	0.01	0.0003	0	0.0038	0.0019	0.0019	0	0	0	0	16.92	0.514	99.486
1	03/16/2021 09:00	0.1752	0.006	0.0113	0.0013	0.0007	0.0042	0.0021	0.0021	0	0	0	0	16.89	0.547	99.453
1	03/17/2021 09:00	0.1725	0.0057	0.011	0.0015	0	0.004	0.002	0.002	0	0	0	0	16.88	0.535	99.465
1	03/18/2021 09:00	0.1715	0.0056	0.0108	0.0013	0	0.004	0.002	0.002	0	0	0	0	16.88	0.531	99.469
1	03/19/2021 09:00	0.2012	0.0047	0.0076	0.0003	0	0.0022	0.0011	0.0011	0	0	0	0	17.15	0.571	99.429
1	03/20/2021 09:00	0.2483	0.0065	0.0113	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.30	0.700	99.300
1	03/21/2021 09:00	0.249	0.0059	0.0094	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.34	0.691	99.309
1	03/22/2021 09:00	0.2337	0.0062	0.0116	0.0001	0	0.0014	0.0007	0.0007	0	0	0	0	17.32	0.662	99.338
1	03/23/2021 09:00	0.2116	0.0049	0.0086	0.0001	0	0.0016	0.0008	0.0008	0	0	0	0	17.31	0.593	99.407
1	03/24/2021 09:00	0.2354	0.0063	0.0124	0	0	0.0016	0.0008	0.0008	0	0	0	0	17.38	0.668	99.332
1	03/25/2021 09:00	0.2311	0.0058	0.0111	0	0	0.0016	0.0008	0.0008	0	0	0	0	17.38	0.651	99.349
1	03/26/2021 09:00	0.2158	0.0049	0.009	0	0	0.002	0.001	0.001	0	0	0	0	17.38	0.604	99.396
1	03/27/2021 09:00	0.2203	0.005	0.0084	0	0	0.002	0.001	0.001	0	0	0	0	17.36	0.615	99.385
1	03/28/2021 09:00	0.2345	0.0058	0.0102	0.0001	0	0.0018	0.0009	0.0009	0	0	0	0	17.33	0.660	99.340
1	03/29/2021 09:00	0.2435	0.0067	0.0137	0.0005	0.0001	0.002	0.001	0.001	0	0	0	0	17.40	0.698	99.302
1	03/30/2021 09:00	0.1934	0.0039	0.0066	0	0	0.002	0.001	0.001	0	0	0	0	17.31	0.538	99.462
1	03/31/2021 09:00	0.1987	0.004	0.007	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.30	0.552	99.448
1	04/01/2021 09:00	0.1982	0.0041	0.0072	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.30	0.552	99.448
1	04/02/2021 09:00	0.2059	0.0046	0.0082	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.31	0.576	99.424
1	04/03/2021 09:00	0.0772	0.0018	0	0	0	0.0007	0.0004	0.0004	0	0	0	0	8.49	0.420	99.580
1	04/04/2021 09:00	0.103	0.002	0.0033	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.70	0.294	99.706
1	04/05/2021 09:00	0.1137	0.003	0.0059	0.0001	0.0001	0.0016	0.0008	0.0008	0	0	0	0	16.75	0.339	99.661
1	04/06/2021 09:00	0.1369	0.0049	0.0101	0.0005	0.0003	0.0024	0.0012	0.0012	0	0	0	0	16.77	0.428	99.572
1	04/07/2021 09:00	0.1225	0.0035	0.007	0	0	0.002	0.001	0.001	0	0	0	0	16.74	0.369	99.631
1	04/08/2021 09:00	0.1325	0.0037	0.0069	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.74	0.395	99.605
1	04/09/2021 09:00	0.1409	0.0046	0.0092	0	0	0.002	0.001	0.001	0	0	0	0	16.69	0.431	99.569
1	04/10/2021 09:00	0.1353	0.004	0.0079	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.74	0.407	99.593
1	04/11/2021 09:00	0.1307	0.0039	0.0076	0	0	0.002	0.001	0.001	0	0	0	0	16.75	0.394	99.606
1	04/12/2021 09:00	0.1308	0.0039	0.0077	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.74	0.394	99.606
1	04/13/2021 09:00	0.1215	0.0035	0.0067	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.70	0.365	99.635
1	04/14/2021 09:00	0.1169	0.0033	0.0066	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.70	0.351	99.649
1	04/15/2021 09:00	0.1162	0.0033	0.0065	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.70	0.349	99.651
1	04/16/2021 09:00	0.116	0.0033	0.0065	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.70	0.350	99.650

EPNG Washington Ranch

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	04/17/2021 09:00	0.1322	0.0032	0.0061	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.70	0.388	99.612
1	04/18/2021 09:00	0.1457	0.0223	0.0074	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.69	0.495	99.505
1	04/19/2021 09:00	0.1103	0.0026	0.0044	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.67	0.322	99.678
1	04/20/2021 09:00	0.1011	0.0022	0.0036	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.66	0.294	99.706
1	04/21/2021 09:00	0.1019	0.0022	0.0037	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.66	0.296	99.704
1	04/22/2021 09:00	0.1022	0.0022	0.0037	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.67	0.298	99.702
1	04/23/2021 09:00	0.1004	0.0021	0.0036	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.66	0.293	99.707
1	04/24/2021 09:00	0.1166	0.0028	0.0049	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.68	0.342	99.658
1	04/25/2021 09:00	0.1281	0.0031	0.0057	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.69	0.377	99.623
1	04/26/2021 09:00	0.1285	0.0032	0.0057	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.69	0.379	99.621
1	04/27/2021 09:00	0.1287	0.0032	0.0057	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.69	0.379	99.621
1	04/28/2021 09:00	0.1312	0.0032	0.0059	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.70	0.385	99.615
1	04/29/2021 09:00	0.1362	0.0035	0.0066	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.75	0.401	99.599
1	04/30/2021 09:00	0.1372	0.0037	0.007	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.77	0.406	99.594
1	05/01/2021 09:00	0.1712	0.0067	0.0103	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.79	0.517	99.483
1	05/02/2021 09:00	0.1848	0.0073	0.0098	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.78	0.553	99.447
1	05/03/2021 09:00	0.2419	0.0096	0.0151	0.0009	0.0009	0.0024	0.0012	0.0012	0	0	0	0	16.88	0.737	99.263
1	05/04/2021 09:00	0.2297	0.0064	0.0106	0.0004	0.0003	0.0016	0.0008	0.0008	0	0	0	0	16.90	0.669	99.331
1	05/05/2021 09:00	0.2278	0.0042	0.0074	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.89	0.644	99.356
1	05/06/2021 09:00	0.2432	0.0038	0.006	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.91	0.676	99.324
1	05/07/2021 09:00	0.2096	0.0046	0.0069	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.90	0.594	99.406
1	05/08/2021 09:00	0.19	0.0059	0.0078	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.88	0.553	99.447
1	05/09/2021 09:00	0.1839	0.0057	0.0086	0	0	0.002	0.001	0.001	0	0	0	0	16.82	0.542	99.458
1	05/10/2021 09:00	0.167	0.0054	0.0082	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.80	0.495	99.505
1	05/11/2021 09:00	0.2394	0.0122	0.0225	0.0032	0.0033	0.0044	0.0022	0.0022	0	0	0	0	16.82	0.798	99.202
1	05/12/2021 09:00	0.1435	0.0065	0.0135	0.0017	0.0018	0.003	0.0015	0.0015	0	0	0	0	16.78	0.477	99.523
1	05/13/2021 09:00	0.1238	0.0025	0.0041	0	0	0.001	0.0005	0.0005	0	0	0	0	16.77	0.354	99.646
1	05/14/2021 09:00	0.1504	0.0046	0.0075	0.0001	0.0001	0.0016	0.0008	0.0008	0	0	0	0	16.76	0.447	99.553
1	05/15/2021 09:00	0.1392	0.0036	0.0065	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.77	0.408	99.592
1	05/16/2021 09:00	0.1585	0.0039	0.0066	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.82	0.458	99.542
1	05/17/2021 09:00	0.1585	0.0039	0.0066	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.82	0.458	99.542
1	05/18/2021 09:00	0.1585	0.0039	0.0066	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.82	0.458	99.542
1	05/19/2021 09:00	0.1585	0.0039	0.0066	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.82	0.458	99.542
1	05/20/2021 09:00	0.1585	0.0039	0.0066	0	0	0.0012	0.0006	0.0006	0	0	0	0	16.82	0.458	99.542
1	05/21/2021 09:00	0.2644	0.0185	0.0387	0.0079	0.0085	0.008	0.004	0.004	0	0	0	0	16.82	1.002	98.998
1	05/22/2021 09:00	0.2644	0.0185	0.0387	0.0079	0.0085	0.008	0.004	0.004	0	0	0	0	16.82	1.002	98.998
1	05/23/2021 09:00	0.2644	0.0185	0.0387	0.0079	0.0085	0.008	0.004	0.004	0	0	0	0	16.82	1.002	98.998
1	05/24/2021 09:00	0.2557	0.0202	0.0346	0.007	0.0074	0.0074	0.0037	0.0037	0	0	0	0	16.83	0.959	99.041
1	05/25/2021 09:00	0.3613	0.0173	0.0439	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.96	1.153	98.847
1	05/26/2021 09:00	0.3505	0.0068	0.0083	0	0	0.0002	0.0001	0.0001	0	0	0	0	16.94	0.965	99.035
1	05/27/2021 09:00	0.2041	0.005	0.0084	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.80	0.589	99.411
1	05/28/2021 09:00	0.1317	0.0032	0.0057	0	0	0.0004	0.0002	0.0002	0	0	0	0	16.77	0.379	99.621
1	05/29/2021 09:00	0.1338	0.0025	0.004	0	0	0	0	0	0	0	0	0	16.83	0.373	99.627
1	05/30/2021 09:00	0.1361	0.0026	0.0042	0	0	0	0	0	0	0	0	0	16.84	0.380	99.620
1	05/31/2021 09:00	0.1488	0.0036	0.0061	0	0	0.0001	0	0	0	0	0	0	16.80	0.425	99.575
1	06/01/2021 09:00	0.1542	0.0044	0.0082	0	0	0.0014	0.0007	0.0007	0	0	0	0	16.80	0.455	99.545
1	06/02/2021 09:00	0.1641	0.0048	0.0088	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.83	0.486	99.514
1	06/03/2021 09:00	0.1784	0.0039	0.0065	0	0	0.001	0.0005	0.0005	0	0	0	0	17.10	0.501	99.499
1	06/04/2021 09:00	0.2182	0.0039	0.0063	0	0	0.0006	0.0003	0.0003	0	0	0	0	17.37	0.591	99.409
1	06/05/2021 09:00	0.2016	0.0036	0.0061	0	0	0.001	0.0005	0.0005	0	0	0	0	17.31	0.551	99.449
1	06/06/2021 09:00	0.2023	0.005	0.0098	0	0	0.002	0.001	0.001	0	0	0	0	17.23	0.578	99.422
1	06/07/2021 09:00	0.2021	0.0049	0.0089	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.26	0.574	99.426
1	06/08/2021 09:00	0.2158	0.0047	0.0083	0.0001	0	0.0022	0.0011	0.0011	0	0	0	0	17.28	0.606	99.394
1	06/09/2021 09:00	0.1938	0.004	0.0071	0.0002	0.0001	0.0022	0.0011	0.0011	0	0	0	0	17.22	0.546	99.454
1	06/10/2021 09:00	0.2566	0.007	0.0124	0.0014	0.0013	0.0026	0.0013	0.0013	0	0	0	0	17.27	0.745	99.255

EPNG Washington Ranch

FLOW_COMP	DATE	Propane	i-Butane	n-Butane	i-Pentane	n-Pentane	C6 Plus	Hexane	Heptane	Octane	nnonn_cont	Oxygen	Helium	MW * Mol %	VOC Wt %	Non-VOC Wt %
1	06/11/2021 09:00	0.172	0.0027	0.0036	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.19	0.472	99.528
1	06/12/2021 09:00	0.1737	0.0029	0.0044	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.22	0.477	99.523
1	06/13/2021 09:00	0.151	0.0033	0.0062	0.0001	0.0001	0.002	0.001	0.001	0	0	0	0	17.19	0.430	99.570
1	06/14/2021 09:00	0.1556	0.0029	0.0049	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.22	0.434	99.566
1	06/15/2021 09:00	0.1761	0.0037	0.0065	0	0	0.002	0.001	0.001	0	0	0	0	17.19	0.496	99.504
1	06/16/2021 09:00	0.2021	0.0047	0.0084	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.20	0.573	99.427
1	06/17/2021 09:00	0.2023	0.0047	0.0085	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.19	0.575	99.425
1	06/18/2021 09:00	0.2006	0.0047	0.0084	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.17	0.571	99.429
1	06/19/2021 09:00	0.1959	0.0048	0.0085	0	0	0.0022	0.0011	0.0011	0	0	0	0	17.10	0.561	99.439
1	06/20/2021 09:00	0.2061	0.0041	0.0067	0	0	0.0018	0.0009	0.0009	0	0	0	0	17.20	0.574	99.426
1	06/21/2021 09:00	0.16	0.0023	0.003	0.0001	0.0001	0.0006	0.0003	0.0003	0	0	0	0	17.24	0.431	99.569
1	06/22/2021 09:00	0.1624	0.0026	0.0037	0	0	0.0008	0.0004	0.0004	0	0	0	0	17.24	0.441	99.559
1	06/23/2021 09:00	0.2216	0.0033	0.0052	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.32	0.600	99.400
1	06/24/2021 09:00	0.1673	0.0029	0.0047	0	0	0.0012	0.0006	0.0006	0	0	0	0	17.30	0.458	99.542
1	06/25/2021 09:00	0.1621	0.0028	0.0045	0	0	0.001	0.0005	0.0005	0	0	0	0	17.25	0.444	99.556
1	06/26/2021 09:00	0.1747	0.003	0.0047	0	0	0.0016	0.0008	0.0008	0	0	0	0	17.29	0.479	99.521
1	06/27/2021 09:00	0.188	0.0039	0.0065	0	0	0.0012	0.0006	0.0006	0	0	0	0	17.16	0.524	99.476
1	06/28/2021 09:00	0.1859	0.0051	0.0087	0	0	0.0016	0.0008	0.0008	0	0	0	0	16.98	0.538	99.462
1	06/29/2021 09:00	0.187	0.0056	0.0096	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.93	0.548	99.452
1	06/30/2021 09:00	0.1888	0.0058	0.01	0	0	0.002	0.001	0.001	0	0	0	0	16.92	0.556	99.444
1	07/01/2021 09:00	0.1771	0.0038	0.006	0	0	0.0004	0.0002	0.0002	0	0	0	0	17.05	0.494	99.506
1	07/02/2021 09:00	0.1688	0.0033	0.0055	0	0	0	0	0	0	0	0	0	17.05	0.467	99.533
1	07/03/2021 09:00	0.169	0.0035	0.006	0	0	0.0002	0.0001	0.0001	0	0	0	0	17.04	0.471	99.529
1	07/04/2021 09:00	0.1785	0.0036	0.0057	0	0	0	0	0	0	0	0	0	17.07	0.493	99.507
1	07/05/2021 09:00	0.1538	0.0029	0.0047	0	0	0	0	0	0	0	0	0	17.04	0.424	99.576
1	07/06/2021 09:00	0.1481	0.0028	0.0046	0	0	0	0	0	0	0	0	0	17.02	0.409	99.591
1	07/07/2021 09:00	0.1534	0.0033	0.0057	0	0	0.0014	0.0007	0.0007	0	0	0	0	17.02	0.435	99.565
1	07/08/2021 09:00	0.1815	0.0048	0.0081	0	0	0.0018	0.0009	0.0009	0	0	0	0	16.99	0.524	99.476
1	07/09/2021 09:00	0.1856	0.0055	0.0094	0	0	0.002	0.001	0.001	0	0	0	0	16.92	0.545	99.455
1	07/10/2021 09:00	0.1851	0.0055	0.0093	0	0	0.002	0.001	0.001	0	0	0	0	16.92	0.543	99.457
1	07/11/2021 09:00	0.138	0.0033	0.0056	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.97	0.393	99.607
1	07/12/2021 09:00	0.1155	0.0021	0.0038	0	0	0.0006	0.0003	0.0003	0	0	0	0	16.99	0.323	99.677
1	07/13/2021 09:00	0.1228	0.0024	0.0044	0	0	0.0008	0.0004	0.0004	0	0	0	0	16.99	0.346	99.654
1	07/14/2021 09:00	0.1218	0.0025	0.0047	0	0	0.001	0.0005	0.0005	0	0	0	0	17.00	0.346	99.654
1	07/15/2021 09:00	0.1334	0.0025	0.0048	0	0	0.0012	0.0006	0.0006	0	0	0	0	17.03	0.377	99.623
														Annual Average =	0.436	99.564

ATTACHMENT E

KINDER MORGAN							
PROJECT NAME	EPNG NM Ozone Rule - Caprock Compressor Station						
COMPANY NAME	El Paso Natural Gas Company			COMPANY NO.	5205		
REQUESTED BY				PREPARED BY			
ESTIMATE NO.	CE2107005			ORIGINAL EST. DATE	07/16/21		
REVISION NO.	P2			CONSTRUCTION CONTINGENCY	5%		
REVISION DATE	07/27/21			OVERHEAD	0.00%		
PROJECT MANAGER							
STATE	New Mexico			TAX GROSS UP	0.00%		
COUNTY	Lea			PROJECT TYPE	Sustaining Capital		
				IN-SERVICE	Aug-23		
Reservation Credits SCOPE:	Potential 2022 reservation credits on the XOver with one Caprock unit unavailable. Assumes three (3) months outage for SCR and Regen modifications per unit (6 months total).						
CWIP- Unit 1 Emissions Controls SCOPE:	Install SCR Emissions control system provided by . New expansion joints (3 per unit) will be installed on ducting between new regen and new SCR. Install a new Aux building for a new air system and other SCR controls.						
CWIP- Unit 2 Emissions Controls SCOPE:	Install SCR Emissions control system provided by . New expansion joints (3 per unit) will be installed but the existing exhaust stack will be reused. Install a new Aux building for a new air system and SCR controls.						
CWIP-Unit 2 Regen SCOPE:	Install a new Regeneration equipment on Unit 2.						
RWIP-Unit 2 Regen SCOPE:	Remove the existing regenerator on Unit 2 including all exhaust duct work from the first Turbine Exhaust Expansion Joint to the entire exhaust stack. Prep site for installation of new regen unit.						
ASSET CAPABILITIES: Vol @ ### psi							
Minimum	MMCFD			Minimum	Pressure		
Maximum	MMCFD			MAOP	psig		
				Normal Operating	psig		
				Delivery Pressure	psig		
ESTIMATE SUMMARY		Reservation Credits	CWIP- Unit 1 Emissions Controls	CWIP- Unit 2 Emissions Controls	CWIP-Unit 2 Regen	RWIP-Unit 2 Regen	TOTAL
MATERIAL (INCL SALES TAX)	\$ -	\$ 4,310,500	\$ 3,639,700	\$ 3,512,700	\$ -	\$ -	\$ 11,462,900
COMPANY LABOR COST	\$ -	\$ 37,100	\$ 37,100	\$ -	\$ -	\$ -	\$ 74,200
PM, ENG, LAND, ENVIRO - EXPENSE	\$ -	\$ 3,100	\$ 3,100	\$ -	\$ -	\$ -	\$ 6,200
PRIMARY CONSTRUCTION CONTRACTOR	\$ -	\$ 1,916,500	\$ 1,798,100	\$ 670,500	\$ 449,000	\$ -	\$ 4,834,100
SECONDARY CONTRACTOR	\$ -	\$ 182,900	\$ 166,900	\$ -	\$ -	\$ -	\$ 349,800
PROFESSIONAL ENGINEERING	\$ -	\$ 49,500	\$ 49,500	\$ -	\$ -	\$ -	\$ 99,000
INSPECTION SERVICES	\$ -	\$ 148,400	\$ 148,400	\$ 101,300	\$ 36,100	\$ -	\$ 434,200
RADIOGRAPHY SERVICES	\$ -	\$ 900	\$ 900	\$ -	\$ -	\$ -	\$ 1,800
ENVIRONMENTAL CONTRACTOR	\$ -	\$ 16,100	\$ -	\$ -	\$ -	\$ -	\$ 16,100
ELECTRICAL & INSTRUMENTATION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RIGHT OF WAY CONTRACTOR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SURVEY CONTRACTOR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OUTSIDE LEGAL SERVICES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ROW & DAMAGES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PERMIT FEES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GAS LOSS	\$ 1,620,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,620,000
SUBTOTAL	\$ 1,620,000	\$ 6,665,000	\$ 5,843,700	\$ 4,284,500	\$ 485,100	\$ -	\$ 18,898,300
CONSTRUCTION CONTINGENCY	\$ 81,000	\$ 333,250	\$ 292,185	\$ 214,225	\$ 24,255	\$ -	\$ 944,915
AFUDC	\$ 9,130	\$ 182,671	\$ 157,906	\$ 128,490	\$ -	\$ -	\$ 478,197
SUBTOTAL	\$ 1,710,130	\$ 7,180,921	\$ 6,293,791	\$ 4,627,215	\$ 509,355	\$ -	\$ 20,321,412
CAPITALIZED OVERHEAD (BURDEN)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TAX GROSS-UP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ESCALATION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RISK INSURANCE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ESTIMATED TOTAL COST	\$ 1,710,130	\$ 7,180,921	\$ 6,293,791	\$ 4,627,215	\$ 509,355	\$ -	\$ 20,321,412
Price/Ton: \$2,400							
(If Applicable) Escalated Price/Ton:							
Contingency:	5%	5%	5%	5%	5%		
In-Service Date:	Aug-23	Aug-23	Aug-23	Aug-23	Aug-23		
ASSUMPTIONS							
Include (Yes/No)	Assumptions						
Yes	See Assumptions Tab	** Estimate shelf life is 6 months from published date.					
Revision	Date	Notes	Approval	Name	Date		
			Project Manager				
			Project Manager Direct				
			Project Controls				
			Vice President				
AUTHORITY LEVELS:				Escalation Rates FV=PV(1+i) ⁿ			
< \$25,000,000 PM, PM Director, Project Controls				Material: 0.0%			
> \$25,000,000 PM, PM Director, Project Controls, VP				Other: 0.0%			

KINDER MORGAN

PROJECT NAME	EPNG NM OZONE Rule- Rio Vista Compressor Station					
COMPANY NAME	El Paso Natural Gas Company		COMPANY NO.	5205		
REQUESTED BY			PREPARED BY			
ESTIMATE NO.	CE2107008		ORIGINAL EST. DATE	07/14/21		
REVISION NO.	P1		CONSTRUCTION CONTINGENCY	20%		
REVISION DATE	07/14/21		OVERHEAD	0.00%		
PROJECT MANAGER						
STATE	New Mexico		TAX GROSS UP	0.00%		
COUNTY	San Juan		PROJECT TYPE	Sustaining Capital		
		IN-SERVICE	Aug-22			
CWIP Rio Vista CS Mods SCOPE:	Install SCR Emissions control system provided by This is for two (2) Saturn 10-1202 units. New expansion joints (3 per unit) will be installed but the existing exhaust stack will be reused. Install a new Aux building for a new air system and SCR controls.					
RWIP Rio Vista CS Mods SCOPE:	Remove the existing exhaust system from the interior expansion joint flange to the exhaust stack. Remove the existing exhaust stack, existing expansion joint, exhaust stack foundation and supports. Prep site to install new Emissions Equipment.					
ASSET CAPABILITIES: Vol @ ### psi						
Minimum	MMCFD	Minimum	Pressure			
Maximum	MMCFD	MAOP	psig			
		Normal Operating	psig			
		Delivery Pressure	psig			

ESTIMATE SUMMARY			CWIP Rio Vista CS Mods	RWIP Rio Vista CS Mods	TOTAL
MATERIAL (INCL SALES TAX)			\$ 2,210,300	\$ -	\$ 2,210,300
COMPANY LABOR COST			\$ 74,300	\$ -	\$ 74,300
PM, ENG, LAND, ENVIRO - EXPENSE			\$ 6,300	\$ -	\$ 6,300
PRIMARY CONSTRUCTION CONTRACTOR			\$ 3,479,300	\$ 194,800	\$ 3,674,100
SECONDARY CONTRACTOR			\$ 328,400	\$ -	\$ 328,400
PROFESSIONAL ENGINEERING			\$ 263,200	\$ -	\$ 263,200
INSPECTION SERVICES			\$ 291,100	\$ 9,600	\$ 300,700
RADIOGRAPHY SERVICES			\$ 1,900	\$ -	\$ 1,900
ENVIRONMENTAL CONTRACTOR			\$ 16,100	\$ -	\$ 16,100
ELECTRICAL & INSTRUMENTATION			\$ -	\$ -	\$ -
RIGHT OF WAY CONTRACTOR			\$ -	\$ -	\$ -
SURVEY CONTRACTOR			\$ -	\$ -	\$ -
OUTSIDE LEGAL SERVICES			\$ -	\$ -	\$ -
ROW & DAMAGES			\$ -	\$ -	\$ -
PERMIT FEES			\$ -	\$ -	\$ -
GAS LOSS			\$ -	\$ -	\$ -
SUBTOTAL			\$ 6,670,900	\$ 204,400	\$ 6,875,300
CONSTRUCTION CONTINGENCY			\$ 1,334,180	\$ 40,880	\$ 1,375,060
AFUDC			\$ 167,642	\$ -	\$ 167,642
SUBTOTAL			\$ 8,172,722	\$ 245,280	\$ 8,418,002
CAPITALIZED OVERHEAD (BURDEN)			\$ -	\$ -	\$ -
TAX GROSS-UP			\$ -	\$ -	\$ -
ESCALATION			\$ -	\$ -	\$ -
RISK INSURANCE			\$ -	\$ -	\$ -
ESTIMATED TOTAL COST			\$ 8,172,722	\$ 245,280	\$ 8,418,002
Price/Ton:					
(If Applicable) Escalated Price/Ton:					
Contingency:	20%	20%	20%	20%	
In-Service Date:	Aug-22	Aug-22	Aug-22	Aug-22	

ASSUMPTIONS

Include (Yes/No)	Assumptions	
Yes	See Assumptions Tab	** Estimate shelf life is 6 months from published date.

Revision	Date	Notes	Approval	Name	Date
			Project Manager		
			Project Manager Director		
			Project Controls		
			Vice President		

AUTHORITY LEVELS:	Escalation Rates FV=PV(1+i) ⁿ
< \$25,000,000 PM, PM Director, Project Controls	Material: 0.0%
> \$25,000,000 PM, PM Director, Project Controls, VP	Other: 0.0%

Estimate Form Revision 10.3-Small 05/26/21

KINDER MORGAN

PROJECT NAME	EPNG NM Ozone Rule - Monument Station				
COMPANY NAME	El Paso Natural Gas Company		COMPANY NO.	5205	
REQUESTED BY			PREPARED BY		
ESTIMATE NO.	CE2107007		ORIGINAL EST. DATE	07/07/21	
REVISION NO.	BASE		CONSTRUCTION CONTINGENCY	10%	
REVISION DATE			OVERHEAD	0.00%	
PROJECT MANAGER					
STATE	New Mexico		TAX GROSS UP	0.00%	
COUNTY			PROJECT TYPE	Sustaining Capital	
		IN-SERVICE	Aug-22		
		ESTIMATE ACCURACY LEVEL	Class 3		
RWIP SCOPE:	Removal of existing equipment for retrofit				
CWIP SCOPE:	A cost estimate is needed to retrofit engine units A04 and A05 to meet proposed NM standards for existing units. Refer to attachment #1 for standards, and Attachment #2 for facility permits. Estimates will be used for commenting upon economic reasonability of proposed rules, and should be obtained by July 14th to accommodate final comment submissions (NMED Ozone Rulemaking Comments (20.2.50 NMAC)). Detailed scope and SCR quote/assumptions will be provided by James Trent				

ASSET CAPABILITIES: Vol @ ### psi		Pressure	
Minimum	MMCFD	Minimum	psig
Maximum	MMCFD	MAOP	psig
		Normal Operating	psig
		Delivery Pressure	psig
Metrics: Dia (Inch) =			
Length (Miles) =			
Aggregate Base Lay (Per Ft) =			
Total Cost (Per Ft) =			
Contractor Cost (DIM) =			
Directs + Contingency Cost (DIM) =			

ESTIMATE SUMMARY	Tab 12	Tab 13	RWIP	CWIP	TOTAL
MATERIAL (INCL SALES TAX)			\$ -	\$ 1,451,600	\$ 1,451,600
COMPANY LABOR COST			\$ -	\$ 89,800	\$ 89,800
PM, ENG, LAND, ENVIRO - EXPENSE			\$ -	\$ 4,200	\$ 4,200
PRIMARY CONSTRUCTION CONTRACTOR			\$ 225,100	\$ 1,033,800	\$ 1,258,900
SECONDARY CONTRACTOR			\$ -	\$ 2,669,800	\$ 2,669,800
PROFESSIONAL ENGINEERING			\$ -	\$ 190,600	\$ 190,600
INSPECTION SERVICES			\$ 10,300	\$ 239,400	\$ 249,700
RADIOGRAPHY SERVICES			\$ -	\$ 3,800	\$ 3,800
ENVIRONMENTAL CONTRACTOR			\$ -	\$ 16,100	\$ 16,100
ELECTRICAL & INSTRUMENTATION			\$ -	\$ -	\$ -
RIGHT OF WAY CONTRACTOR			\$ -	\$ -	\$ -
SURVEY CONTRACTOR			\$ -	\$ -	\$ -
OUTSIDE LEGAL SERVICES			\$ -	\$ -	\$ -
ROW & DAMAGES			\$ -	\$ -	\$ -
PERMIT FEES			\$ -	\$ -	\$ -
GAS LOSS			\$ -	\$ -	\$ -
SUBTOTAL			\$ 235,400	\$ 5,699,100	\$ 5,934,500
CONSTRUCTION CONTINGENCY			\$ 23,540	\$ 569,910	\$ 593,450
AFUDC			\$ -	\$ 137,916	\$ 137,916
SUBTOTAL			\$ 258,940	\$ 6,406,926	\$ 6,665,866
CAPITALIZED OVERHEAD (BURDEN)			\$ -	\$ -	\$ -
TAX GROSS-UP			\$ -	\$ -	\$ -
ESCALATION			\$ -	\$ -	\$ -
RISK INSURANCE			\$ -	\$ -	\$ -
ESTIMATED TOTAL COST			\$ 258,940	\$ 6,406,926	\$ 6,665,866

Price/Ton:				
(If Applicable) Escalated Price/Ton:				
Contingency:	10%	10%	10%	10%
In-Service Date:	Aug-22	Aug-22	Aug-22	Aug-22

ASSUMPTIONS

Include (Yes/No)	Assumptions	
Yes	See Assumptions Tab	** Estimate shelf life is 6 months from published date.

Revision	Date	Notes	Approval	Name	Date
			Project Manager		
			Project Manager Director		
			Project Controls		
			Vice President		

AUTHORITY LEVELS:	Escalation Rates FV=PV(1+i) ⁿ
< \$25,000,000 PM, PM Director, Project Controls	Material: 0.0%
> \$25,000,000 PM, PM Director, Project Controls, VP	Other: 0.0%

KINDER MORGAN

PROJECT NAME	EPNG NM Ozone Rule - Washington Ranch				
COMPANY NAME	El Paso Natural Gas Company		COMPANY NO.	5205	
REQUESTED BY			PREPARED BY		
ESTIMATE NO.	CE2107006		ORIGINAL EST. DATE	07/07/21	
REVISION NO.	BASE		CONSTRUCTION CONTINGENCY	10%	
REVISION DATE			OVERHEAD	0.00%	
PROJECT MANAGER					
STATE	New Mexico		TAX GROSS UP	0.00%	
COUNTY			PROJECT TYPE	Sustaining Capital	
		IN-SERVICE	Aug-22		
		ESTIMATE ACCURACY LEVEL	Class 3		
RWIP SCOPE:	Removal of existing equipment for retrofit				
CWIP SCOPE:	Washington Ranch Station, Units A04 and A05 retrofits to meet proposed standards for existing lean-burn reciprocating units using combustion modifications (enhanced fuel mixing, PCCs, turbochargers, control panel upgrade, etc., as needed) and oxidation catalyst. All ancillaries and infrastructure must be considered and modified as needed to support the engine modifications for ongoing compliant operation.				

ASSET CAPABILITIES: Vol @ ### psi		Pressure	
Minimum	MMCFD	Minimum	psig
Maximum	MMCFD	MAOP	psig
		Normal Operating	psig
		Delivery Pressure	psig
Metrics: Dia (Inch) =			
Length (Miles) =			
Aggregate Base Lay (Per Ft) =			
Total Cost (Per Ft) =			
Contractor Cost (DIM) =			
Directs + Contingency Cost (DIM) =			

ESTIMATE SUMMARY	Tab 12	Tab 13	RWIP	CWIP	TOTAL
MATERIAL (INCL SALES TAX)			\$ -	\$ 860,700	\$ 860,700
COMPANY LABOR COST			\$ -	\$ 61,900	\$ 61,900
PM, ENG, LAND, ENVIRO - EXPENSE			\$ -	\$ 4,200	\$ 4,200
PRIMARY CONSTRUCTION CONTRACTOR			\$ 141,500	\$ 947,800	\$ 1,089,300
SECONDARY CONTRACTOR			\$ -	\$ 964,500	\$ 964,500
PROFESSIONAL ENGINEERING			\$ -	\$ 140,400	\$ 140,400
INSPECTION SERVICES			\$ 10,300	\$ 175,800	\$ 186,100
RADIOGRAPHY SERVICES			\$ -	\$ 1,900	\$ 1,900
ENVIRONMENTAL CONTRACTOR			\$ -	\$ 16,100	\$ 16,100
ELECTRICAL & INSTRUMENTATION			\$ -	\$ -	\$ -
RIGHT OF WAY CONTRACTOR			\$ -	\$ -	\$ -
SURVEY CONTRACTOR			\$ -	\$ -	\$ -
OUTSIDE LEGAL SERVICES			\$ -	\$ -	\$ -
ROW & DAMAGES			\$ -	\$ -	\$ -
PERMIT FEES			\$ -	\$ -	\$ -
GAS LOSS			\$ -	\$ -	\$ -
SUBTOTAL			\$ 151,800	\$ 3,173,300	\$ 3,325,100
CONSTRUCTION CONTINGENCY			\$ 15,180	\$ 317,330	\$ 332,510
AFUDC			\$ -	\$ 75,804	\$ 75,804
SUBTOTAL			\$ 166,980	\$ 3,566,434	\$ 3,733,414
CAPITALIZED OVERHEAD (BURDEN)			\$ -	\$ -	\$ -
TAX GROSS-UP			\$ -	\$ -	\$ -
ESCALATION			\$ -	\$ -	\$ -
RISK INSURANCE			\$ -	\$ -	\$ -
ESTIMATED TOTAL COST			\$ 166,980	\$ 3,566,434	\$ 3,733,414

Price/Ton:				
(If Applicable) Escalated Price/Ton:				
Contingency:	10%	10%	10%	10%
In-Service Date:	Aug-22	Aug-22	Aug-22	Aug-22

ASSUMPTIONS

Include (Yes/No)	Assumptions	
Yes	See Assumptions Tab	** Estimate shelf life is 6 months from published date.

Revision	Date	Notes	Approval	Name	Date
			Project Manager		
			Project Manager Director		
			Project Controls		
			Vice President		

AUTHORITY LEVELS:	Escalation Rates FV=PV(1+i) ⁿ
< \$25,000,000 PM, PM Director, Project Controls	Material: 0.0%
> \$25,000,000 PM, PM Director, Project Controls, VP	Other: 0.0%

ATTACHMENT F



Kinder Morgan

Proposal Title: Caprock

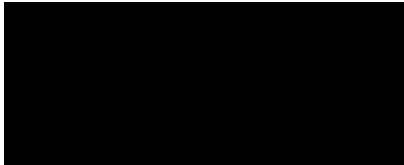
Proposal Number: [REDACTED]

Proposal Description: [REDACTED] Emission Control System to Reduce Emissions from (2)
GE Frame 3 Turbines

Submitted by: [REDACTED]

[REDACTED] **Contact:** [REDACTED]

Date Submitted: July 8, 2021



July 8, 2021

Kinder Morgan
James Trent
1001 Louisiana Street
Houston, TX 77002
Phone: 713-254-5279
Email: james_trent@kindermorgan.com

Proposal #:	[REDACTED]
Project Name:	Caprock

James,

We are pleased to submit this proposal for an [REDACTED] **Emissions Control System** designed to reduce emissions for (2) Frame 3 Turbines.

The [REDACTED] **Emissions Control System** offered for this project is based on engine and emissions data provided by Kinder Morgan. The enclosed proposal details the price, scope of supply, warranty, commissioning and terms and conditions necessary to achieve the required emissions limits and long-term compliance.

Should you have any questions or comments, please do not hesitate to contact me.

THE [REDACTED] ADVANTAGE: COMPLIANCE AT A COMPETITIVE COST

[REDACTED] is an environmental engineering company supplying reliable exhaust after-treatment based emissions control systems to the North American market. Our strength is helping customers comply with federal and local emission regulations targeting process machines, marine vessels, offshore rigs, stationary diesel and natural gas engines and turbines. We specialize in reducing NOx using a comprehensive systems approach based on Selective Catalytic Reduction (SCR). Our SCR systems are then combined with oxidation catalysts or particulate filter technologies to reduce other regulated pollutant emissions, such as carbon monoxide (CO), hydrocarbons (HC), volatile organic compounds (VOC) and particulate matter (PM). We also offer an array of supporting component options, from urea storage tanks to air compressors to silencers, with the goal of providing everything necessary for a successful and near-turnkey installation.

Based in [REDACTED] [REDACTED] is [REDACTED]. [REDACTED] leverages more than five decades of experience in environmental compliance, and draws upon the knowledge of over 1000 successful SCR systems in a wide variety of markets such as marine, power generation, oil and gas development, industrial and chemical processes.

Our structured engineering approach begins by comparing your project's emissions profile to the regulations, or to the project's unique requirements. We then design an emission control system tailored to your application. Our product manufacturing process is governed by exacting quality standards, and our systems are commissioned with the [REDACTED] Emissions Guarantee. To ensure compliance over the long-term, we provide support after the sale through extensive operator training, spare parts, and on-site maintenance.

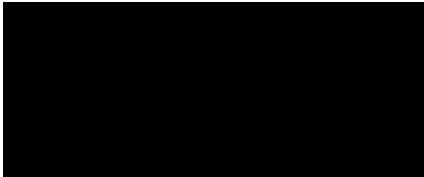


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[REDACTED]	[REDACTED]
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[REDACTED]	[REDACTED]
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I. QUOTATION

PROPOSAL #: [REDACTED]

PROJECT: Caprock

DESCRIPTION: [REDACTED] Emission Control Systems to reduce emissions from GE Frame 3 Natural-Gas Fired Turbines

1. SCOPE OF SUPPLY

ITEM	DESCRIPTION	EXT. PRICE (\$)
001	EMISSIONS CONTROL SYSTEM (2 x Frame3) 2 x Ducting / SCR Housing / Silencer - Oxidation Catalyst - Ammonia Injection Grid - SCR Catalyst - Ducting from Regen Outlet to SCR - Expansion joint at Regen Outlet - Ducting from SCR to Tailpipe - Silencer / Tailpipe with CEMS Ports 2 x Recycle Gas Skid, each including: 1 x Two-Phase Injection Lance for ammonia/air 1 x Static mixer 1 x Ventilator fan 1 x SCR Control System with Touch-screen and PLC - With NO/O2 analyzer (dual channel, single O2 measurement) 2 x Sample Probes and Heated Sample Lines (Per Unit) 2 x Ammonia/Air Dosing Panel 1 x Reagent Pump Station 1 x Reagent Storage Tank - Engineering, Operation & Maintenance Documentation (Thumb Drive Only)	\$6,200,000

Not included in the scope of supply:

- Load signal from the engine (4-20 mA)
- Fuel flow signal from the engine (4-20mA)
- Fuel composition (TCP/IP)
- Engine running signal (digital dry contact, closed when engine is running)
- Internet connection for remote PLC access and service support
- Structural and civil work necessary to complete the installation
- Catalyst element lift / crane (available as an option)
- Aqueous Ammonia Solution
- Unloading valve/pump skid and controller (available as an option)
- Platforms and other support structures not listed herein
- Compressed Air, per ISO 1.3.4 requirements
- Heat tracing of Ammonia tank or Ammonia lines (available as an option)
- Provision for electricity and connection of the power supply to the enclosure
- System integration (design and engineering) with the building structure
- Unloading of material at customer location
- Any 3rd party emission certification of stack test

2. PRICE

The given prices for the SCR Emissions Control System are net prices, DDP to customer location in NM, according to Incoterms 2010. All prices are in US dollars. Not included are taxes. Shipping based on standard ground, sea vessel and non-expedited shipping.

3. PAYMENT

All payments are to be paid within 30 days after each date of invoice, net.

4. SCHEDULING & DELIVERY

Delivery of the drawings and technical documents is approximately 16 weeks after receipt of a purchase order. Delivery of the hardware is approximately 32 weeks after approval of all technical details. Total estimated schedule is 36 weeks (8 weeks for customer review) for receipt of material at each station.

- Preliminary Engineering Drawings – Approximately 16 weeks after receipt of a purchase order
- Customer Review/Approval – 6 Weeks from Receipt of Preliminary
- Release IFC's – 4 Weeks From Receipt of Customer Comments
- Manufacturing – Approximately 6 months From Customer Approval
- Shipping – 4 Weeks
- Follow on unit hardware 'ready to ship' at 2–3-month intervals

5. QUALITY STANDARD

All drawings will be in both metric and English units. We reserve the right to adapt the technical design of the emission control system based on the results of the final engineering work, provided this does not impact the affect the guaranteed performance characteristics and is approved by the customer before production begins.

6. OFFER VALIDITY

This offer is valid 90 days from date on proposal.

II. TECHNICAL DESCRIPTION

1. EXHAUST GAS DATA & EMISSION REQUIREMENTS

Unit Data:

Parameter = 100% Load	Unit	GE Frame 3*
Fuel	-	CQNG
Power	bhp	7,040
Exhaust Gas Flow Rate (wet)	lb/hr	~335,000
Exhaust Gas Moisture Content (actual, wet)	Vol. %	3.5
Oxygen Content (actual, wet)	Vol. %	18.1
Exhaust Temperature	°F	450**

* From KM provided data

**Regen Outlet

Emission Control System Design Parameters:

Parameter	Unit	Frame 3
Aqueous Ammonia Solution	%	19
Aqueous Urea Solution Consumption Rate (at 100% engine load) approximately, per engine	gph	~10.0
Total Estimated Backpressure Contribution	inH ₂ O	9.0
Air Consumption, per engine (Based on 87 psi nominal, max 160 psi)	scfm	25**

**Type Z purge for control panel and dosing panel are not included in this air consumption

2. EMISSIONS GUARANTEE & WARRANTY

Constituent	Current Engine Out	Required Stack Out**
NOx as NO ₂ *	150 ppmvd @15% O ₂	50 ppmvd @15% O ₂
CO*	35 ppmvd @15% O ₂	15 ppmvd @15% O ₂
VOC*	20 ppmvd @15% O ₂	9 ppmvd @15% O ₂

* Based on 1 hour averaging with the engine operating at 100% load. Minimum temperature for SCR performance is 570F.

**Based on a minimum 440F SCR outlet temperature with 19% NH₃ and Maximum SCR inlet temperature of 750F

Provided the engine is operating under stable operating conditions, [REDACTED] guarantees the stack emissions (Based on % reduction) for a period of 24,000 hours of operation or 36 months after the initial SCR commissioning, or 42 months after delivery, whichever comes first. All values are per EPA-approved measurement methods, with one-hour averaging while the engine is operating at 100% load. The mechanical warranty is 12 months after commissioning or 18 months after delivery, whichever comes first.

This guarantee is subject certain maintenance practices and engine operating conditions, [REDACTED]. The guarantee is also based on the emissions data provided to [REDACTED] at the time of this quotation and defined in Section 1 of the Technical Description. [REDACTED] reserves the right to modify Items 001 in the Scope of Supply and associated price once more accurate and complete emissions data are obtained in order to ensure the emission limits can be maintained as required.

3. SCOPE OF SUPPLY

A. Engineering (Per Site)

- Drawings
- System flow diagram
- Control of the SCR system
- Documentation
- Supporting Analyses

B. Ammonia Injection Grid (Per Unit)

Includes one ammonia injection grid (AIG). The ammonia gas will be re-injected in the main exhaust gas duct with an ammonia injection grid.

C. OXI / SCR Reactor Housing / Ducting / Silencer (Per Unit)

The reactor housing duct and stack is designed as a cool wall lined system. This design incorporates a high strength carbon steel casing complete with external structural stiffening and support steel with an internal floating liner decoupled from the casing using a proprietary liner isolation support system. Compressed thermal / acoustical insulation between the 409SS liner and casing reduce thermal and acoustic coupling between the two surfaces minimizing the transfer of heat and noise to outer surfaces of the duct system.

Ducting/structure consists of the following major components:

- Inlet expansion joint
- Acoustically and thermally lined inlet transition duct
- SCR reactor housing designed for AIG, SCR and Oxicat elements. Includes personnel access doors for catalyst maintenance and replacement
- Exhaust stack to include silencer section and (4) EPA approved flanged test ports. Acoustic design is based on 85 dBA @ 3ft perpendicular to stack exit, 100 mph wind load.
- Stack height from grade is 85ft
- Maintenance platform for installation and removal of the oxidation and SCR modules.

D. OXI/SCR Catalyst (Per Unit)

The elements will be designed for installation within the framework of the ducting. Oxicat to be installed before the AIG and SCR elements installed after the AIG.

Note the SCR catalyst impurity tolerance specification in Section IV and SCR manufacturer data sheet.

E. Recycle Gas Skid (Per Unit)

A small part of the exhaust gas will be taken out from the main exhaust gas duct downstream of the SCR reactor housing and sent to the recycle gas skid, where aqueous ammonia solution will be injected, evaporated and re-injected in the main exhaust gas duct via the ammonia injection grid.

F. SCR Control (Per 2 Units)

The SCR unit is controlled by a single control system housed in a control cabinet. Includes an Allen-Bradley ControlLogix Programmable Logic Controller and an A-B 15in touch screen with menu-guided parameter inputs (without any program change); password protection; error message and clear readable display. Includes an Ethernet communication between the PLC and the customer's control system.

G. Reagent Dosing Panel (Per Unit)

All components for aqueous ammonia dosing are mounted on a steel back panel; includes steel dosing valve, magnetic valves and shut-off valves. (Pressure indicators related to reagent solution supply to the dosing panel are the customer's scope.)

H. Ammonia Pump Station (Per Site)

Pump station complete with auxiliary valves, filters; ships fully assembled and pretested from our factory. The pump station has been designed for 19% aqueous NH₃ for simultaneous operation of all units at the facility. The pump station also comes with one 100% backup pump.

I. Ammonia Tank and End Devices (Per Site)

Includes (1) horizontal, 25,000 USG, single-wall stainless-steel tank. 120in D x 42ft tangent to tangent length, made of 304 stainless steel, built to ASME Section VIII Division 1 Code, Design Parameters: 30 psig, 125°F with 1/16 in corrosion allowance. With the following end devices:

- (1) Ultrasonic level transmitter
- (1) Temperature transmitter
- (1) Pressure transmitter
- (1) Relief and Vacuum Valve
- (1) NH₃ leak detection sensor
- (1) Control panel for indication of level, pressure and temperature

III. OPERATING PRINCIPLE

Selective Catalytic Reduction Principle

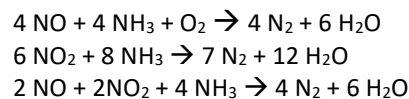
NO_x is a general term referring to Nitrogen Oxide (NO) and Nitrogen Dioxide (NO₂) gases. NO_x forms at the high temperatures of a combustion process, typical of internal combustion engines. NO_x is a precursor to smog and adversely affects health and the environment. As such, NO_x is increasingly regulated by both the US Environmental Protection Agency and by local authorities.

NO_x emissions are most efficiently removed from the exhaust by Selective Catalytic Reduction, often referred to as SCR. SCR works by promoting a chemical reaction between the NO_x and ammonia gas (NH₃), which is introduced upstream of the SCR catalysts. The ammonia can come from a variety of sources, including directly as a gas (known as anhydrous ammonia), or as an aqueous ammonia solution. It is more common to use aqueous urea solution. Urea is a widespread component of fertilizer, and water-based solutions made from urea are easier to handle than ammonia compounds. Moreover, aqueous urea solutions are readily available in different storage capacities and concentrations.

Commercially, aqueous urea solutions come in two concentrations, either 32.5% or 40%. The lower concentration, 32.5%, has the lowest freezing point of 12°F (-11°C), and is therefore used in colder climates where ambient temperatures can reach this point. The 40% concentration has a higher freezing temperature of 35°F (2°C), but requires less volume of solution to achieve the same degree of NO_x reduction. In either case, freezing is to be avoided since injection becomes problematic. When low temperatures are encountered in the application, it is customary to install an immersion heater in the urea storage tank, as well as heat-tracing the urea supply lines to the SCR System. This is true for both concentrations of urea solution.

When the engine is running and the catalyst has warmed up to its normal operating temperature, urea solution is injected into exhaust stream ahead of the SCR catalyst, in combination with high-pressure air, to assist in atomizing the spray. (The air also cools the urea injection nozzle and purges the injector when the engine is no longer running.) Chemically, the heat of the exhaust first vaporizes the water in the urea solution, resulting in the formation of small urea crystals. These crystals further breakdown in the exhaust stream into ammonia and carbon dioxide. Once ammonia is present, the chemical reactions shown below take place over the SCR catalyst, reducing NO_x to harmless nitrogen gas and water vapor.

Once ammonia gas is present, the chemical reactions shown below take place over the SCR catalyst, reducing NO_x to harmless nitrogen gas and water vapor:



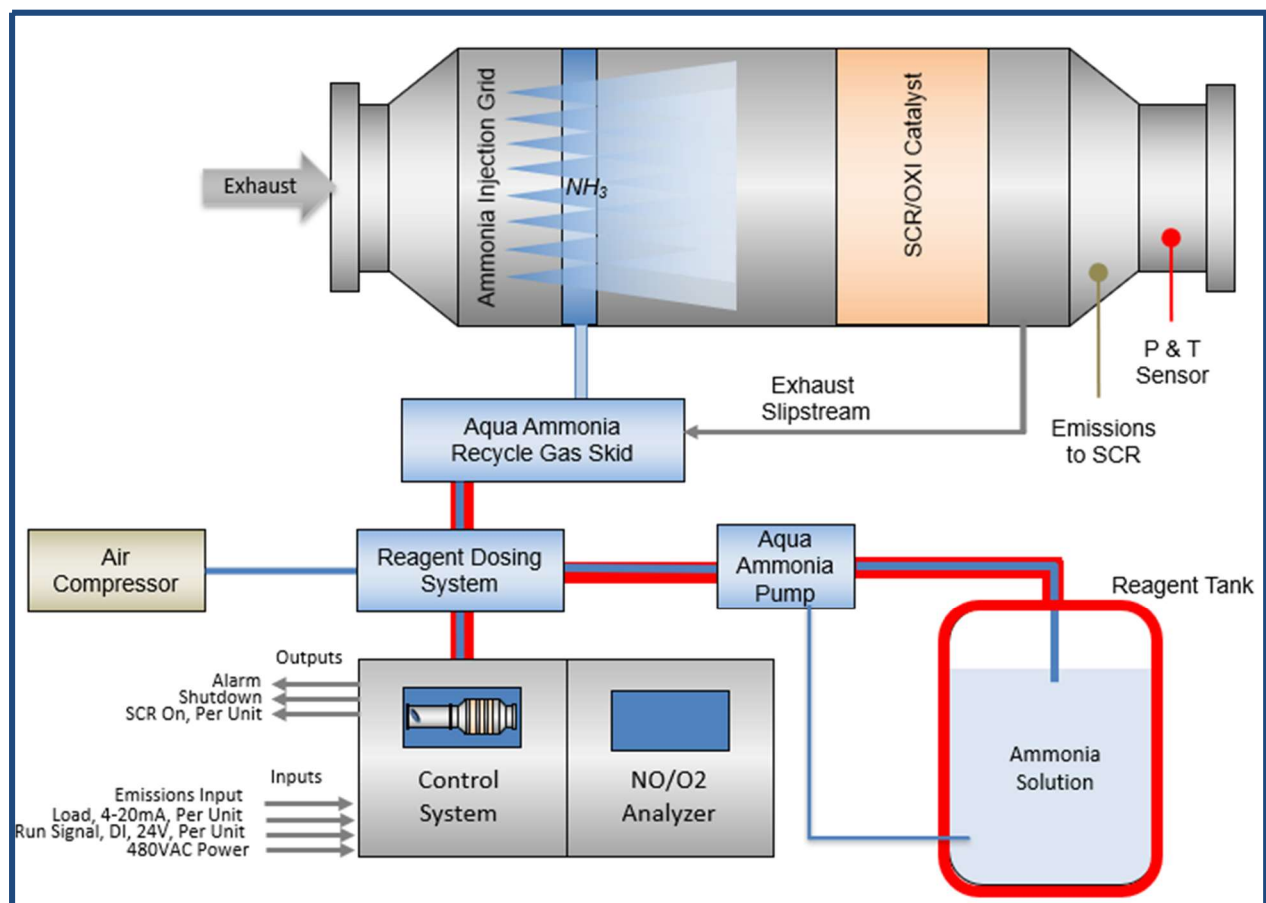
The SCR Catalyst Technology:

SCR catalysts generally fall into two categories, a vanadia-based catalyst embedded in an extruded ceramic substrate, or a zeolite-based technology coated onto the surface of a ceramic substrate. In the former, the catalyst is actually incorporated into the ceramic structure, and as a result the catalyst is generally more robust to thermal variation. In addition, vanadia-based technologies operate over a wide temperature range, and when combined with its strength advantages and lower cost, are used in many

industrial applications such as large-scale power plants and boiler systems. Vanadia-based catalysts have demonstrated NO_x reduction capability of up to 98%, and can operate continuously to temperatures of 510°C (950°F).

Zeolite systems are ideal for higher temperature applications, for example above 510°C, and as such have found wide use in mobile diesel applications such as on-highway trucks. These systems have also demonstrated a capability for high NO_x reduction.

The size of the SCR catalyst elements and how they are configured in a catalyst housing (e.g., number of catalyst layers) is determined by factors such as the required NO_x reduction, allowable back pressure of the engine, and ammonia slip limits. High levels of NO_x reduction (>80%) generally require 2-4 layers of catalyst.



Schematic of a representative [REDACTED] Emission Control System.

Urea Injection Strategy:

Reducing NO_x to N₂ with high levels of chemical conversion efficiency without introducing excess ammonia into the exhaust (known as “ammonia slip”) requires precise control of the urea or ammonia injection process. The strategy for urea or ammonia injection depends on the degree of NO_x reduction, and the required ammonia slip limits.

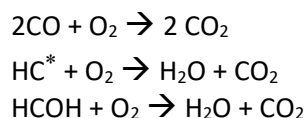
The simplest injection strategy links the engine to the SCR system through the engine load. NO_x emissions are measured as a function of engine load, creating a “NO_x vs. Engine Load” map. From this map, an injection algorithm determines the amount of urea or aqua ammonia necessary to reach the required NO_x level, and sends this signal to the dosing control system. Because the amount of urea or ammonia injected is based on the engine load and not on a direct measurement of NO_x, such an engine mapping strategy is often referred to as an “open-loop” control strategy. Such an injection strategy has been used successfully when NO_x reduction requirements are generally less than 90%. Moreover, the strategy has demonstrated that ammonia slip is minimal, generally far less than typical 10ppm regulatory requirements.

When higher levels of NO_x reduction are necessary, it is customary to add a NO_x analyzer to the SCR System to directly measure NO_x after the SCR catalyst. The signal from the analyzer is then sent to the SCR dosing control system, which then “trims” the injection volume up or down to ensure the required NO_x reduction level is reached, without overdosing that could lead to an increase in ammonia slip. As the NO_x is measured directly with the NO_x analyzer, and the signal is used to control the reagent dosing volume, this strategy is referred to as “closed-loop” control. This strategy has demonstrated up to 98% NO_x reduction, with very low levels of ammonia slip (as low as 5ppm in some applications).

Role of the Oxidation Catalyst:

By incorporating an oxidation catalyst into the system, it is possible to reduce carbon monoxide (CO), many hydrocarbon species (HC), volatile organic compounds (VOC) such as formaldehyde, and particulate matter. Placement of the oxidation catalyst depends on the application requirements, such as degree of CO reduction, but also on parameters such as the degree of NO_x reduction and maximum levels of ammonia slip. In many cases, the oxidation catalyst can be incorporated directly into the SCR catalyst housing, saving both space and the cost of a separate housing.

Oxidation catalysts are generally precious metals-based systems composed of platinum, or mixtures of platinum, palladium and other precious group metals (PGM). PGM catalysts are highly effective at utilizing the excess oxygen in the exhaust stream of lean-burning engines to convert CO, HC and formaldehyde to water vapor and carbon dioxide, as shown below:



Oxidation catalysts can be engineered to operate at temperatures similar to SCR catalysts, allowing for reduction of several pollutant emissions within the same system. Moreover, oxidation catalysts are highly effective, reducing emissions as much as 95%.

* The specific reaction depends on HC species, such as CH₄, C₂H₆ etc.

IV. SCR CATALYST IMPURITY TOLERANCE SPECIFICATION

SCR catalysts, like all catalyst materials, are susceptible to severe performance degradation if certain impurities in the exhaust stream exceed specific levels. These impurities derive from the use of improper or off-spec fuels, certain impurities in landfill or digester gases, lubrication oils, or other additives that could become part of the exhaust gas composition.

In order to maintain the warranty for the SCR quoted in this engineering document, the following impurities and impurity concentrations must be strictly adhered to. Any unexpected performance degradation of the SCR and/or Oxidation catalyst system will result in a chemical analysis of the catalyst system to determine if these impurity tolerances were exceeded.

Impurity	Max. Concentration Limit
Alkaline Metals	5 mg/Nm ³ (wet)
Alkaline Earth Metals	1 mg/Nm ³ (wet)
Hydrochloric Acid; Chloride Compounds	100 mg/Nm ³ (wet)
Hydrofluoric Acid; Fluoride Compounds*	1 mg/Nm ³ (wet)
P ₂ O ₅ ; Organic Phosphorous Compounds	0.05 mg/Nm ³ (wet)
Mercury & Zinc	0.1 mg/Nm ³ (wet)
Lead & Cadmium	0.1 mg/Nm ³ (wet)
Arsenic; Arsenic Compounds	0.005 mg/Nm ³ (wet)
Organic Silicon Compounds (e.g., Siloxanes); Silicon Halides	0.005 mg/Nm ³ (wet)

**Depending on exhaust gas composition and engine operating condition, a concentration of up to 20 mg/Nm³ may be acceptable. Please contact us for more information.*

ATTACHMENT G



Kinder Morgan

Proposal Title: Rio Vista

Proposal Number: [REDACTED]

Proposal Description: [REDACTED] Emission Control System to Reduce Emissions from
Solar Saturn 10-1202 Turbines

Submitted by: [REDACTED]

[REDACTED] **Contact:** [REDACTED]

Date Submitted: July 1, 2021

July 1, 2021

Kinder Morgan
James Trent
1001 Louisiana Street
Houston, TX 77002
Phone: 713-254-5279
Email: james_trent@kindermorgan.com

Proposal #:	[REDACTED]
Project Name:	Rio Vista

James,

We are pleased to submit this proposal for an [REDACTED] **Emissions Control System** designed to reduce emissions for (2) Solar Saturn turbines.

The [REDACTED] **Emissions Control System** offered for this project is based on engine and emissions data provided by Kinder Morgan. The enclosed proposal details the price, scope of supply, warranty, commissioning and terms and conditions necessary to achieve the required emissions limits and long-term compliance.

Should you have any questions or comments, please do not hesitate to contact me.

THE [REDACTED] ADVANTAGE: COMPLIANCE AT A COMPETITIVE COST

[REDACTED] is an environmental engineering company supplying reliable exhaust after-treatment based emissions control systems to the North American market. Our strength is helping customers comply with federal and local emission regulations targeting process machines, marine vessels, offshore rigs, stationary diesel and natural gas engines and turbines. We specialize in reducing NOx using a comprehensive systems approach based on Selective Catalytic Reduction (SCR). Our SCR systems are then combined with oxidation catalysts or particulate filter technologies to reduce other regulated pollutant emissions, such as carbon monoxide (CO), hydrocarbons (HC), volatile organic compounds (VOC) and particulate matter (PM). We also offer an array of supporting component options, from urea storage tanks to air compressors to silencers, with the goal of providing everything necessary for a successful and near-turnkey installation.

Based in [REDACTED], [REDACTED] is a [REDACTED]. [REDACTED] leverages more than five decades of experience in environmental compliance, and draws upon the knowledge of over 1000 successful SCR systems in a wide variety of markets such as marine, power generation, oil and gas development, industrial and chemical processes.

Our structured engineering approach begins by comparing your project's emissions profile to the regulations, or to the project's unique requirements. We then design an emission control system tailored to your application. Our product manufacturing process is governed by exacting quality standards, and our systems are commissioned with the [REDACTED] Emissions Guarantee. To ensure compliance over the long-term, we provide support after the sale through extensive operator training, spare parts, and on-site maintenance.

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III. OPERATING PRINCIPLE	12
IV. SCR CATALYST IMPURITY TOLERANCE SPECIFICATION	15

I. QUOTATION

PROPOSAL #: [REDACTED]

PROJECT: Rio Vista

DESCRIPTION: [REDACTED] Emission Control Systems to reduce emissions from Solar Saturn Natural-Gas Fired Turbines

1. SCOPE OF SUPPLY

ITEM	DESCRIPTION	EXT. PRICE (\$)
001	EMISSIONS CONTROL SYSTEM (2 x Saturn 10-1202) • 2 x Tempering Air Blower • 2 x Static Mixing Section with integrated Injection Lance • 2 x SCR Catalyst Housing containing: ○ SCR catalyst ○ Temperature and Differential Pressure Sensors • 2 x Silencer and Stack • 2 x Control System, Touch-screen PLC ○ NOx Sensor • 2 x Urea/Air Dosing Panel • 1 x Reagent Pump Station • 1 x Reagent Storage Tank • Engineering, Operation & Maintenance Documentation	\$1,170,000

Not included in the scope of supply:

- Load signal from the engine (4-20 mA)
- Fuel flow signal from the engine (4-20mA)
- Fuel composition (TCP/IP)
- Engine running signal (digital dry contact, closed when engine is running)
- Internet connection for remote PLC access and service support
- Structural and civil work necessary to complete the installation
- Expansion joints for provided exhaust components
- Aqueous Ammonia Solution
- Compressed Air, per ISO 1.3.4 requirements
- Heat tracing of Ammonia tank or Ammonia lines (available as an option)
- Provision for electricity and connection of the power supply to the enclosure
- System integration (design and engineering) with the building structure
- Platforms and other support structures
- Any 3rd party emission certification of stack test

2. PRICE

The given prices for the SCR Emissions Control System are net prices, DDP to customer location in NM, according to Incoterms 2010. All prices are in US dollars. Not included are taxes. Shipping based on standard ground, sea vessel and non-expedited shipping.

3. PAYMENT

30% of the order value upon initial order;

15% of the order value with submittal of engineering documents

50% of the order value with ready for shipment of the hardware

5% of the order value after successful commissioning, not to exceed six (6) months after delivery

All payments are to be paid within 30 days after each date of invoice, net.

4. SCHEDULING & DELIVERY

Delivery of the drawings and technical documents is approximately 12 weeks after receipt of a purchase order. Delivery of the hardware is approximately 20 weeks after approval of all technical details. Total estimated schedule (with a 4-week customer review period) is 36 weeks for receipt of material at each station.

5. QUALITY STANDARD

All drawings will be in both metric and English units. We reserve the right to adapt the technical design of the emission control system based on the results of the final engineering work, provided this does not impact the affect the guaranteed performance characteristics and is approved by the customer before production begins.

6. OFFER VALIDITY

This offer is valid 90 days from date on proposal.

II. TECHNICAL DESCRIPTION

1. EXHAUST GAS DATA & EMISSION REQUIREMENTS

Unit Data:

Parameter = 100% Load	Unit	Solar Saturn 10-1202*
Fuel	-	CQNG
Power	bhp	1,051
Exhaust Gas Flow Rate (wet)	lb/hr	37,652 95,398**
Exhaust Gas Moisture Content (actual, wet)	Vol. %	4.5
Oxygen Content (actual, wet)	Vol. %	15.6
Exhaust Temperature	°F	1190 850**

* From KM provided data

**With Tempering Air Added

Emission Control System Design Parameters:

Parameter	Unit	Saturn 10-1202
Aqueous Ammonia Solution	%	19
Aqueous Urea Solution Consumption Rate (at 100% engine load) approximately, per engine	gph	~5.8
Total Estimated Backpressure Contribution	inH ₂ O	6.5
Air Consumption, per engine (Based on 87 psi nominal, max 160 psi)	scfm	12**

**Typical dosing Type Z-Purge is ~4scfm with door open and <1scfm with door closed

2. EMISSIONS GUARANTEE & WARRANTY

Constituent	Current Engine Out	Required Stack Out**
NOx as NO ₂ *	150 ppmvd @15% O ₂	50 ppmvd @15% O ₂

** Based on 1 hour averaging with the engine operating at 100% load. Minimum temperature for SCR performance is 570F.*

***Based on a minimum 500F SCR outlet temperature with 19% NH3 and Maximum SCR inlet temperature of 950F*

Provided the engine is operating under stable operating conditions, guarantees the stack emissions (Based on % reduction) for a period of 16,000 hours of operation or 24 months after the initial engine performance test date, or 30 months after delivery, whichever comes first. All values are per EPA-approved measurement methods, with one-hour averaging while the engine is operating at 100% load. The mechanical warranty is 12 months after commissioning or 18 months after delivery, whichever comes first.

This guarantee is subject certain maintenance practices and engine operating conditions, as defined in the Terms & Conditions. The guarantee is also based on the emissions data provided to at the time of this quotation and defined in Section 1 of the Technical Description. reserves the right to modify Items 001 in the Scope of Supply and associated price once more accurate and complete emissions data are obtained in order to ensure the emission limits can be maintained as required.

3. SCOPE OF SUPPLY

A. Engineering (Per Site)

- Drawings
- System flow diagram
- Control of the SCR system
- Documentation

B. Tempering Air Blower (Per Unit)

Includes a single air tempering blower system to maintain constant temperature at the SCR elements. Designed to maintain ~850F temperature at the SCR inlet depending on the ambient conditions and unit load. Includes the motor VFD.

C. Mixing Section & Injection Nozzle (Per Unit)

Aqueous Ammonia solution is injected into the exhaust with a two-phase nozzle (air and Ammonia solution). An air atomization nozzle is integrated into the mixer to create small droplets such that complete evaporation of the water occurs without contacting the walls of the ductwork. The mixing section (SS304 housing/flanges) with integrated injection nozzle is coupled to a straight exhaust duct (included) to ensure complete conversion of aqueous Ammonia to ammonia gas.

D. Catalyst Housing (Per Unit)

The SCR catalysts are integrated into a single catalyst housing enclosure. The catalyst is loaded via service panels located on the side of the housing. With outlet temperature and differential pressure monitoring. Includes space for 1 additional layer of SCR elements and 1 layer of oxidation element. Note the SCR catalyst impurity tolerance specification in Section IV.

E. Silencer (Per Unit)

Based on the following:

- Carbon-steel, painted high temperature paint.
- Designed based on 100mph wind load
- Designed as base mounted, vertical
- With Stack for height from grade ~30ft
- Designed for 15-20 dBA noise reduction
- With 4 x 4in ANSI 150# test ports

F. SCR Control (Per Unit)

The SCR is controlled by a single PLC based control system housed in a control cabinet per unit. Includes an A-B MicroLogix PLC; 6in touch screen (A-B) control with menu-guided parameter inputs (without any program change); password protection; error message and clear readable display.

G. Reagent Dosing Panel (Per Unit)

All components for aqueous ammonia dosing are mounted on a steel back panel; includes steel dosing valve, magnetic valves and shut-off valves. (Pressure indicators related to reagent solution supply to the dosing panel are the customer's scope.)

H. Ammonia Pump Station (Per Site)

Pump station complete with auxiliary valves, filters; ships fully assembled and pretested from our factory. The pump station has been designed for 19% aqueous NH₃ for simultaneous operation of all units at the facility. The pump station also comes with one 100% backup pump.

I. Ammonia Tank and End Devices (Per Site)

Includes (1) horizontal, 12,000 USG, single-wall stainless-steel tank. 96in D x 32ft tangent to tangent length, made of 304 stainless steel, built to ASME Section VIII Division 1 Code, Design Parameters: 30 psig, 125°F with 1/16 in corrosion allowance. With the following end devices:

- (1) Ultrasonic level transmitter
- (1) Temperature transmitter
- (1) Pressure transmitter
- (1) Relief and Vacuum Valve
- (1) NH₃ leak detection sensor
- (1) Control panel for indication of level, pressure and temperature

III. OPERATING PRINCIPLE

Selective Catalytic Reduction Principle

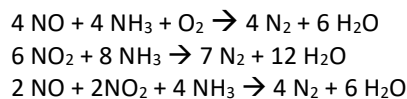
NO_x is a general term referring to Nitrogen Oxide (NO) and Nitrogen Dioxide (NO₂) gases. NO_x forms at the high temperatures of a combustion process, typical of internal combustion engines. NO_x is a precursor to smog and adversely affects health and the environment. As such, NO_x is increasingly regulated by both the US Environmental Protection Agency and by local authorities.

NO_x emissions are most efficiently removed from the exhaust by Selective Catalytic Reduction, often referred to as SCR. SCR works by promoting a chemical reaction between the NO_x and ammonia gas (NH₃), which is introduced upstream of the SCR catalysts. The ammonia can come from a variety of sources, including directly as a gas (known as anhydrous ammonia), or as an aqueous ammonia solution. It is more common to use aqueous urea solution. Urea is a widespread component of fertilizer, and water-based solutions made from urea are easier to handle than ammonia compounds. Moreover, aqueous urea solutions are readily available in different storage capacities and concentrations.

Commercially, aqueous urea solutions come in two concentrations, either 32.5% or 40%. The lower concentration, 32.5%, has the lowest freezing point of 12°F (-11°C), and is therefore used in colder climates where ambient temperatures can reach this point. The 40% concentration has a higher freezing temperature of 35°F (2°C), but requires less volume of solution to achieve the same degree of NO_x reduction. In either case, freezing is to be avoided since injection becomes problematic. When low temperatures are encountered in the application, it is customary to install an immersion heater in the urea storage tank, as well as heat-tracing the urea supply lines to the SCR System. This is true for both concentrations of urea solution.

When the engine is running and the catalyst has warmed up to its normal operating temperature, urea solution is injected into exhaust stream ahead of the SCR catalyst, in combination with high-pressure air, to assist in atomizing the spray. (The air also cools the urea injection nozzle and purges the injector when the engine is no longer running.) Chemically, the heat of the exhaust first vaporizes the water in the urea solution, resulting in the formation of small urea crystals. These crystals further breakdown in the exhaust stream into ammonia and carbon dioxide. Once ammonia is present, the chemical reactions shown below take place over the SCR catalyst, reducing NO_x to harmless nitrogen gas and water vapor.

Once ammonia gas is present, the chemical reactions shown below take place over the SCR catalyst, reducing NO_x to harmless nitrogen gas and water vapor:



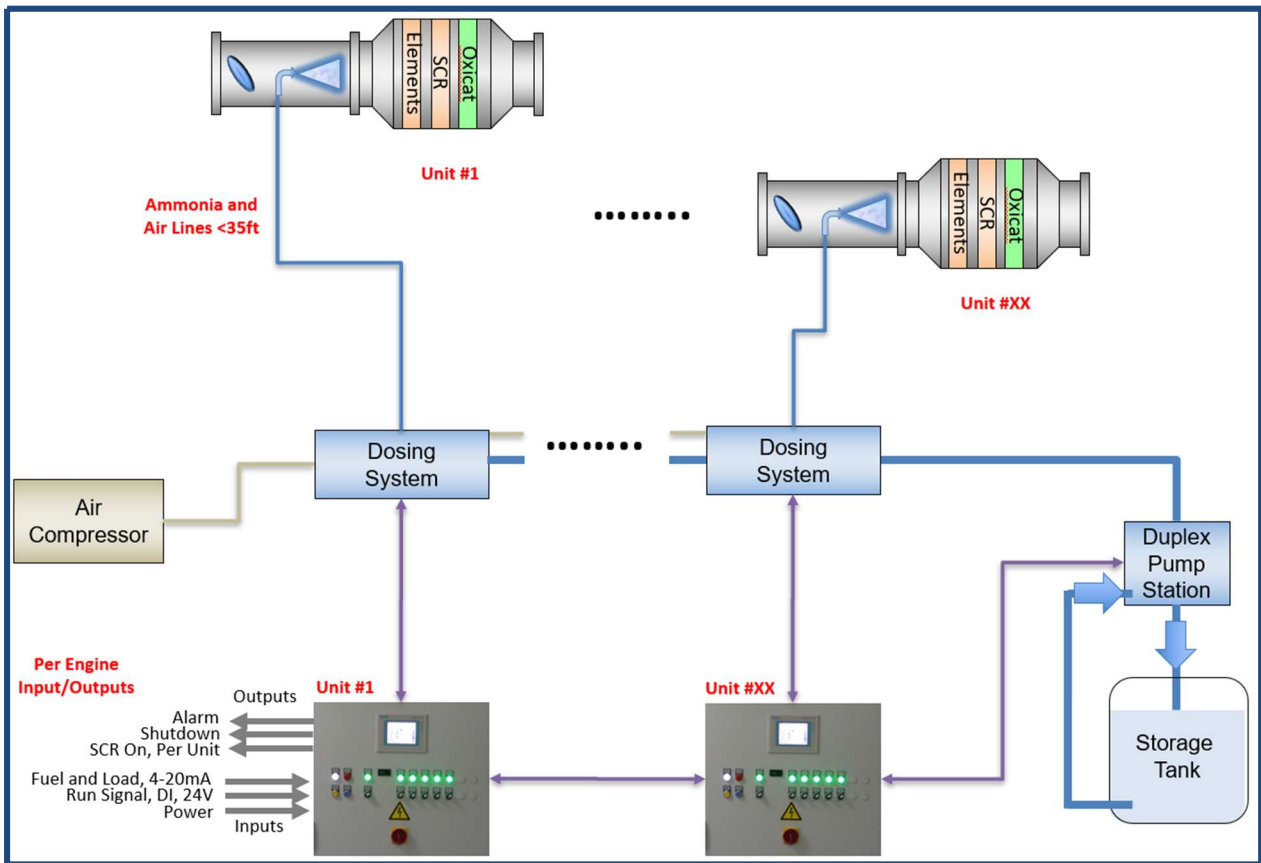
The SCR Catalyst Technology:

SCR catalysts generally fall into two categories, a vanadia-based catalyst embedded in an extruded ceramic substrate, or a zeolite-based technology coated onto the surface of a ceramic substrate. In the former, the catalyst is actually incorporated into the ceramic structure, and as a result the catalyst is generally more robust to thermal variation. In addition, vanadia-based technologies operate over a wide temperature range, and when combined with its strength advantages and lower cost, are used in many

industrial applications such as large-scale power plants and boiler systems. Vanadia-based catalysts have demonstrated NOx reduction capability of up to 98%, and can operate continuously to temperatures of 510°C (950°F).

Zeolite systems are ideal for higher temperature applications, for example above 510°C, and as such have found wide use in mobile diesel applications such as on-highway trucks. These systems have also demonstrated a capability for high NOx reduction.

The size of the SCR catalyst elements and how they are configured in a catalyst housing (e.g., number of catalyst layers) is determined by factors such as the required NOx reduction, allowable back pressure of the engine, and ammonia slip limits. High levels of NOx reduction (>80%) generally require 2-4 layers of catalyst.



Schematic of a representative Emission Control System.

Urea Injection Strategy:

Reducing NO_x to N₂ with high levels of chemical conversion efficiency without introducing excess ammonia into the exhaust (known as “ammonia slip”) requires precise control of the urea or ammonia injection process. The strategy for urea or ammonia injection depends on the degree of NO_x reduction, and the required ammonia slip limits.

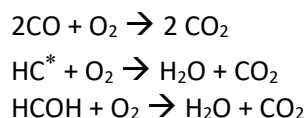
The simplest injection strategy links the engine to the SCR system through the engine load. NO_x emissions are measured as a function of engine load, creating a “NO_x vs. Engine Load” map. From this map, an injection algorithm determines the amount of urea or aqua ammonia necessary to reach the required NO_x level, and sends this signal to the dosing control system. Because the amount of urea or ammonia injected is based on the engine load and not on a direct measurement of NO_x, such an engine mapping strategy is often referred to as an “open-loop” control strategy. Such an injection strategy has been used successfully when NO_x reduction requirements are generally less than 90%. Moreover, the strategy has demonstrated that ammonia slip is minimal, generally far less than typical 10ppm regulatory requirements.

When higher levels of NO_x reduction are necessary, it is customary to add a NO_x analyzer to the SCR System to directly measure NO_x after the SCR catalyst. The signal from the analyzer is then sent to the SCR dosing control system, which then “trims” the injection volume up or down to ensure the required NO_x reduction level is reached, without overdosing that could lead to an increase in ammonia slip. As the NO_x is measured directly with the NO_x analyzer, and the signal is used to control the reagent dosing volume, this strategy is referred to as “closed-loop” control. This strategy has demonstrated up to 98% NO_x reduction, with very low levels of ammonia slip (as low as 5ppm in some applications).

Role of the Oxidation Catalyst:

By incorporating an oxidation catalyst into the system, it is possible to reduce carbon monoxide (CO), many hydrocarbon species (HC), volatile organic compounds (VOC) such as formaldehyde, and particulate matter. Placement of the oxidation catalyst depends on the application requirements, such as degree of CO reduction, but also on parameters such as the degree of NO_x reduction and maximum levels of ammonia slip. In many cases, the oxidation catalyst can be incorporated directly into the SCR catalyst housing, saving both space and the cost of a separate housing.

Oxidation catalysts are generally precious metals-based systems composed of platinum, or mixtures of platinum, palladium and other precious group metals (PGM). PGM catalysts are highly effective at utilizing the excess oxygen in the exhaust stream of lean-burning engines to convert CO, HC and formaldehyde to water vapor and carbon dioxide, as shown below:



Oxidation catalysts can be engineered to operate at temperatures similar to SCR catalysts, allowing for reduction of several pollutant emissions within the same system. Moreover, oxidation catalysts are highly effective, reducing emissions as much as 95%.

* The specific reaction depends on HC species, such as CH₄, C₂H₆ etc.

IV. SCR CATALYST IMPURITY TOLERANCE SPECIFICATION

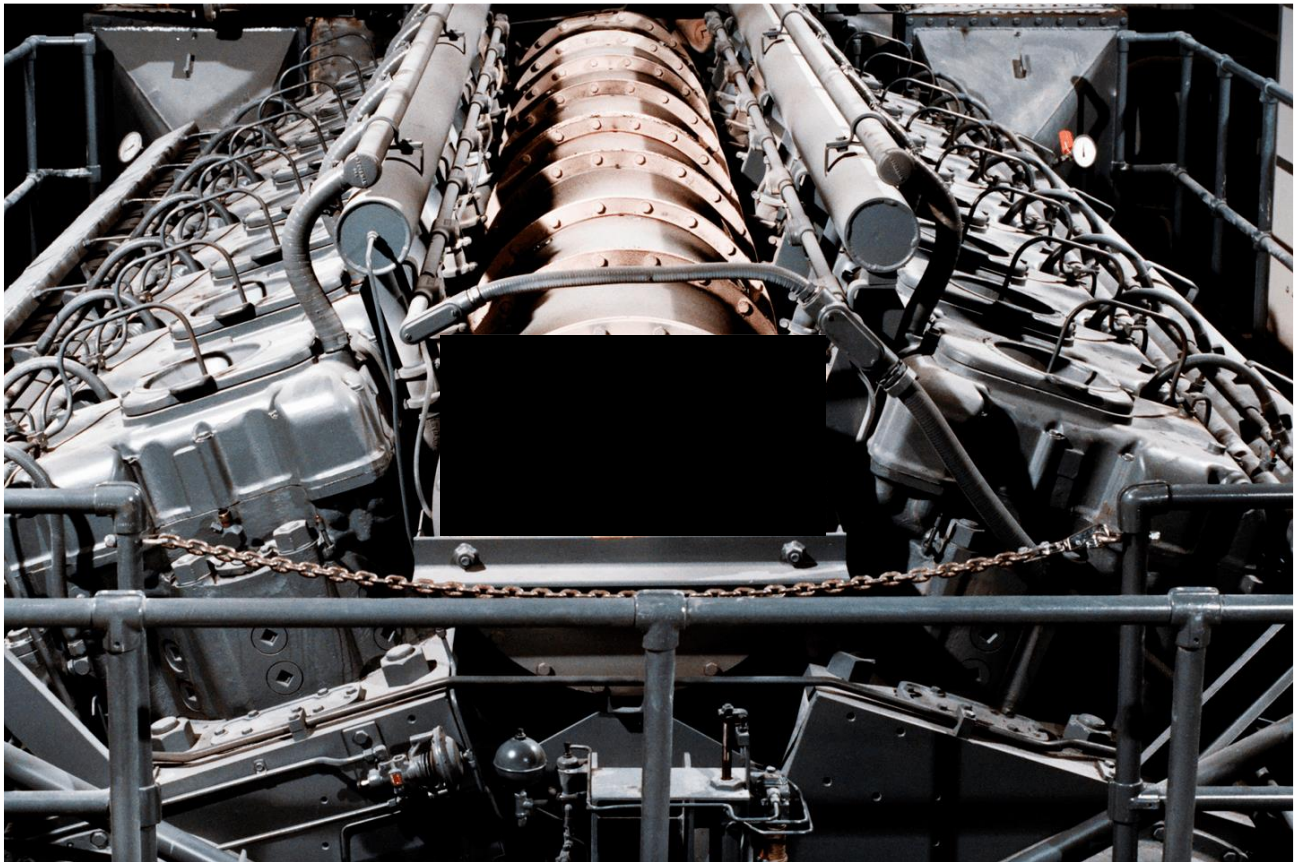
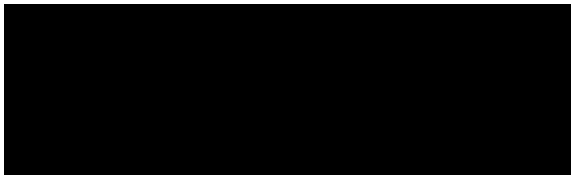
SCR catalysts, like all catalyst materials, are susceptible to severe performance degradation if certain impurities in the exhaust stream exceed specific levels. These impurities derive from the use of improper or off-spec fuels, certain impurities in landfill or digester gases, lubrication oils, or other additives that could become part of the exhaust gas composition.

In order to maintain the warranty for the SCR quoted in this engineering document, the following impurities and impurity concentrations must be strictly adhered to. Any unexpected performance degradation of the SCR and/or Oxidation catalyst system will result in a chemical analysis of the catalyst system to determine if these impurity tolerances were exceeded.

Impurity	Max. Concentration Limit
Alkaline Metals	5 mg/Nm ³ (wet)
Alkaline Earth Metals	1 mg/Nm ³ (wet)
Hydrochloric Acid; Chloride Compounds	100 mg/Nm ³ (wet)
Hydrofluoric Acid; Fluoride Compounds*	1 mg/Nm ³ (wet)
P ₂ O ₅ ; Organic Phosphorous Compounds	0.05 mg/Nm ³ (wet)
Mercury & Zinc	0.1 mg/Nm ³ (wet)
Lead & Cadmium	0.1 mg/Nm ³ (wet)
Arsenic; Arsenic Compounds	0.005 mg/Nm ³ (wet)
Organic Silicon Compounds (e.g., Siloxanes); Silicon Halides	0.005 mg/Nm ³ (wet)

**Depending on exhaust gas composition and engine operating condition, a concentration of up to 20 mg/Nm³ may be acceptable. Please contact us for more information.*

ATTACHMENT H



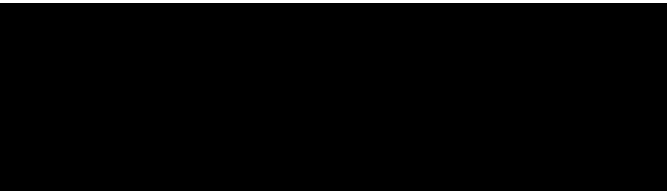
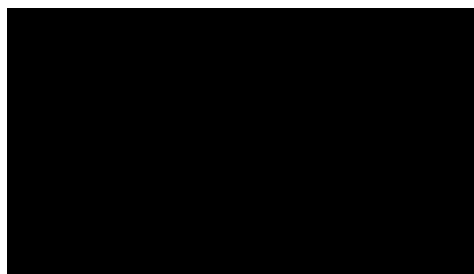
Date: July 23, 2021
Estimate is valid for 180 days

Budgetary Estimate for Emissions Reduction Solutions at EPNG Monument Compressor Station

Kinder Morgan

James Trent

James_Trent@kindermorgan.com



██████████ is pleased to respond to your request for a budgetary estimate concerning engine and compressor optimization retrofits for the Cooper GMV 10TF units located in Monument New Mexico. This is a ***budgetary estimate*** for the scope of work listed and described in this estimate. Since no site visit has been made prior to this proposal, certain assumptions were made to be able to offer this estimate. It is not uncommon for final pricing to be within +/- 20% of this estimate after a site visit and full engineering review is conducted. As a turn-key budgetary estimate, this proposal includes all the estimated materials and labor efforts required to meet the project guarantees as requested in the RFP. ██████████ reserves the right to correct clerical errors in this proposal. This estimate pricing is valid for 90 days.

Approach to the Solution

There are several options and combinations of technologies, available through ██████████ to reach varying levels of reliability while reducing NOx emissions. These solutions will seek to positively manipulate all three sides of the combustion triangle – Air, Fuel and Ignition – thus improving combustion stability while reducing NOx and Methane emissions.

Performance Guarantees

The ██████████ guarantee for emission retrofit projects addresses two vital aspects of engine operation – emissions compliance and combustion stability. These performance guarantees will ensure that at completion of the commissioning phase, the engine will operate within the emissions requirements while operating more reliably than prior to the retrofit. The emissions performance will meet and/or exceed the described limits in the Performance and Guarantees section below. The combustion stability performance (reliability), demonstrated via Coefficient of Variation (CV), as explained in Combustion Stability and the Lean Limit below, will also meet and/or exceed the described parameters highlighted in the Performance and Guarantees section below.

Combustion Stability and the Lean Limit

The definition for “The Lean Limit” of combustion is subject to interpretation. There are some who suggest that if the flywheel turns, then the engine is performing as expected. At ██████████ every emissions reduction project is approached by evaluating and addressing the engine’s specific combustion challenges. ██████████ defines these challenges and applies the following guidelines based on combustion stability. ██████████ uses the coefficient of variation or CV to define the recommended lean limit of operation. CV is simply the engine average standard deviation of combustion divided by the engine average peak pressure and is presented as a percentage. ██████████ characterizes engine performance by CV and recommends all proposed designs to have an operating CV of 10% or less. For this project, ██████████ will expect an engine CV less than 8%. Figure 1.2 summarizes CV and engine operating characteristics.

Figure 1.2

COV	Characteristic
≤ 5	Very smooth, only achieved with pre-chambers for lean burn engines
5 ≤ 8	Smooth running engine
8 ≤ 10	Typical lean burn performance
10 ≤ 12	Somewhat rough running, maximum acceptable COV for long term operation
≥ 12	Rough running, not recommended for long term operation

SECTION 1- UNIT REFERENCE

Station	Units	Model	HP	Air Delivery	Current limit NOx	Current limit CO	Current limit VOC
Monument	1 - 3	GMV-10TF	1,002	PS	12.95	1.22	0.45
Monument	4 - 5	GMV-10TFSC	1,002	Turbo and PS	1.77	2.04	0.68

SECTION 2 - Technical Description of Solution

Kinder Morgan has requested solutions and pricing to reduce the unit specific emissions limits to .5g NOx for each of the units. To achieve the .5 g/bhp-hr emissions limits, [REDACTED] [REDACTED] will recommend the necessary upgrades and combustion modification retrofits as described in this Budgetary Estimate.

When collaborating with customers on an emissions reduction project, the foundational system to any NOx reduction strategy is the air delivery system. [REDACTED] is the only retrofit company that will design an air delivery system to meet the specific needs of the customer's engine.

Turbocharger design and matching is an exact science and when performed properly will enhance the operating range while increasing the maintenance interval. [REDACTED] is the only turbocharger provider in this industry that owns its own turbocharger test cell facility. From air specification design to manufacturing to testing and delivery, [REDACTED] can manage and guarantee the turbocharger build will perform up to the customer's expectations. [REDACTED] also provides a 5-point turbocharger air specification performance test report with all emissions guaranteed turbochargers.

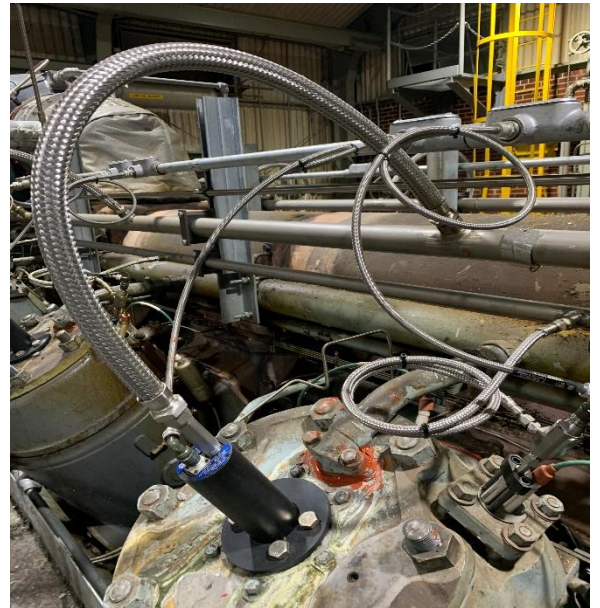
All designs are developed to ensure that a proper scavenge ratio is maintained for the unit and its application. Scavenge Ratio is a measure of the ACFM flow through the cylinder (air flow at AMP and AMT) divided by the trapped volume of the cylinder. This measure is applied to make sure that cylinders are adequately scavenged. This design parameter dictates how successful the charged air will flow through the system during each combustion cycle. The lower the ratio, the more combusted gases stay in the cylinder and act as nonparticipants to combustion for the following cycle (less efficiency). The higher the ratio means there is a more efficient gas exchange and more combustion participants for the following cycle.

Designing a turbocharger involves the development of a five-point air specification that is matched, and performance tested to provide a total peace of mind for project success.

Combustion System Modifications - Improved Fuel Delivery with enhanced mixing technology

To achieve the required emissions limits of .5 g, improvements, modifications, and upgrades to the current fuel delivery system will be needed. The air side will be addressed by the development of a properly sized turbocharger and air:fuel ratio control however, even with optimized air control, the cylinders will remain an extremely lean environment causing lower energy ignition to struggle with light-off. This will be overcome by implementing a high energy ignition system, combustion modifications and enhanced mixing technology. These upgrades and systems are highlighted below and described as follows.

The [REDACTED] system was designed as a user friendly, low operating cost system for achieving high-pressure fuel injection in large bore natural gas engines. The [REDACTED] system is an ALL-electronic high-pressure fuel injection system that eliminates the need for mechanical or hydraulic actuation of the fuel valves. The elimination of the mechanical system improves the reliability of fuel injection, eliminates the routine maintenance associated with stock mechanical or aftermarket hydraulics and greatly reduces the component cost and installation effort. The [REDACTED] system fundamentally changes the operating philosophy from the current constant timed (cam shaft) variable pressure (governor) to a variable timed (pulse width modulated) constant pressure (500 psig) system. This operating change greatly diminishes the effects of pressure waves within the fuel gas system and allows for extremely accurate balancing and control.



The [REDACTED] system valves inject fuel through direct injection at 500psig. Electronic control of the fuel injectors allows for automatic balancing and the ability to operate in [REDACTED] mode when the engine is lightly loaded. In [REDACTED] mode, the [REDACTED] system will work to avoid lean misfires during warm-up or unloaded conditions. This is accomplished by maintaining a rich enough mixture to fire a cylinder when more torque is needed while at the same time not fueling a cylinder when more torque is not required. Skip Fuel greatly extends the low torque operating range of the engine.

At the same BMEP, an engine fitted with enhanced mixing technology experiences ~20%-30% lower combustion loading and stress. Probabilistically this means a component failure occurring at ~40,000 hrs. on a conventionally fueled engine will not fail until the engine has accumulated ~2.5 times that number of cycles or ~100,000 hrs. of operation for a unit fitted with enhanced mixing technology.

Pilot Gas System

A pilot fuel supply system will be furnished. This assembly includes two steel pilot fuel headers, individual (one per Jet Cell) fuel filters, a fuel pressure regulator, and a 1:2 amplifying ratio relay to bias Jet Cell fuel pressure from air manifold pressure. Also included with this assembly is the miscellaneous tubing, fittings, etc. to install the pilot fuel delivery system.

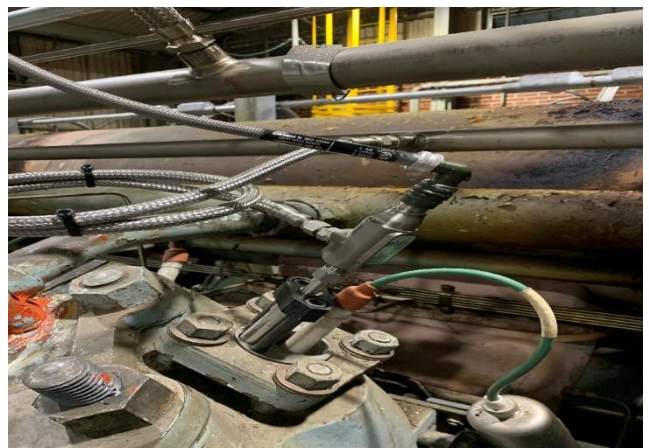
Jet Cell Power Cylinder Heads

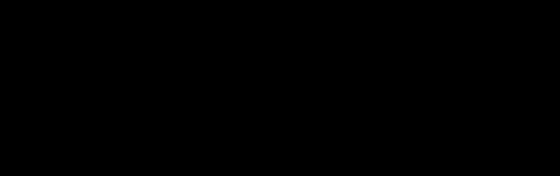
New power cylinder heads with provisions to accept the Jet Cell gas ignitor are included with this assembly. The head being supplied is the standard currently stocked head for use on GMV, GMVA and GMVC engines. It has provisions to mount one Jet Cell per head. It also contains a provision for a standard spark plug to be used in a second location as well as a provision for the existing air starting valve. The second spark plug can have some beneficial impact on engine starting.

Due to extremely lean air/fuel ratio mixtures required to operate at the lower NOx levels, cylinder light off is greatly challenged. Pre-Combustion Chambers (PCC) are utilized where high energy ignition is required i.e. clean burn retrofits. The traditional PCC, with mechanical ball or wafer checks, function by admitting fuel in the PCC by method of differential pressure within the chamber. Fueling occurs when the fuel gas pressure against the check valve overcomes the pressure in the chamber. The extent of control with traditional PCC systems includes a fuel pressure bias typically mapped to AMP. This control is very “loose” and depends on the check valves to be functioning properly. Depending on operating conditions and fuel gas properties, check valves experience degradation at relatively short intervals including partial to full restriction of flow due to check valve sticking. In these conditions, even marginal control is not possible especially at ultra-lean air/fuel ratios. Generally, mechanical checks require cleaning every 750 – 2000 hours depending on gas quality and pose a significant maintenance and reliability issue for engines that are in frequent start stop service.

██████████ is proud to present the OEM approved solution to the mechanical pre combustion chamber check valves with the r ██████████ system. The ██████████ system combats mechanical check valve issues and related maintenance costs. The ██████████ system was first introduced to the industry by ██████████ and is now owned and provided by ██████████

The ██████████ system replaces the mechanical check valve with an electronic valve offering absolute control of the pre-chamber air: fuel ratio, eliminates startup fuel control issues and eliminates sticking issues. The ██████████ system positively actuates the PCC fuel valve with an end of admission (EOA) strategy, and it is not as susceptible to fouling. Combustion stability with the ██████████ system is nothing less than amazing. The common measure for combustion stability is Coefficient of Variation (CV) which measures the relative combustion stability by dividing the engine standard





deviation into the engine average peak pressure. Engines fitted with PCC generally have CV values near 5%. Engines fitted with the [REDACTED] system generally have CV values near 3%, which accounts for nearly a 40% improvement in combustion stability

Power Piston

The bill of material reveals that the GMV-10-TF engines were originally manufactured with a " Mexican hat" style power piston, part number GMV-9-4A. While not a factor in meeting the emissions requirements, the crown contour of this piston is such that the high intensity flame front from the Jet Cell will impinge upon the crown in a more perpendicular fashion than later piston designs. For long term, reliability concerns it is recommended that any of the old GMY-4-9A pistons still in use be replaced with a more modern design. As the Mexican hat style piston was made obsolete in 1961 experience indicates that there are probably none of these still in operation and therefore no financial considerations have been made for replacing these style pistons.

Power Cylinders

[REDACTED] records show that these GMV-10-TF units were originally supplied with power cylinders part number GMY-2- 14A#1. These are low port design with the distance from the top of the cylinder to the top of the exhaust port being nominally 10.5". [REDACTED] recommends replacing the current power cylinders to utilize a higher port option with the for the GMV-10-TF engine conversion.

Ignition System

To facilitate variable ignition timing control and to maintain similarity with the package being offered for the GMW-10-TF, a complete ignition system upgrade will be furnished as part of the conversion. The system being offered is the Altronic CPU 2000.

Scavenging Air System Modifications - High Efficiency Turbocharger - Series Configuration

To provide the scavenging and combustion air necessary to operate in the series turbocharged configuration at the proposed engine rating, ambient temperature rating of 110°F and effectively lower the NOx emissions, a high efficiency turbocharger will be added. The turbocharger will be specifically matched to engine requirements. [REDACTED] has experience with use of the Cooper-Bessemer Model CB13A in similar applications and is offering employment of same here. To mount the new turbocharger on the flywheel end of the existing engine base, a fabricated steel platform type support structure will be furnished. An angle bracket and two support legs that attached to the flywheel end housing make up the support system.

Dry Exhaust Manifold

The existing water-cooled exhaust manifold will remove too much heat energy from the exhaust system to allow the low emissions guarantee to be achieved. A new dry type of sectional exhaust manifold will be provided. Ceramic fiber insulation is sandwiched between steel inner and outer shells. An insulation wrapped expansion joint is placed between each of the five sections. Also supplied with this assembly is new exhaust elbows to keep the installed height to a minimum. The rear manifold section includes the provision for the by-pass valve piping.



Exhaust By-Pass Valve Linkage

To properly control the air/fuel ratio an exhaust by-pass butterfly valve must be supplied to control the speed of the turbocharger. This assembly includes a 6" valve with close-coupled pneumatic positioner and the piping to install the by-pass valve between the rear section of the exhaust manifold and in the turbocharger exhaust gas discharge adapter.

Turbocharger Oil System

To assure proper lubrication to the bearings in the new turbocharger an oil system will be supplied. That system includes a complete plate mounted turbocharger pre-lube panel as described in the following paragraph, a 10-micron duplex oil filter, a pressure regulator set at 35 psi, a check valve to prevent back flow, and all the tubing and fittings required to complete the installation. The existing oil header relief valves in the crankcase are set at only 25 psi. A new valve with a set point of 40 psi will be supplied and installed inside the engine crankcase.

Turbocharger Per-Lube Panel

Satisfactory operation of the new turbocharger includes pre-lube and post-lube requirements. Since these requirements are for much lower oil flows and pressures than are necessary for complete operation, a separate air motor driven turbocharger pre/post-lube panel will be furnished. The panel will be integrated into the turbocharger oil system described in the previous section. The sub-plate mounted assembly includes a 3-way on-off control valve, airline filter, air pressure regulator, air line lubricator, air motor, coupling with guard, positive displacement oil pump with integral 60 psi relief valve, and the check valves to prevent back flow. These components are pre-tubed and mounted on a sub-plate.

Turbocharger Air Discharge Piping/ Intercooler / Engine Intake Piping

The existing crosshead scavenging pistons will remain in use. New air piping is being furnished to connect the new turbocharger to the suction side of the crosshead scavenging pumps. An intercooler will be installed between the turbocharger discharge and the scavenge pump suction to limit the engine air chest temperature. Piping furnished as part of this assembly includes turbocharger air outlet pipe, intercooler inlet / outlet air covers, intercooler discharge pipe, and several connection pipes between scavenge cylinders. Several existing scavenge system items such as an inlet tee and two suction covers will be re-used.

Turbocharger Coolant Inlet and Outlet Piping

The new turbocharger must be cooled with engine jacket water. This assembly includes the miscellaneous piping, hoses, and fittings to provide coolant for inlet and outlet to the new turbocharger. This piping will be integrated into the engine coolant system in conjunction with its modification for the installation of the dry exhaust manifold.

Turbocharger Air Inlet and Exhaust Outlet Adapters

The new turbocharger air inlet and exhaust outlet flanges are not standard field piping sizes. To accommodate easy transition to standard size piping flanges,  will supply the special transition connections for both air inlet and exhaust outlet. The exhaust outlet is oriented above on the same vertical centerline as the air intake (matching the engine vertical centerline). The air intake connection matches a 16" O.D. pipe while the exhaust connection terminates in a 18"- J25# flange connection.

Auxilliary Cooling System / On-Engine Piping and Assemblies

Engine Coolant Outlet Piping

Removing the water-cooled exhaust manifold will also remove the existing engine jacket water discharge piping, as much of it is integral with the exhaust manifold. A new discharge header assembly will be furnished. New discharge jumpers connecting the cylinder head outlets to the new outlet header will be steel braided flexible hose to ease maintenance. The customer connection to this new coolant discharge assembly will remain near to that which currently exists. However, Kinder Morgan will be responsible for any changes that must be made to the station discharge piping to meet the new discharge header tie point.

Engine Fuel Gas Piping

Installing the new dry exhaust manifold results in the need for new engine fuel headers. Two new headers and new stainless steel flexible braided hose jumpers will be furnished. The main gas supply piping and valves along with the individual trim valves will be re-used.

Crane Height

The CB13A turbine exhaust connection must be oriented in the vertical direction. [REDACTED] will terminate with an exhaust adapter with the Kinder Morgan tie point flange pointing upward. To meet this will require exhaust piping ending in a long radius elbow. The highest point on the Cameron supplied material will be 8' 2-3/4" above the engine crankshaft centerline. The height of the elbow must be added to determine crane clearance.

Cooling System Modifications

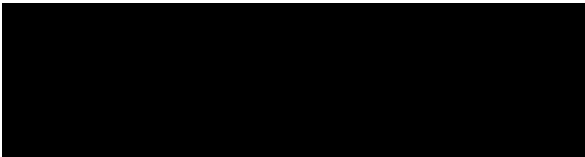
At the increased boost levels required to meet the emission targets on these units, there will be an increased amount of heat rejection needed from the charge air necessitating modifications and upgrades to the exiting cooling capacity.

[REDACTED] has not made an Engineering Site Visit in preparation of this Budgetary Estimate however, we have included some estimated costs based on past experience with Kinder Morgan on projects of a similar scope of work and supply.

At this time, the exact cooling system specifications are not known however, every effort will be made to reuse the existing equipment, where possible. Upon receiving data, either from an engineering study or from the customer, engineering models will determine exactly what upgrades or additions will be needed to ensure the overall cooling system will meet or exceed the new performance demand.

Example Aux Cooling Fin Fan and





Air Intake/Exhaust System

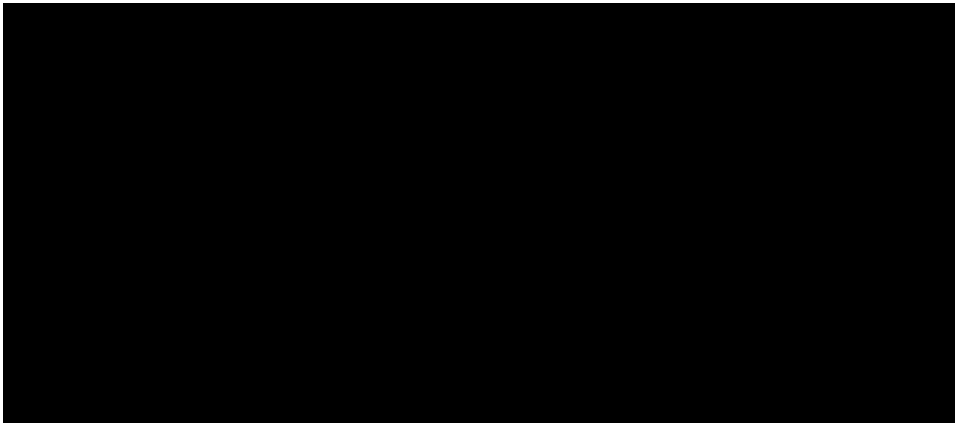
In order to comply with the CO and VOC emission reduction requirements, called out in the RFP, modifications and upgrades to the air intake and exhaust system will be needed. [REDACTED] is recommending using a silencer / catalyst combination to achieve the desired result.

Controls

[REDACTED] [REDACTED] is now the upgrade market leader in engine automation and emissions controls technologies. All of the systems and modifications explained in this budgetary estimate will be tied together with an advanced air:fuel ratio controller. [REDACTED] will utilize the [REDACTED] to achieve the emissions performance as required in the customer RFP. [REDACTED] [REDACTED] will help eliminate or reduce costly emissions excursions that can negatively affect your ability to run under the permitted thresholds at the ultra-low levels.

[REDACTED]
Engines that utilize electronically controlled fuel valve systems are readily adapted to the quick response electronic pressure monitoring and automatic balancing system. These systems combined can maintain all the cylinders at the same approximate air/fuel ratio. This will prevent an excessively lean or rich cylinder from limiting the operable range of speeds or loads effectively increasing the operable range.

The monitoring functions built into the [REDACTED] System help to quickly diagnose small problems before they become big ones and thereby help to ensure engine protection. HyperBalance III™ is the most effective and accurate large bore engine balancing and in-cylinder monitoring platform in the natural gas compression industry. Some key features are:

- Data acquisition - requires no enterprise system to obtain combustion statistics
 - Automatic balancing - for peak engine performance and protection
 - Protection - Abnormal combustion detection with alarms and shutdowns
- 

SECTION 3 – Scope of Supply

Detailed Bid Description

██████████ agrees to provide the customer with all engineering, construction labor and oversight, project management, drafting materials and commissioning services, as noted, to upgrade and/or install the Emissions Reduction Solutions as described in this Budgetary Estimate in accordance with the ██████████. Any exceptions to the specifications listed in the RFP are either clarified in this proposal ██████████.

The above-mentioned systems and pricing include the following parts and services:

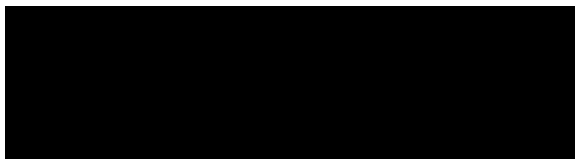
Overview Scope of Work

- All design and project engineering and management required for unit specific adaptation and installation of the following systems: *Air Delivery System Upgrades or Retrofits, Fuel Delivery System Upgrades or Retrofits, Cooling Systems and Air Intake and Exhaust Systems Upgrades / Modifications in support of Emissions Reduction Solutions for the Units at the Monument Compressor Station*
- All manpower necessary to remove the replaced systems and install the new systems listed above
- All commissioning and start up services
- All drawings necessary to document modifications and support the installation
- Training for maintenance and operation of the installed systems

Scope of Supply for Unit Upgrades

██████████ will supply the following components necessary to complete the installation of the systems listed in the section above. These Fuel Systems are Class I, Division 2, Group D systems and are installed according to those guidelines:

- **Budgetary Estimate** covering all estimated time and material costs to complete this scope of work
- All engineering efforts to including, drawing reviews and engineering site visits
- Project manager for all project activities, timelines and customer project inquiries
- Procurement staff with QC engineer to purchase, inspect and deliver all required material
- ██████████ construction representative on-site during all construction activities to ensure project is being installed to **Kinder Morgan** Engineering Standards
- Commissioning expert to optimize the engine and systems integration
- Complete hands-on training of units and upgrade systems after completion of project commissioning
- Service site visit 12 months after completion of commissioning to review all installed ██████████ systems
- Two-year warranty on ██████████ ██████████
- New CB-13A Turbo In Series with existing piston scavenger on units 1-3
- Combustion Modifications – ██████████
- Cooling System – New Intercoolers, New Aux Cooling System

- 
- Air Intake / Exhaust System with Oxidation Catalyst
 - Engine Hardware - New head with built-in Pre-Chamber, High port power cylinder, New clean burn power piston (replace the Mexican Hat style piston)
 - Dry exhaust manifold
 - All Turbo aux system (wastegate – oil/cooling systems)
 - New coolant outlet header with outlet jumpers
 - Overhaul of the existing piston scavenger/reed valves/sealing

Customer Scope of Supply

- Removal and disposal of hazardous materials
- Provide penetrations in transite siding and dispose of hazardous waste if required
- Provide for the testing and remediation of lead paint surfaces
- Any heavy equipment or elevated work platform equipment rental required to support unit upgrades and uprates
- Compressor Capacity Analysis or upgrades in support of new unit performance
- NDE testing and construction inspection as required
- Engine operator to start, stop and operate the unit as necessary for testing and commissioning
- Supply necessary documentation to for engineering and automation changes
- Any necessary or required welding, painting, testing of parts, pipes or systems not in  Scope of Supply
- Customer will allow  and its subcontractors to use plant facilities for accumulation of parts
- Customer will provide office space during the construction and commissioning efforts
- Customer will provide  and subcontractors with restroom facilities during construction and commissioning
- The customer will make repairs to the unit or its support equipment if the equipment is not operating as designed.
- Repair service may be requested of  Repairs will be quoted and billed on a time and material basis

Exclusions from Quotation price:

- Any applicable taxes are NOT included in the price. Applicable taxes will be calculated and billed at the time of invoicing.
- Cost of construction permitting (billed on T&M basis, as required).
- Time spent waiting by  personnel or its contractors due to delays caused by plant problems or plant non-preparedness.
- Additional waiting time will be billed on a time and materials basis.

Minimum Unit Health and Performance Assumptions

Current Unit Condition

The following assumptions were made during preparation of this proposal. The  scope will have to be added to the project or the customer scope of supply will be amended if any of the assumptions are not valid.

- Existing fuel gas metering and conditioning meet the fuel gas requirements for this project
- Current unit hardware and configuration is meeting current emissions requirements.
- Unit is in good health, with no mechanical defects.
- Current Performance Baseline date are accurate

- Current unit automation can accommodate start and stop sequencing of the system.
- Current unit automation can accommodate fuel flow-based fuel-air ratio control.

Project Guarantees and General Warrantees

- Any exceptions to these warranties are noted on the cover page.
- The standard manufacturer's warranties for all third-party components are in place at the time of shipment.
- The standard warranty for the [REDACTED] is 24 months, beginning at the start of commissioning.

Performance Guarantees	Current Baseline	[REDACTED] Upgrade / Uprate Solution
GMV-10-TF (NOx)	12.95 g/bhp-hr	.5 g/bhp-hr
GMV-10-TF (CO)	1.22 g/bhp-hr	93% reduction
GMV-10-TF (VOC)	.45 g/bhp-he	.3 g/bhp-hr

SECTION 4 - PRICING SCHEDULE, AND COMMERCIAL TERMS

[REDACTED] offers to supply the materials and services, as described in this proposal, for the following price.

2021 Budgetary Estimate Schedule of Values for Monument Compressor Station

Required Upgrades and Retrofits for Units 1-3	\$ 6,694,873.00
Required Upgrades and Retrofits for Units 4-5	\$ 2,491,143.00

PRICE NOTES:

- Pricing in US dollars
- Price based on the purchase of the Scope or Work and Quantity contained in Seller's proposal.
- No taxes/assessments/duties are included in the pricing shown. Customer shall pay all sales, use, or transportation taxes, or duties for which it may be liable and/or which the law requires [REDACTED] to collect.

EXTRA WORK:

[REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

At Risk Items

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Payment and Invoicing Conditions

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Cancellation

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

Payment Terms

[REDACTED]

Indemnification/Limits of Liability

[REDACTED]

Additional or Different Terms

[REDACTED]

Codes and Standards

[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[REDACTED]

ATTACHMENT I

El Paso Natural Gas Company, LLC

Caprock Compressor Station - 50 ppmc Nox limiting factor

Turbine Cost Analysis	Interest Rate:	3.25%
All Units	Period (yrs):	20

Cost Effectiveness Summary using Stack Test Data Emission Factors

Control Equipment	Unit	SCR Capital Cost	Building Modification	Total Annual Cost*	Emission Reduction	Cost Effectiveness
		(\$)	(\$)	(\$)	(tpy)	(\$/ton)
Selective Catalytic Reduction (SCR)	A-01	7,180,921	-	612,350	7.6	80,398
	A-02	11,430,361	-	914,265	16.6	54,935

* Total Annual Cost includes the annualized capital cost as well as the direct and indirect annual operating costs.

El Paso Natural Gas Company, LLC

Caprock Compressor Station - 50 ppmc Nox limiting factor

GE Model M3712R Turbine		Interest Rate:	3.25% <-- EPA Default Interest Rate
A-01		Period (yrs):	20 <-- EPA Air Pollution Control Cost Manual
Base Case			
NO _x lb/hr:	34.35 lb/hr	<-- Sept. 29, 2020 portable analyzer stack test result (permit limit is 45.9 lb/hr)	
NO _x tpy:	11.51 tpy	<-- Calculated 9/29/2000 stack test results and 2018 through 2020 avg actual operating hours.	
SCR			
NO _x Reduction:	66.2%	<-- Reach the 50 ppmc Nox limit	
NO _x lb/hr:	11.62 lb/hr	<-- Based on reaching the 50 ppmc Nox limit (estimated from 1994 emission test)	
NO _x tpy:	3.89 tpy	<-- Expected annually NOx emissions (ton/yr) after SCR	
Turbine Housing Reconfiguration	\$ -	<-- Presumed to be included in CE2107005 shown below (Emission Controls CWIP)	
SCR Capital Investment	\$ 7,180,921	<-- CE2107005 Caprock internal est 07/16/2021	
Total Capital Investment	\$ 7,180,921		
Annualized TCI:	\$ 493,896	<-- Based on interest rate, year and TCI	
Annual O&M Costs:	\$ 118,454	<-- EPA Cost Control Spreadsheet	
Total Annual Costs:	\$ 612,350		
Emissions Reduction:	7.6 tpy		
Cost Effectiveness:	\$ 80,398.40	\$/ton	

El Paso Natural Gas Company, LLC

Caprock Compressor Station - 50 ppmc Nox limiting factor

GE Model M3712R Turbine		Interest Rate:	3.25%
A-02		Period (yrs):	20 <-- EPA Air Pollution Control Cost Manual
Base Case			
NO _x lb/hr:	16.83 lb/hr	<-- highest most recent test 9/29/2000 portable analyzer	
NO _x tpy:	29.64 tpy	<-- Calculated using 2018 through 2020 average actual operating hours and 9/29/2000 results.	
SCR			
NO _x Reduction:	56%	<-- Reach the 50 ppmc Nox limit	
NO _x lb/hr:	7.38 lb/hr	<-- Based on reaching the 50 ppmc Nox limit (estimated from 1994 emission test)	
NO _x tpy:	13.00 tpy	<-- Expected annually NOx emissions (ton/yr) after SCR	
Turbine Housing Reconfiguration	\$ -	<-- Presumed to be included in CE2107005 shown below	
SCR Capital Investment	\$ 11,430,361	<-- CE2107005 Caprock internal est 07/16/2021 (Emission CWIP+ Regen CWIP +Regeneration)	
Total Capital Investment	\$ 11,430,361		
Annualized TCI:	\$ 786,167	<-- Based on interest rate, year and TCI	
Annual O&M Costs:	\$ 128,097	<-- EPA Cost Control Spreadsheet	
Total Annual Costs:	\$ 914,265		
Emissions Reduction:	16.6 tpy		
Cost Effectiveness:	\$ 54,935.11	\$ /ton	

Caprock CS

Op Hour Comparison

Operating Hours Per Year		
Yr/Unit	A-01	A-02
2018	-	138.00
2019	2.50	3,347.00
2020	2,008.00	7,081.75
2018 – 2020 Avg. Hours	670.17	3,522.25

Fuel Consumption

Fuel Consumption Per Year (MMSCF)		
Yr/Unit	A-01	A-02
2018	-	6.94
2019	0.19	215.97
2020	130.82	353.30
2018 – 2020 Avg. Hours	43.67	192.07

Total

#VALUE!

#VALUE!

484.12

ATTACHMENT J

El Paso Natural Gas Company, LLC
Rio Vista Compressor Station - Permit Limits

Turbine Cost Analysis	Interest Rate:	3.25%
All Units	Period (yrs):	20

Cost Effectiveness Summary using Permit Limits

Control Equipment	Unit	Total Capital Investment Cost	Total Annual Cost*	Emission Reduction	Cost Effectiveness
		(\$)	(\$)	(tpy)	(\$/ton)
Selective Catalytic Reduction (SCR)	A-01	4,200,000	442,388	0.5	974,508
Selective Catalytic Reduction (SCR)	A-02	4,200,000	449,590	0.5	830,527

* Total Annual Cost includes the annualized capital cost as well as the direct and indirect annual operating costs.

El Paso Natural Gas Company, LLC

Rio Vista Compressor Station - Permit Limits

Solar Model 10-T1202 Turbine		Interest Rate:	3.25% <-- EPA Default Interest Rate
A-01		Period (yrs):	20 <-- EPA Air Pollution Control Cost Manual
Base Case			
NO _x lb/hr:	2.34 lb/hr	<-- Highest measured NOx emissions of identical unit at San Juan CS	
NO _x tpy:	4.00 tpy	<-- Annual emissions based on highest measured NOx emissions of identical unit at San Juan CS and 3,420 hrs/yr	
SCR			
NO _x Reduction:	11%	<-- Based on highest ppm measured of identical unit at San Juan CS and the proposed NOx limit	
NO _x lb/hr:	2.07 lb/hr	<-- Expected hourly NOx emissions (lb/hr) after SCR	
NO _x tpy:	3.55 tpy	<-- Expected annually NOx emissions (ton/yr) after SCR	
Turbine Housing Reconfiguration	\$ -	<-- Estimated cost included in the total capital investment	
Total SCR Capital Investment	4,200,000.0	<-- CER 7/14/21, sized for 50 ppm NOx; \$8.4 millions for both units	
Total Capital Investment	\$ 4,200,000		
Annualized TCI:	\$ 288,871	<-- Based on interest rate, year and TCI	
Annual O&M Costs:	\$ 153,516	<-- EPA Cost Control Spreadsheet	
Total Annual Costs:	\$ 442,388		
Emissions Reduction:	0.5 tpy	<-- NOx Reduction based on 3,420 hr/yr	
Cost Effectiveness:	\$ 974,507.91	\$/ton	

El Paso Natural Gas Company, LLC
Rio Vista Compressor Station - Permit Limits

GE Model M3712R Turbine		Interest Rate:	3.25% <-- EPA Default Interest Rate
A-02		Period (yrs):	20 <-- EPA Air Pollution Control Cost Manual
Base Case			
NO _x lb/hr:	2.34 lb/hr	<-- Highest measured NO _x emissions of identical unit at San Juan CS	
NO _x tpy:	4.77 tpy	<-- Annual emissions based on highest measured NO _x emissions of identical unit at San Juan CS and 4,078 hrs/yr	
SCR			
NO _x Reduction:	11%	<-- Based on highest ppm measured of identical unit at San Juan CS and the proposed NO _x limit	
NO _x lb/hr:	2.07 lb/hr	<-- Expected hourly NO _x emissions (lb/hr) after SCR	
NO _x tpy:	4.23 tpy	<-- Expected annually NO _x emissions (ton/yr) after SCR	
Turbine Housing Reconfiguration	\$ -	<-- Estimated cost included in the total capital investment	
SCR Capital Investment	\$ 4,200,000	<-- CER 7/14/21, sized for 50 ppm NO _x ; \$8.4 millions for both units	
Total Capital Investment	\$ 4,200,000		
Annualized TCI:	\$ 288,871	<-- Based on interest rate, year and TCI	
Annual O&M Costs:	\$ 160,719	<-- EPA Cost Control Spreadsheet	
Total Annual Costs:	\$ 449,590		
Emissions Reduction:	0.5 tpy	<-- Expected Reduction based on 4,078 hr/yr	
Cost Effectiveness:	\$ 830,526.64	\$/ton	

Op Hour Comparison

Operating Hours Per Year			
Yr/Unit	A-01	A-02	A-03
2018	2,868.25	3,904.00	4117
2019	5,645.25	5,413.50	821.25
2020	1,744.25	2,914.50	64.25
2016 – 2018 Avg. Hours	3,419.25	4,077.33	1,667.50

Fuel Consumption

Fuel Consumption Per Year (MMSCF)			
Yr/Unit	A-01	A-02	A-03
2018	30.60	41.45	122.979
2019	59.85	57.39	23.189
2020	18.84	32.52	2.03
2018 – 2020 Avg. Hours	36.43	43.79	49.40

Total
194.463
141.104
53.39

ATTACHMENT K

El Paso Natural Gas Company, LLC

Monument Compressor Station - Stack Test Data

Engine Cost Analysis	Interest Rate:	3.25%
All Units	Period (yrs):	20

Cost Effectiveness Summary using Stack Test Data Emission Factors

Control Equipment	Unit	Capital Cost	Total Annual Cost*	Emission Reduction	Cost Effectiveness
		(\$)	(\$)	(tpy)	(\$/ton)
Low Emission Combustion Technology	A-04	3,333,000	229,240	3.2	72,527
	A-05	3,333,000	229,240	1.8	125,428

* Total Annual Cost includes the annualized capital cost.

El Paso Natural Gas Company, LLC

Monument Compressor Station - Stack Test Data

Cooper Bessemer GMV-10TF
A-04

Interest Rate: 3.25%
Period (yrs): 20 <-- EPA Air Pollution Control Cost Manual

Base Case

NO _x lb/hr:	1.95 lb/hr	<-- 2018 through 2020 average stack test results
NO _x tpy:	7.31 tpy	<-- Calculated using 2018 through 2020 average stack test results and operating hours

Controlled Retrofit

NO _x lb/hr:	1.10 lb/hr	0.5 g/bhp-hr * 1002 HP * lb/453.6 g; based on proposed rule limit
NO _x tpy:	4.15 tpy	<-- Calculated using average 2018 through 2020 operating hours at proposed limit

Total Capital Investment	\$ 3,333,000	<-- EPNG Cost Estimate
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Total Annual Costs:	\$ 229,240	<-- Based on interest rate, year and TCI
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Emissions Reduction:	3.2 tpy
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Cost Effectiveness:	\$ 72,526.71 \$/ton
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El Paso Natural Gas Company, LLC

Monument Compressor Station - Stack Test Data

Cooper Bessemer GMV-10TF
A-05

Interest Rate: 3.25%
Period (yrs): 20 <-- EPA Air Pollution Control Cost Manual

Base Case

NO _x lb/hr:	1.73 lb/hr	<-- 2018 through 2020 average stack test results
NO _x tpy:	5.04 tpy	<-- Calculated using 2018 through 2020 average stack test results and operating hours

Controlled Retrofit

NO _x lb/hr:	1.10 lb/hr	0.5 g/bhp-hr * 1002 HP * lb/453.6 g; based on proposed rule limit
NO _x tpy:	3.21 tpy	<-- Calculated using average 2018 through 2020 operating hours at proposed limit

Total Capital Investment	\$ 3,333,000	<-- EPNG Cost Estimate
--------------------------	--------------	------------------------

Total Annual Costs:	\$ 229,240	<-- Based on interest rate, year and TCI
---------------------	------------	--

Emissions Reduction:	1.8 tpy
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Cost Effectiveness:	\$ 125,428.20 \$/ton
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Engines

Units: A-04, A-05
Description: Engine Retrofit to Comply with NMED Ozone Standard

Site Rating: 1002 hp

	A-04	A-05
2016 through 2018 Average Operating Hours:	7,506.25	5,812.83

Criteria Pollutant	Emission Factor		Units	Source	A-01	A-02
	A-04	A-05			TPY	TPY
NOx	1.95	1.73	lb/hr	2018 through 2020 average stack test results	7.306	5.038

Op Hour Comparison

Operating Hours Per Year		
Yr/Unit	A-04	A-05
2018	7,831.00	7,980.00
2019	7,715.25	3,887.25
2020	6,972.50	5,571.25
2018 – 2020 Avg. Hours	7,506.25	5,812.83

Date	A-04	A-05
	NOx (lb/hr)	
CY2020	1.52	1.63
CY2019	3.02	2.57
CY2018	1.30	1.00
CY18-CY20	1.95	1.73

Permit Limit: 3.9 lb/hr

ATTACHMENT L

El Paso Natural Gas Company, LLC

Washington Ranch Storage - Reducing Emissions to 0.5gm/hp-hr Nox

Engine Cost Analysis

Interest Rate:

3.25%

All Units

Period (yrs):

20

Cost Effectiveness Summary using Stack Test Data Emission Factors

Control Equipment	Unit	Retrofit Capital Cost	Building Modification	Total Annual Cost*	Emission Reduction	Cost Effectiveness
		(\$)	(\$)	(\$)	(tpy)	(\$/ton)
Hyperfuel System for 2 cycle engines	A-01	1,866,707	-	128,390	12.4	10,392
	B-02	1,866,707	-	128,390	4.2	30,395

* Total Annual Cost includes the annualized capital cost as well as the direct and indirect annual operating costs.

El Paso Natural Gas Company, LLC

Washington Ranch Storage - Reducing Emissions to 0.5gm/hp-hr Nox

Cooper Bessemer 12Q155HC2	Interest Rate:	3.25% <-- EPA Default Interest Rate
A-01	Period (yrs):	20 <-- EPA Air Pollution Control Cost Manual

Base Case		
NO _x lb/hr:	12.22 lb/hr	<-- Average Annual Test results from Ref Methods and Portable tests 2018 -2020
NO _x tpy:	18.79 tpy	<-- Calculated 3-yr avg stack test results and 2018 through 2020 and avg actual operating hours & ave hp. Gm/hp-hr using avg hp 2018-2020
NOX gm/hp-hr	1.46 gm/hp-hr	

0.5 grams/hp-hr Nox		
NO _x Reduction:	65.8%	<--Decrease 3 yr avg test to 0.5 gm/hp-hr
NO _x lb/hr:	4.18 lb/hr	<-- Rate based on 0.5 grams and 3 yr avg - hp
NO _x tpy:	6.43 tpy	<-- Expected annually NOx emissions (ton/yr) after retrofit to 0.5 gram Nox

Engine Housing Reconfiguration	\$	-	<-- Presumed to be included in CE2107006 shown below
Retrofit Capital Investment	\$	1,866,707	<-- CE2107006 WSR internal est 07/26/2021
Total Capital Investment	\$	1,866,707	

Annualized TCI:	\$	128,390	<-- Based on interest rate, year and TCI
Annual O&M Costs:	\$	-	<-- EPA Cost Control Spreadsheet
Total Annual Costs:	\$	128,390	
Emissions Reduction:		12.4 tpy	

Cost Effectiveness:	\$	10,391.99	\$/ton
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El Paso Natural Gas Company, LLC

Washington Ranch Storage - Reducing Emissions to 0.5gm/hp-hr Nox

Cooper Bessemer 12Q155HC2	Interest Rate:	3.25%
B-02	Period (yrs):	20 <-- EPA Air Pollution Control Cost Manual

Base Case		
NO _x lb/hr:	7.06 lb/hr	<-- Average Annual Test results from Ref Methods and Portable tests 2018 -2020
NO _x tpy:	10.42 tpy	<-- Calculated 3-yr avg stack test results and 2018 through 2020 and avg actual operating hours & ave hp. Gm/hp-hr using avg hp 2018-2020
NOX gm/hp-hr	0.84 gm/hp-hr	

SCR		
NO _x Reduction:	41%	<--Decrease 3 yr avg test to 0.5 gm/hp-hr
NO _x lb/hr:	4.20 lb/hr	<-- Rate based on 0.5 grams and 3 yr avg - hp
NO _x tpy:	6.19 tpy	<-- Expected annually NOx emissions (ton/yr) after retrofit to 0.5 gram Nox

Turbine Housing Reconfiguration	\$	-	<-- Presumed to be included in CE2107006 shown below
Retrofit Capital Investment	\$	1,866,707	<-- CE2107006 WSR internal est 07/26/2021
Total Capital Investment	\$	1,866,707	

Annualized TCI:	\$	128,390	<-- Based on interest rate, year and TCI
Annual O&M Costs:	\$	-	<-- EPA Cost Control Spreadsheet
Total Annual Costs:	\$	128,390	
Emissions Reduction:		4.2 tpy	

Cost Effectiveness:	\$	30,394.82	\$/ton
---------------------	----	-----------	--------

Washington Ranch Storage

Op Hour Comparison

Operating Hours Per Year		
Yr/Unit	A-01	B-02
2018	2,195.75	2,054.00
2019	4,461.00	4,153.00
2020	2,564.40	2,647.34
2018 – 2020 Avg. Hours	3,073.72	2,951.45

Annual Ref Meth & Portable Analyzer Test Results

Nox (lb/hr)		
Yr/Unit	A-01	B-02
2018	8.7	3.5
2019	13.5	10.3
2020	14.5	7.4
	12.2	7.1

A-01 (10/24/2018) B-02 (10/23/2018)

2Q portable analyzer tests

A-01 (11/04/2020) B-02 (

Annual Ref Meth & Portable Analyzer Test Results

Hp		
Yr/Unit	A-01	B-02
2018	3,727.0	3,841.0
2019	3,686.0	3,624.0
2020	3,975.0	3,959.0
	3,796.0	3,808.0

A-01 (10/24/2018) B-02 (10/23/2018)

2Q portable analyzer tests (A1: May 7)(B1:May 8)

A-01 (11/04/2020) B-02 (12/11/2020)

ATTACHMENT M



Regional Haze

Stakeholder Outreach Webinar #2

Mark Jones, Michael Baca, Neal Butt, Rhett Zyla - New Mexico Environment
Department Air Quality Bureau

Ed Merta, Andrew Daffern - City of Albuquerque Environmental Health Department





What we will cover today

- ❑ Overview of Western regional planning (“Storyboard”)
- ❑ Show examples of Class I Area monitor data
- ❑ Update on planning progress of NMED/COA
- ❑ Discuss four-factor analyses of control measures
- ❑ Modeling impacts
- ❑ Solicit feedback from stakeholders



Source Selection Process

- **“Source selection”**
 - Determine which facilities will be subject to analysis of potential new control measures (Four-Factor Analysis)
- **NMED/EHD process based on WRAP guidance**
 - Target key drivers of visibility impairment: SO_2 and NO_x
 - For each Title V facility, calculate the following:
 - Q = reported $\text{SO}_2 + \text{NO}_x$ emissions (tons, 2016)
 - d = distance (kilometers) to nearest Class I Area
 - Q/d = potential visibility impact of facility
 - Rank all facilities highest to lowest Q/d
 - Identify facilities accounting for 80% of $\text{SO}_2 + \text{NO}_x$
 - These facilities are subject to Four-Factor Analysis
 - Minor & Area sources not considered for evaluation



New Mexico Four-Factor Facilities

Title V Facilities w/ Q/d > 5.5	Q/d	Class I area	Company Name
Cunningham Station	7.72	Carlsbad NP	Xcel Energy
Prewitt Escalante Generating Station	26.1	San Pedro Parks WA	Tri-State Generation and Transmission Association
Roswell Compressor Station No9	7.6	Salt Creek WA	Transwestern Pipeline
Mountainair No7 Compressor Station	5.7	Bosque del Apache WA	
Monument Gas Plant	20.4	Carlsbad NP	Targa Midstream Services
Eunice Gas Processing Plant	13.0	Carlsbad NP	
Saunders Gas Plant	11.7	Salt Creek WA	
San Juan Generating Station	461.0	Mesa Verde NP	Public Service Co. of New Mexico
Indian Basin Gas Plant	9.4	Carlsbad NP	Oxy USA
Bitter Lake Compressor Station	50.2	Salt Creek WA	IACX Roswell, LLC
Kutz Canyon Processing Plant	10.3	Mesa Verde NP	Harvest Four Corners, LLC
Harvest Pipeline - San Juan Gas Plant	8.3	Mesa Verde NP	
Jal No3 Gas Plant	20.5	Carlsbad NP	ETC Texas Pipeline, Ltd.
Chaco Gas Plant	28.2	Mesa Verde NP	Enterprise Field Services
Blanco Compressor C & D Station	7.8	Mesa Verde NP	
South Carlsbad Compressor Station	5.9	Carlsbad NP	
Washington Ranch Storage Facility	23.5	Carlsbad NP	El Paso Natural Gas Company
Pecos River Compressor Station	13.9	Carlsbad NP	
Blanco Compressor Station A	5.6	Mesa Verde NP	
Eunice Gas Plant	18.4	Carlsbad NP	DCP Operating Company, LP
Linam Ranch Gas Plant	7.6	Carlsbad NP	DCP Midstream
Artesia Gas Plant	5.7	Carlsbad NP	
Denton Gas Plant	7.6	Salt Creek WA	Davis Gas Processing
Rio Grande Portland Cement Plant*	16.0	Bandelier WA	

*Located in Bernalillo County outside of NMED Jurisdiction.

Four-factor analysis documentation available at:

https://www.env.nm.gov/air-quality/four_factor_analysis-reports/



What is a Four-Factor Analysis?

- Identify additional controls that are technically feasible for equipment that emits ≥ 5 tpy SO_2/NO_x
- Assess the four factors for feasible controls:
 - ▣ Cost of compliance
 - ▣ Time necessary for compliance
 - ▣ Energy & non-air environmental impacts
 - ▣ Remaining useful life of the source
- Calculate cost effectiveness of each control
 - ▣ Expressed as \$ per ton of annual emission reduction achieved
 - ▣ Anticipated cost effective threshold: $\leq \$7,000$ per ton/year
 - ▣ Case by case basis for final determination

ATTACHMENT N



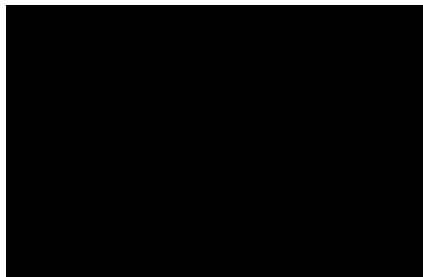
Kinder Morgan

Title: Frame 3 and Solar Saturn Preliminary Schedule

Submitted by:

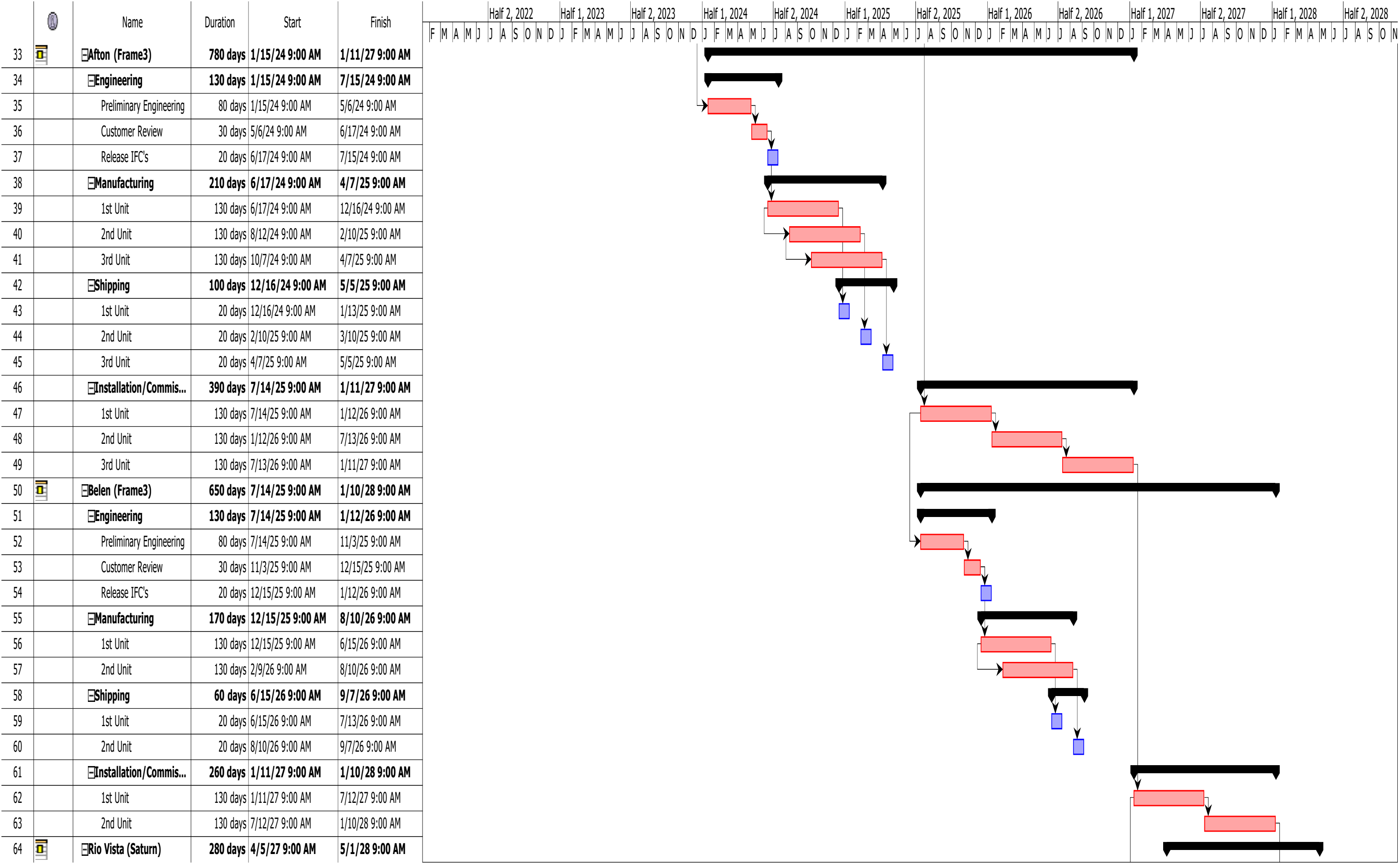


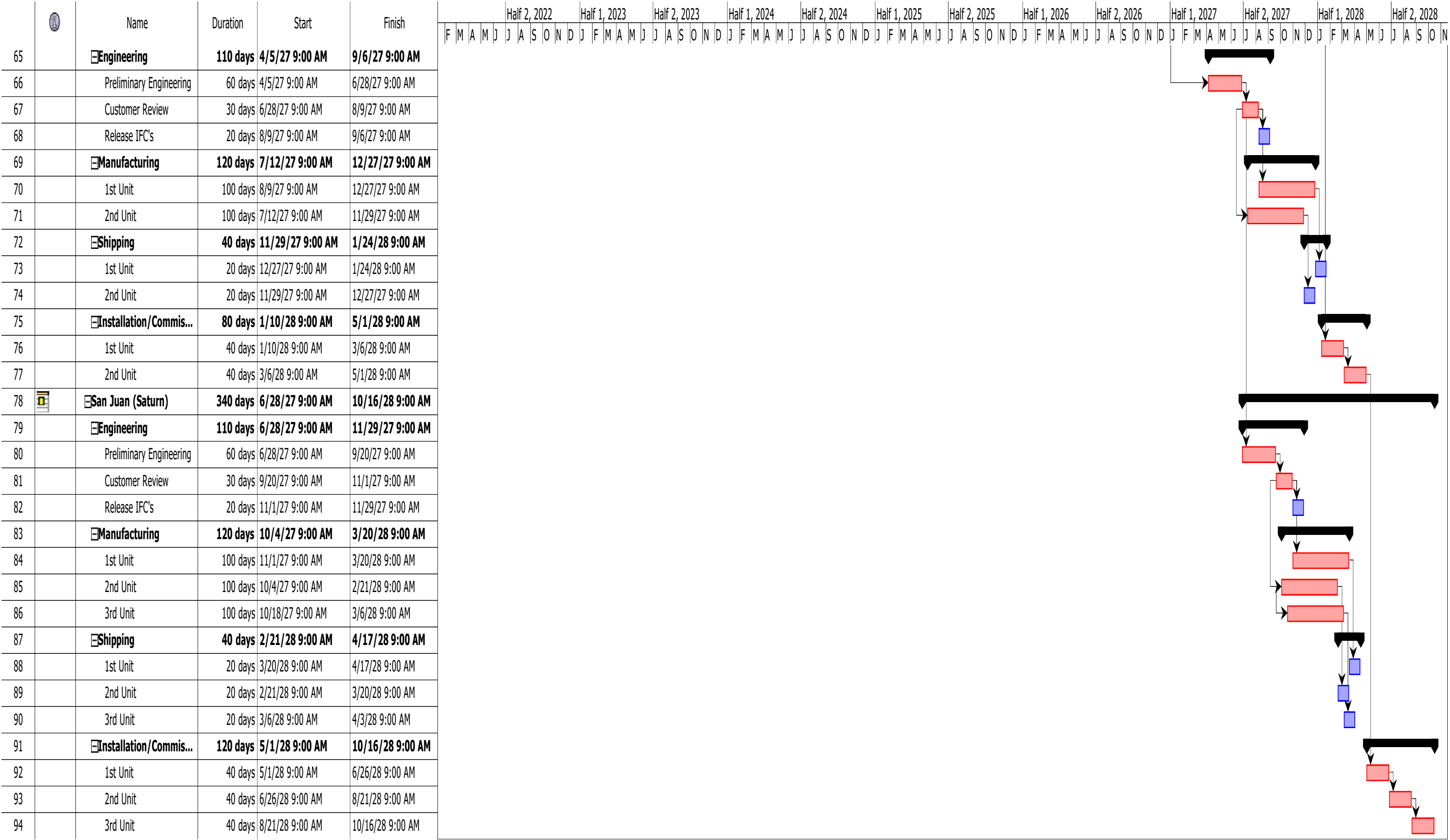
Contact:



Date Submitted: July 27, 2021







ATTACHMENT O

**NEW MEXICO AIR QUALITY BUREAU
NSR & TV: IC ENGINES MONITORING PROTOCOL –
PERMIT TEMPLATE LANGUAGE
Version: May 23, 2016**

Purpose. These guidelines are intended to help permit specialists include adequate monitoring conditions into construction or operating permits in accordance with 20.2.72.210 NMAC or 20.2.70.302 NMAC. These guidelines also help ensure consistency in monitoring conditions for all permits regardless of which permit specialist is assigned the permit.

All IC engines are combustion devices subject to 20.2.61 NMAC and opacity monitoring, unless they qualify for the exemption under 20.2.61.109 NMAC (see permit template for opacity language).

NOTE: If the affected unit is subject to 40 CFR 64, CAM Rule, the AQB standard conditions may not apply.

[NOTE: Each permit writer shall review, select, and adjust the requirements below according to the specific facility circumstances.]

NOTE: EXTERRAN – Engine Integrated Control System (EICS): It is important that the permit identify that this particular control device is installed on an engine so that an enforcement inspector knows to check if the control device is installed. This is an engine emissions control device that will automatically shut down an engine if emission limits are exceeded. The department has determined that this control device is part of the engine’s “physical and operational design” with regard to the definitions of PER and PTE as applied to permitting, not as applied to NSPS/NESHAP. We may adjust the monitoring requirements for engines with this control device once we have experience in verifying that the control system performs as represented. For more information, see the presentation in aurora at: P:\AQB-Permits-Section\NSR-TV-Common\Permitting-Guidance-Documents\Engines\Exterran Engine Integrated Control System.

Engines

A. Maintenance and Repair Monitoring (Unit(s) **X, Y, and Z)**

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by properly maintaining and repairing the units.
Monitoring: Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Activities that involve maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented as they occur for the following events: (1) Routine maintenance that takes a unit out of service for more than two hours during any twenty-four hour period. (2) Unscheduled repairs that require a unit to be taken out of service for more than two hours in any twenty-four hour period.
Recordkeeping: The permittee shall maintain records in accordance with Section B109,

including records of maintenance and repairs activities and a copy of the manufacturer's or permittee's recommended maintenance schedule.

Reporting: The permittee shall report in accordance with Section B110.

[Periodic Testing: Condition may be used for multiple scenarios; adjust as necessary and refer to flow diagram. For example, quarterly testing is required for units with controls and annual testing is required for uncontrolled units with total facility emissions ≥ 95 tpy for any pollutant.]

B. Periodic Emissions Testing (Unit(s) X, Y, and Z)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by completing periodic emission tests during the monitoring period. **For TV Permits add** (NSR XXXX-MX, Condition AXXX.B **and revised**)

Monitoring: The permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. Emission testing is required for NO_x and CO **[change reference to pollutants as necessary]** and shall be carried out as described below.

[If the unit has VOC emission limits, include the following.]

Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

For units with g/hp-hr emission limits, in addition to the requirements stated in Section B108, the engine load shall be calculated by using the following equation:

$$\text{Load(Hp)} = \frac{\text{Fuel consumption (scfh)} \times \text{Measured fuel heating value (LHV btu/scf)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

(1) The testing shall be conducted as follows:

- a. Testing frequency shall be **once per [quarter or year]**
- b. The monitoring period is defined as **[a calendar quarter, a calendar year], or [a custom schedule requested by the permittee].**

(2) The first test shall occur within the first monitoring period occurring after permit issuance. **[or if testing was already required by the previous permit, use this instead:]** The tests shall continue based on the existing testing schedule.

(3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.

(4) The permittee shall follow the General Testing Procedures of Section B111. **[add #5 if subject to testing in NSPS JJJJ/IIII or NESHAP ZZZZ]** (5) Performance testing required by 40 CFR 60, Subpart JJJJ or IIII or 40 CFR 63, Subpart ZZZZ may be used to satisfy these periodic testing requirements if they meet the requirements of this condition and are completed during the specified monitoring period.

Recordkeeping: The permittee shall maintain records in accordance with Section B109, B110, and B111.

Reporting: The permittee shall report in accordance with Section B109, B110, and B111.

ATTACHMENT P

**NEW MEXICO AIR QUALITY BUREAU
NSR & TV: TURBINE MONITORING PROTOCOL –
PERMIT TEMPLATE LANGUAGE
Version: May 23, 2016**

Purpose. These guidelines are intended to help permit specialists include adequate monitoring conditions into construction or operating permits in accordance with 20.2.72.210 NMAC or 20.2.70.302 NMAC. These guidelines also help ensure consistency in monitoring conditions for all permits regardless of which permit specialist is assigned the permit.

All turbines are combustion devices subject to 20.2.61 NMAC and opacity monitoring, unless they qualify for the exemption under 20.2.61.109 NMAC (see permit template for opacity language).

[NOTE: Each permit writer shall review and adjust the requirements below according to the specific facility circumstances.]

Turbines

A. Maintenance and Repair Monitoring (Units A-1 and A-2)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by properly maintaining and repairing the units.

Monitoring: Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Activities that involve maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented as they occur for the following events:
--

(1) Routine maintenance that takes a unit out of service for more than two hours during any twenty-four hour period.
--

(2) Unscheduled repairs that require a unit to be taken out of service for more than two hours in any twenty-four hour period.
--

Recordkeeping: The permittee shall maintain records, including dates, and maintenance activities conducted in accordance with Section B109. The permittee shall also maintain a copy of the manufacturer's or permittee's recommended maintenance schedule.
--

Reporting: The permittee shall report in accordance with Section B110.

A. Periodic Emissions Tests (Unit(s) X, Y, and Z)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by conducting periodic emission tests during the monitoring period.
--

Monitoring: The permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. Emission testing is required for NO _x and CO, [change reference to pollutants as necessary] and shall be carried out as described below.
--

[If the unit has VOC emission limits, include the following.] Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance
--

ATTACHMENT Q



NMED AIR QUALITY APPLICATION TITLE V RENEWAL APPLICATION

**El Paso Natural Gas Company, L.L.C.
Blanco Compressor Station A**

Prepared By:

Kinder Morgan
2 North Nevada Avenue,
Colorado Springs, CO 80903
(719) 473-2300

TRINITY CONSULTANTS
9400 Holly Ave NE
Bldg 3 Suite 300
Albuquerque, NM 87122
(505) 266-6611

February 2019

Project 193201.0009



Environmental solutions delivered uncommonly well



9400 Holly Avenue NE | Bldg 3, Suite 300 | Albuquerque, NM 87122 | P (505) 266-6611

trinityconsultants.com



February , 2018

Mr. Ted Schooley
Permit Programs Manager
NMED Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505

*RE: Application for Title V Renewal
El Paso Natural Gas Company, L.L.C. – Blanco Compressor Station A*

Dear Mr. Shooley:

On behalf of El Paso Natural Gas Company L.L.C., we are submitting an application for a Title V Renewal for Blanco Compressor Station A. The facility is located approximately 0.1 miles north of Bloomfield, NM in San Juan County. The facility is currently authorized to operate under NSR Permits (SSM) and Operating Permit 0613-M9.

The format and content of this application are consistent with the Bureau's current policy regarding Title V applications. Title V Permit P048-R3 expires on February 16, 2020. This application is being submitted in accordance with 20.2.70.300.B.2 NMAC, requiring a timely application for a Title V renewal be submitted at least 12 months prior to the date of permit expiration.

Enclosed are two hard copies of the application, including an original certification and two discs containing the electronic files. Please feel free to contact either myself at (505) 266-6611 or Travis Ray, Specialist – Permitting and Compliance with Kinder Morgan, Inc., at (719) 520-3786 if you have any questions regarding this application.

Sincerely,

Trinity Consultants

Adam Erenstein
Manager of Consulting Services

Cc: Travis Ray
Trinity Project File: 193201.0009

Mail Application To: New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505 Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb		For Department use only: AIRS No.:
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Universal Air Quality Permit Application

Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well. For NOI applications, submit the entire UA1, UA2, and UA3 applications on a single CD (no copies are needed). For NOIs, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required.

This application is submitted as (check all that apply): ☐ Request for a No Permit Required Determination (no fee)
☐ **Updating** an application currently under NMED review. Include this page and all pages that are being updated (no fee required).
 Construction Status: ☐ Not Constructed ☒ Existing Permitted (or NOI) Facility ☐ Existing Non-permitted (or NOI) Facility
 Minor Source: ☐ a NOI 20.2.73 NMAC ☐ 20.2.72 NMAC application or revision ☐ 20.2.72.300 NMAC Streamline application
 Title V Source: ☐ Title V (new) ☒ Title V renewal ☐ TV minor mod. ☐ TV significant mod. TV Acid Rain: ☐ New ☐ Renewal
 PSD Major Source: ☐ PSD major source (new) ☐ minor modification to a PSD source ☐ a PSD major modification

Acknowledgements:

- ☒ I acknowledge that a pre-application meeting is available to me upon request. ☐ Title V Operating, Title IV Acid Rain, and NPR applications have no fees.
- ☐ \$500 NSR application Filing Fee enclosed OR ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).
- ☐ Check No.: N/A in the amount of N/A
- ☒ I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched (except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.
- ☐ This facility qualifies to receive assistance from the Small Business Environmental Assistance program (SBEAP) and qualifies for 50% of the normal application and permit fees. Enclosed is a check for 50% of the normal application fee which will be verified with the Small Business Certification Form for your company.
- ☐ This facility qualifies to receive assistance from the Small Business Environmental Assistance Program (SBEAP) but does not qualify for 50% of the normal application and permit fees. To see if you qualify for SBEAP assistance and for the small business certification form go to https://www.env.nm.gov/aqb/sbap/small_business_criteria.html).

Citation: Please provide the **low level citation** under which this application is being submitted: **20.2.70.300.B.2 NMAC** (e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is 20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

Section 1 – Facility Information

Section 1-A: Company Information

		AI # if known (see 1 st 3 to 5 #s of permit IDEA ID No.): 1147	Updating Permit/NOI #: P048-R3
1	Facility Name: Blanco Compressor Station A	Plant primary SIC Code (4 digits): 4922	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): From the intersection of Highway 550 and North 1 st Street head in Bloomfield, NM, head north on North 1 st Street for approximately 1.5 miles. Turn right onto Rd 4900/Arizona Rd. After approximately 0.7 miles, the facility will be on your right.		
2	Plant Operator Company Name: El Paso Natural Gas Company, L.L.C	Phone/Fax: (719) 473-2300	

a	Plant Operator Address: 2 North Nevada Avenue, Colorado Springs, CO 80903.	
b	Plant Operator's New Mexico Corporate ID or Tax ID: 46-0809216	
3	Plant Owner(s) name(s): El Paso Natural Gas Company, L.L.C.	Phone/Fax: (719) 473-2300
a	Plant Owner(s) Mailing Address: 2 North Nevada Avenue, Colorado Springs, CO 80903.	
4	Bill To (Company): El Paso Natural Gas Company, L.L.C.	Phone/Fax: (719) 520-3786
a	Mailing Address: 2 North Nevada Avenue, Colorado Springs, CO 80903	E-mail: Travis_Ray@kindermorgan.com
5	☒ Preparer: Trinity Consultants ☐ Consultant: Adam Erenstein	Phone/Fax: 505-266-6611
a	Mailing Address: 9400 Holly Ave NE Bldg 3 Suite 300, Albuquerque, NM 87122	E-mail: aerenstein@trinityconsultants.com
6	Plant Operator Contact: Bronson Ashcroft	Phone/Fax: (505) 632-6270
a	Address: 81 County Road 4900, Bloomfield, NM 87413	E-mail: Bronson_Ashcroft@kindermorgan.com
7	Air Permit Contact: Travis Ray	Title: Specialist – Permitting and Compliance
a	E-mail: Travis_Ray@KinderMorgan.com	Phone/Fax: (719) 520-3786
b	Mailing Address: 2 North Nevada Avenue, Colorado Springs, CO 80903	

Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? ☒ Yes ☐ No	1.b If yes to question 1.a, is it currently operating in New Mexico? ☒ Yes ☐ No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? ☐ Yes ☒ No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? ☒ Yes ☐ No
3	Is the facility currently shut down? ☐ Yes ☒ No	If yes, give month and year of shut down (MM/YY): N/A
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? ☒ Yes ☐ No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? ☐ Yes ☐ No ☒ N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? ☒ Yes ☐ No	If yes, the permit No. is: P-048-R3
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes ☒ No	If yes, the NPR No. is: N/A
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ☒ No	If yes, the NOI No. is: N/A
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? ☒ Yes ☐ No	If yes, the permit No. is: 0613-M10R1
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☐ Yes ☒ No	If yes, the register No. is: N/A

Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 53.3 MMscf*	Daily: 1,280 MMscf*	Annually: 467,200 MMscf*
b	Proposed	Hourly: 53.3 MMscf*	Daily: 1,280 MMscf*	Annually: 467,200 MMscf*
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 53.3 MMscf*	Daily: 1,280 MMscf*	Annually: 467,200 MMscf*
b	Proposed	Hourly: 53.3 MMscf*	Daily: 1,280 MMscf *	Annually: 467,200 MMscf*

*Capacities are provided for informational purposes only and are not intended to be a limit.

Section 1-D: Facility Location Information

1	Section: 14	Range: 11E	Township: 29N	County: San Juan	Elevation (ft): 5,605
2	UTM Zone: ☐ 12 or ☒ 13			Datum: ☐ NAD 27 ☐ NAD 83 ☒ WGS 84	
a	UTM E (in meters, to nearest 10 meters): 236,040 m E			UTM N (in meters, to nearest 10 meters): 4,068,810 m N	
b	AND Latitude (deg., min., sec.): 36°43'42" N			Longitude (deg., min., sec.): 107°57'21" W	
3	Name and zip code of nearest New Mexico town: Bloomfield, NM, 87413				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary):				
5	The facility is 0.1 miles North of Bloomfield, NM.				
6	Status of land at facility (check one): ☒ Private ☐ Indian/Pueblo ☐ Federal BLM ☐ Federal Forest Service ☐ Other (specify)				
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Municipalities: Aztec, Bloomfield, Farmington; Indian Tribes: None; Counties: Rio Arriba County, San Juan County				
8	20.2.72 NMAC applications only: Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see www.env.nm.gov/aqb/modeling/class1areas.html)? ☐ Yes ☐ No ☒ N/A – This application is a Title V application being submitted under 20.2.70.303.B.2 (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Other States: Bernalillo County: Class I Area:				
9	Name nearest Class I area: Mesa Verde National Park				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 64 km				
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 200 m				
12	Method(s) used to delineate the Restricted Area: Continuous Fencing “Restricted Area” is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.				
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? ☐ Yes ☒ No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.				
14	Will this facility operate in conjunction with other air regulated parties on the same property? ☒ No ☐ Yes If yes, what is the name and permit number (if known) of the other facility? N/A				

Section 1-E: Proposed Operating Schedule (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

1	Facility maximum operating ($\frac{\text{hours}}{\text{day}}$): 24	($\frac{\text{days}}{\text{week}}$): 7	($\frac{\text{weeks}}{\text{year}}$): 52	($\frac{\text{hours}}{\text{year}}$): 8760
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start: N/A		☐ AM ☐ PM	End: N/A ☐ AM ☐ PM
3	Month and year of anticipated start of construction: N/A – No proposed construction			
4	Month and year of anticipated construction completion: N/A – No proposed construction			
5	Month and year of anticipated startup of new or modified facility: N/A – No proposed construction			
6	Will this facility operate at this site for more than one year? ☒ Yes ☐ No			

Section 1-F: Other Facility Information

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? ☐ Yes ☒ No If yes, specify: N/A		
a	If yes, NOV date or description of issue: N/A	NOV Tracking No: N/A	
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? ☐ Yes ☒ No If Yes, provide the 1c & 1d info below:		
c	Document Title: N/A	Date: N/A	Requirement # (or page # and paragraph #): N/A
d	Provide the required text to be inserted in this permit: N/A		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? ☐ Yes ☒ No		
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? ☐ Yes ☒ No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? ☒ Yes ☐ No		
a	If Yes, what type of source? ☒ Major (☒ ≥ 10 tpy of any single HAP OR ☒ ≥ 25 tpy of any combination of HAPS) OR ☐ Minor (☐ < 10 tpy of any single HAP AND ☐ < 25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? ☐ Yes ☒ No		
a	If yes, include the name of company providing commercial electric power to the facility: N/A Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

Section 1-G: Streamline Application

(This section applies to 20.2.72.300 NMAC Streamline applications only)

1	☐ I have filled out Section 18, "Addendum for Streamline Applications." ☒ N/A (This is not a Streamline application.)
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Section 1-H: Current Title V Information - Required for all applications from TV Sources

(Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or 20.2.74/20.2.79 NMAC (Major PSD/NNSR applications), and/or 20.2.70 NMAC (Title V))

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): Donald W. Perkins		Phone: (970) 208-1268
a	R.O. Title: Director, Operations	R.O. e-mail: Don_Perkins@kindermorgan.com	
b	R. O. Address: 2527 Foresight Circle, Grand Junction, CO 81505		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): Joe McLaughlin		Phone: (713) 369-9847
a	A. R.O. Title: Vice President, Operations	A. R.O. e-mail: Joe_McLaughlin@kindermorgan.com	
b	A. R. O. Address: 1001 Louisiana St., Suite 1000, Houston, TX, 77022		
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship): El Paso Natural Gas Company, L.L.C. was formerly named "El Paso Natural Gas Company" (until 8/6/2012); both names may appear on operating permits, and refer to the same company.		
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): Kinder Morgan, Inc.		
a	Address of Parent Company: 1001 Louisiana St., Suite 1000, Houston, TX 77002		
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.): N/A - El Paso Natural Gas Company, L.L.C. has no subsidiaries.		
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: Travis Ray (719) 520-3786 & Bronson Ashcroft (505) 632-6270		

7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers: Colorado (32 km); Local Air Pollution Control Programs: none; Indian Tribes/Pueblos: None
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Section 1-I – Submittal Requirements

Each 20.2.73 NMAC (**NOI**), a 20.2.70 NMAC (**Title V**), a 20.2.72 NMAC (**NSR** minor source), or 20.2.74 NMAC (**PSD**) application package shall consist of the following:

Hard Copy Submittal Requirements:

- 1) One hard copy **original signed and notarized application package printed double sided ‘head-to-toe’ 2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be **head-to-head**. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. **Please include a copy of the check on a separate page.**
- 2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This **copy** does not need to be 2-hole punched, but **must be double sided**. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.
- 3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically on compact disk(s) (CD). For permit application submittals, **two CD** copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a **single CD** submittal.
- 4) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver OR** one additional electronic copy of the air dispersion modeling including the input and output files. The dispersion modeling **summary report only** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau. The complete dispersion modeling study, including all input/output files, should be submitted electronically as part of the electronic submittal.
- 5) If subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
 - a. one additional CD copy for US EPA,
 - b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
 - c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

- 1) All required electronic documents shall be submitted in duplicate (2 separate CDs). A single PDF document of the entire application as submitted and the individual documents comprising the application.
- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc.), submit these items in hard copy format with the number of additional hard copies corresponding to the number of CD copies required. We must be able to review the formulas and inputs that calculated the emissions.
- 3) It is preferred that this application form be submitted as 3 electronic files (**2 MSWord docs**: Universal Application section 1 and Universal Application section 3-19) and **1 Excel file** of the tables (Universal Application section 2) on the CD(s). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The **electronic file names** shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: “A-3423-FacilityName”. The “A” distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with “A-”. Modifications to existing facilities should use the **core permit number** (i.e. ‘3423’) the Department assigned to the facility as the next 4 digits. Use ‘XXXX’ for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: “A-3423-9-description”, where “9” stands for the **section #** (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the **header information** throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision # (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. The footer information should not be modified by the applicant.

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Table 2-A: Regulated Emission Sources

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
A-01	RICE	Cooper Bessemer	GMV10-TF	43051	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-01				
A-02	RICE	Cooper Bessemer	GMV10-TF	43050	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-02				
A-03	RICE	Cooper Bessemer	GMV10-TF	43052	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-03				
A-04	RICE	Cooper Bessemer	GMV10-TF	43058	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-04				
A-05	RICE	Cooper Bessemer	GMV10-TF	43054	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-05				
A-06	RICE	Cooper Bessemer	GMV10-TF	43057	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-06				
A-07	RICE	Cooper Bessemer	GMV10-TF	43053	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-07				
A-08	RICE	Cooper Bessemer	GMV10-TF	43055	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-08				
A-09	RICE	Cooper Bessemer	GMV10-TF	43056	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-09				
A-10	RICE	Cooper Bessemer	GMV10-TF	43400	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-10				
A-11	RICE	Cooper Bessemer	GMV10-TF	43399	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-11				
A-12	RICE	Cooper Bessemer	GMV10-TF	43398	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-12				
A-13	RICE	Cooper Bessemer	GMV10-TF	43397	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-13				
A-14	RICE	Cooper Bessemer	GMV10-TF	42008	1100 hp	943 hp	Unknown	N/A	20200252	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	20.2.61 NMAC	N/A
							August 1953	A-14				

¹ Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.² Specify dates required to determine regulatory applicability.³ To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.

Table 2-B: Insignificant Activities¹ (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see http://www.env.nm.gov/aqb/permit/aqb_pol.html), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at <http://www.env.nm.gov/aqb/forms/InsignificantListTitleV.pdf>. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
Various	Storage Tanks	Various	N/A	< 500			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	gallons	Item #5	< 8/23/2011	
Various	Storage Tanks	Various	N/A	Varies			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	gallons	Item #5	< 8/23/2011	
Various	Storage Tanks	Various	N/A	< 25,000			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	gallons	Item #5	< 8/23/2011	
KO	Knockout Vessel	N/A	N/A	1,000			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	gallons	Item #5	< 8/23/2011	
T-1	Lube Oil	N/A	N/A	8,820			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	gallons	Item #5	< 8/23/2011	
T-2	Lube Oil	N/A	N/A	8,820			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	gallons	Item #5	< 8/23/2011	
PURGE-01	Scrubber blowdown	N/A	N/A	500			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	scf/hr	Item #1.a	Unknown	
F-001	Fugitive Emissions	N/A	N/A	N/A			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	N/A	Item #1.a.	Unkown	
1	Torpedo Heater	Dayton	3VE49A	0.075			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			1044AFF0422	MMBtu/hr	Item #1.a.	2011	
2	Torpedo Heater	Dayton	3VE49A	0.075			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			1044AFF0423	MMBtu/hr	Item #1.a.	2011	
3	Torpedo Heater	Dayton	3VE49A	0.075			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			1127AFF0071	MMBtu/hr	Item #1.a.	2011	
4	Line Heater	Reddy Heater	Unkown	0.1			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			1359298	MMBtu/hr	Item #1.a.	2011	
5	Line Heater	National-Riverside Co.	K150FA	0.15			☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			2223	MMBtu/hr	Item #1.a.	2011	

¹ Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 15, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

² Specify date(s) required to determine regulatory applicability.

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

¹ List each control device on a separate line. For each control device, list all emission units controlled by the control device.

All applications for facilities that have emissions during routine or predictable startup, shutdown or scheduled maintenance (SSM)¹, including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (https://www.env.nm.gov/aqb/permit/aqb_pol.html) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

¹ **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for TSP unless TSP is set equal to PM10 and PM2.5.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the “-” symbol and on significant figures.

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Table 2-H: Stack Exit Conditions

Unit and stack numbering must correspond throughout the application package. Include the stack exit conditions for each unit that emits from a stack, including blowdown venting parameters and tank emissions. If the facility has multiple operating scenarios, complete a separate Table 2-H for each scenario and, for each, type scenario name here:

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H=Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (ft)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter (ft)
						(acfs)	(dscfs)			
A-01	A-01	V	N	30	650	139	N/A	N/A	100	1.33
A-02	A-02	V	N	30	650	139	N/A	N/A	100	1.33
A-03	A-03	V	N	30	650	139	N/A	N/A	100	1.33
A-04	A-04	V	N	30	650	139	N/A	N/A	100	1.33
A-05	A-05	V	N	30	650	139	N/A	N/A	100	1.33
A-06	A-06	V	N	30	650	139	N/A	N/A	100	1.33
A-07	A-07	V	N	30	650	139	N/A	N/A	100	1.33
A-08	A-08	V	N	30	650	139	N/A	N/A	100	1.33
A-09	A-09	V	N	30	650	139	N/A	N/A	100	1.33
A-10	A-10	V	N	30	650	139	N/A	N/A	100	1.33
A-11	A-11	V	N	30	650	139	N/A	N/A	100	1.33
A-12	A-12	V	N	30	650	139	N/A	N/A	100	1.33
A-13	A-13	V	N	30	650	139	N/A	N/A	100	1.33
A-14	A-14	V	N	30	650	139	N/A	N/A	100	1.33

In the table below, report the Potential to Emit for each HAP from each regulated emission unit listed in Table 2-A, only if the entire facility emits the HAP at a rate greater than or equal to one (1) ton per year. For each such emission unit, HAPs shall be reported to the nearest 0.1 tpy. Each facility-wide Individual HAP total and the facility-wide Total HAPs shall be the sum of all HAP sources calculated to the nearest 0.1 ton per year. Per 20.2.72.403.A.1 NMAC, facilities not exempt [see 20.2.72.402.C NMAC] from TAP permitting shall report each TAP that has an uncontrolled emission rate in excess of its pounds per hour screening level specified in 20.2.72.502 NMAC. TAPs shall be reported using one more significant figure than the number of significant figures shown in the pound per hour threshold corresponding to the substance. Use the HAP nomenclature as it appears in Section 112 (b) of the 1990 CAAA and the TAP nomenclature as it listed in 20.2.72.502 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

[illegible]

Table 2-J: Fuel

Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.

Unit No.	Fuel Type (low sulfur Diesel, ultra low sulfur diesel, Natural Gas, Coal, ...)	Fuel Source: purchased commercial, pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Specify Units				
			Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
A-01	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-02	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-03	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-04	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-05	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-06	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-07	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-08	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-09	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-10	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-11	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-12	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-13	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A
A-14	Sweet Natural Gas	Pipeline Quality Natural Gas	902 BTU/scf	10.17 Mscf	89.05 MMscf	N/A	N/A

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

[illegible]

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 10.159 M3 = 42.0 gal

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Table 2-L2: Liquid Storage Tank Data Codes Reference Table

Roof Type	Seal Type, Welded Tank Seal Type		Seal Type, Riveted Tank Seal Type		Roof, Shell Color	Paint Condition
FX: Fixed Roof	Mechanical Shoe Seal	Liquid-mounted resilient seal	Vapor-mounted resilient seal	Seal Type	WH: White	Good
IF: Internal Floating Roof	A: Primary only	A: Primary only	A: Primary only	A: Mechanical shoe, primary only	AS: Aluminum (specular)	Poor
EF: External Floating Roof	B: Shoe-mounted secondary	B: Weather shield	B: Weather shield	B: Shoe-mounted secondary	AD: Aluminum (diffuse)	
P: Pressure	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	LG: Light Gray	
Note: 1.00 bbl = 0.159 M ³ = 42.0 gal					MG: Medium Gray	
					BL: Black	
					OT: Other (specify)	

Note: $1.00 \text{ bbl} = 0.159 \text{ M}^3 = 42.0 \text{ gal}$

Table 2-M: Materials Processed and Produced (Use additional sheets as necessary.)

[illegible]

Table 2-N: CEM Equipment

Enter Continuous Emissions Measurement (CEM) Data in this table. If CEM data will be used as part of a federally enforceable permit condition, or used to satisfy the requirements of a state or federal regulation, include a copy of the CEM's manufacturer specification sheet in the Information Used to Determine Emissions attachment. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

[illegible]

Table 2-O: Parametric Emissions Measurement Equipment

Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

[illegible]

Table 2-P: Greenhouse Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box ☐ By checking this box, the applicant acknowledges the total CO₂e emissions are less than 75,000 tons per year.

		CO ₂ ton/yr	N ₂ O ton/yr	CH ₄ ton/yr	SF ₆ ton/yr	PFC/HFC ton/yr ²									Total GHG Mass Basis ton/yr ⁴	Total CO ₂ e ton/yr ⁵
Unit No.	GWPs ¹	1	298	25	22,800	footnote 3										
A-01 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.6224	2.21												4703
A-02 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-03 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-04 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-05 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-06 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-07 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-08 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-09 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-10 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-11 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-12 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-13 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
A-14 ⁶	mass GHG	4698	0.0088	0.088											4698	
	CO ₂ e	4698	2.62	2.21												4703
SSM/M	mass GHG	10	-	450											460	
	CO ₂ e	10	-	11250												11260
Total	mass GHG														66236	
	CO ₂ e															77103

¹ GWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

² For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

³ For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

⁴ Green house gas emissions on a mass basis is the ton per year green house gas emission before adjustment with its GWP.

⁵ CO₂e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

⁶ Compressor Engine GHG emission were updated with the current fuel heating value.

Section 3

Application Summary

The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM): Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

This application is being submitted for the renewal of Operating Permit P048-R3 for Blanco Compressor Station A (Blanco A). The facility is owned and operated by El Paso Natural Gas Company, L.L.C. (EPNG), a Kinder Morgan company. This submittal is pursuant to 20.2.70.300.B.2 NMAC which requires a Title V renewal application be submitted at least twelve months prior to expiration of the current permit. Title V Permit P048-R3 expires on February 16, 2020.

Blanco A is currently permitted under Operating Permit P048-R3 (issued February 16, 2015) and NSR Permits 613-M10R1. The facility is a Title V major source. The facility is located approximately 0.1 miles northeast of Bloomfield in San Juan County, New Mexico.

Blanco Compressor Station A shares its NSR Permit with the following adjacent facilities:

Facility Name	Facility Owner/Operator	Facility Permits
Blanco C&D Compressor Station	Enterprise Field Services, LLC and Enterprise Products Operating, LLC	613-M12, P214-R3
San Juan Gas Plant	ConocoPhillips	613-M10R2, P124-R2M2

Blanco Compressor Station A is a compressor station which compresses natural gas for transportation purposes. Equipment at this facility includes fourteen Cooper Bessemer GMV10-TF reciprocating engines (units A-01 to A-14), and an emergency flare (unit FL-01) shared with Enterprise Field Services, LLC Blanco C&D Compressor Station. Startup, shutdown, and routine maintenance (SSM) emissions result from compressor and facility blowdowns. Insignificant activities include fugitive emissions (unit F-001), scrubber blowdown emissions (unit PURGE-01), engine startup and shutdown emissions, and several small heaters used for space heat.

Blanco Compressor Station A is a major source of NO_x under the Prevention of Significant Deterioration (PSD) rules, as currently permitted, and will remain a major source after the proposed Title V renewal. This facility will also remain a major source of NO_x, CO, formaldehyde and total HAPs for operating permit purposes under Title V (20.2.70 NMAC).

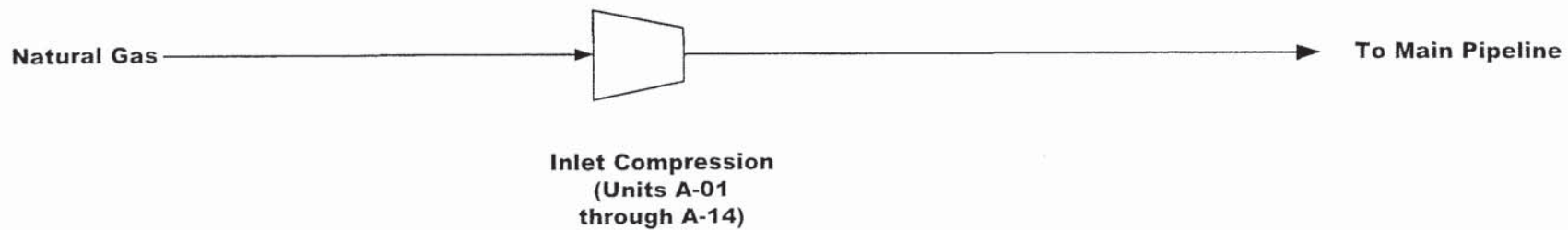
Section 4

Process Flow Sheet

A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

A process flow diagram is attached.

Insignificant activities as defined in 20.2.70.7 NMAC are not included in the PFD.



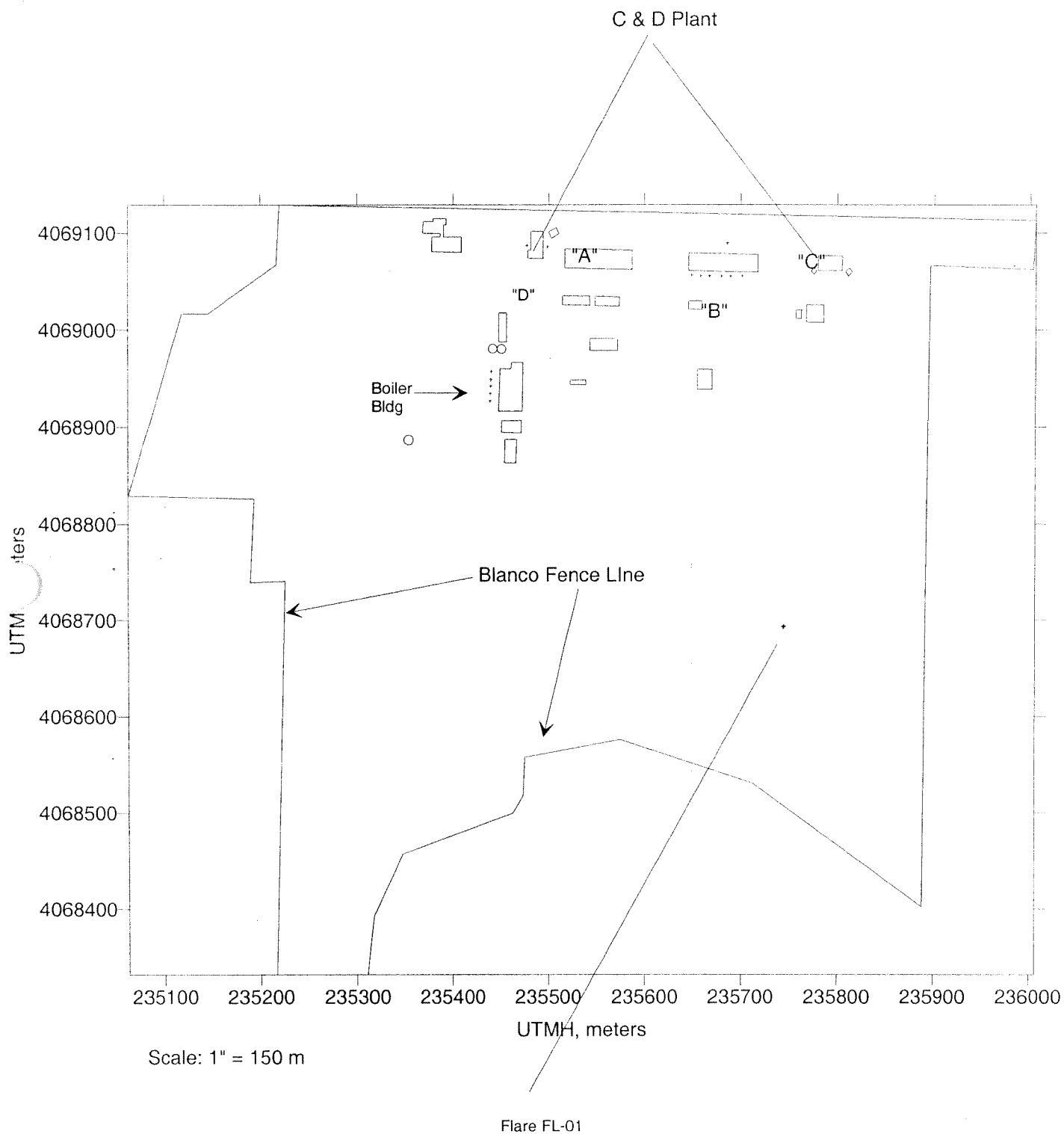
**Process Flow Diagram
Blanco A Compressor Station**

Section 5

Plot Plan Drawn To Scale

A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

A plot plan is attached.



Section 5
Site Layout
El Paso Natural Gas Blanco Compressor Station

Section 6

All Calculations

Show all calculations used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

Tank Flashing Calculations: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

SSM Calculations: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

Glycol Dehydrator Calculations: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

Significant Figures:

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

B. At least 5 significant figures shall be retained in all intermediate calculations.

C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

- (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
- (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**
- (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
- (4) The final result of the calculation shall be expressed in the units of the standard.

Control Devices: In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device

regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

Emission units at Blanco Compressor Station A include the following:

- Fourteen Cooper-Bessemer GMV-10TF natural gas-fueled compressor engines, units A-01 through A-14
- One John Zink flare, unit FL-01 used to combust a small quantity of scrubber blowdown gas associated with activity PURGE-01, (an insignificant activity). This flare is shared with Blanco C&D Compressor Station.
- Facility fugitive emissions, unit F-001 (an insignificant activity)
- Engine startup and shutdown emissions, unit SSM/M
- Compressor and facility blowdown emissions, unit SSM/M
- A number of insignificant storage tanks

Emission calculations are reproduced from previous applications. Calculations and supporting data from previous applications are included where appropriate.

COOPER-BESSEMER GMV-10TF ENGINES (UNITS A-01 THROUGH A-14)

Emissions of NO_x, CO, SO₂, HAP(s), and VOC are as currently permitted in Operating Permit P048-R3. Emission factors from AP-42 Table 3.3.2-1 (April 1976) were used to calculate emissions of NO_x, CO, SO_x and VOC. The HAP emission rates are calculated using the latest edition of GRI-HAPCalc, version 3.01. Per the guidance in Table 2-I, individual HAPS are shown in Table 2-I. Individual HAP emission are shown if the HAP emits greater than or equal to 1 ton per year.

Emission factors from AP-42 Table 3.2-1 (August 2000) were used to calculate the TSP, PM₁₀, & PM_{2.5}. Greenhouse gas (GHG) emissions were calculated using 40 CFR 98 Subpart C emission factors. The GHG emission and particulate emissions were updated with the current fuel heating value.

JOHN ZINK EMERGENCY FLARE (UNIT FL-01, ACTIVITY PURGE-01)

The emergency flare is shared with Enterprise Field Services, LLC Blanco C&D Compressor Station. The flare is used to control scrubber blowdown emissions from activity PURGE-01. Activity PURGE-1 is an insignificant activity consisting of routing a 500 scf/hr periodic blowdown from Blanco Compressor Station A (4 hours/week, all year).

FUGITIVE EMISSIONS (UNIT F-001)

Facility fugitive VOC and GHG emissions have been calculated using emission factors from the EPA Protocol for Equipment Leak Emission Estimates. Fugitive emissions from the combined EPNG - Blanco Compressor Station A and Enterprise Products Operating LLC - Blanco C & D Compressor Station were quantified for the applications for Operating Permit P048 and NSR Permit 0613-M5. EPNG staff estimate that 30% of the total component count presented in the application for P048 can be reasonably apportioned to EPNG-Blanco Compressor Station A based on the equipment used at each facility. Facility-wide fugitive emissions qualify as an insignificant activity. Unit F-001 is listed in Table 2-B.

INSIGNIFICANT STORAGE TANKS

There are a number of storage tanks at the facility which are classified as insignificant activities as defined in 20.2.70.7 NMAC. These units are listed in Table 2-B. Emissions from these insignificant units are not shown in this application.

ROUTINE OR PREDICTABLE EMISSIONS DURING STARTUP, SHUTDOWN, AND MAINTENANCE (SSM/M)

Under NSR 0613-M9, the facility has chosen to consolidate both SSM and Malfunction per NMED guidance. Per Section 2.F of the implementation Guidance for permitting SSM Emissions and Excess Emissions (version 7 June 2012) "instead of permitting SSM and upset/malfunction emissions separately, the applicant may request that emissions from both SSM and upset/malfunction be consolidated in the permit."

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC) applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO₂e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO₂e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO₂e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
5. All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO₂e emissions for each unit in Table 2-P.
6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following ☐ By checking this box, the applicant acknowledges the total CO₂e emissions are less than 75,000 tons per year.

Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at <http://www.epa.gov/ttn/chief/ap42/index.html>
- EPA's Internet emission factor database WebFIRE at <http://cfpub.epa.gov/webfire/>
- 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at <http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases>:

Global Warming Potentials (GWP):

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO₂ over a specified time period.

"Greenhouse gas" for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. **(20.2.70.7 NMAC, 20.2.74.7 NMAC)**. You may also find GHGs defined in 40 CFR 86.1818-12(a).

Metric to Short Ton Conversion:

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.

1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

Cooper-Bessemer GMV-10TF

Emission unit: A-01 through A-14
 Source description: Natural gas-fired reciprocating engine
 Manufacturer: Cooper-Bessemer
 Model: GMV-10TF
 Type: Turbocharged, two-cycle, lean burn engine

Sea level hp: 1100 hp Manufacturer's data
 Actual site hp: 943 hp As currently permitted

Fuel Consumption

Fuel heat value: 902 Btu/scf As currently permitted
 Fuel consumption: 10.17 Mscf/hr As currently permitted
 Annual fuel usage: 89.05 MMsct/yr 8760 hrs/yr operation
 9.17 MMBtu/hr

Exhaust Parameters

Exhaust temp (Ta): 650 °F
 Stack diameter: 1.33 ft
 Exhaust velocity: 100 fps
 Stack height: 30 ft

Emission Factors			
Component	Emission Factor	Emission Factor Unit	Emission Factor Source
NO _x	24	lb/10 ³ hp-hr	Ap-42 Table 3.3.2-1 (4/76)
CO	3.1	lb/10 ³ hp-hr	Ap-42 Table 3.3.2-1 (4/76)
SO _x	0.004	lb/10 ³ hp-hr	Ap-42 Table 3.3.2-1 (4/76)
TSP/PM/PM ₁₀ /PM _{2.5} ¹	0.048	lb/MMBtu	Ap-42 Table 3.2-1 (2019)
VOC	9.7	lb/10 ³ hp-hr	Ap-42 Table 3.3.2-1 (4/76)
HCHO	1.39	tons/yr	GRI Hap Calc
Total Haps	2.27	tons/yr	Gri Hap Calc

¹TSP/PM/PM₁₀/PM_{2.5} emission factor are based on the sum of PM₁₀ filterable and PM condensable.

Emission Calculations

Pollutant	Emission per Unit		Basis	Total Emissions (14 units)	
	Hourly (lb/hr)	Annual (tpy)		Hourly (lb/hr)	Annual (tpy)
NO _x	21.91	95.97	As currently permitted	306.75	1343.58
CO	2.83	12.40	As currently permitted	39.62	173.60
SO ₂	0.0046	0.020	As currently permitted	0.064	0.28
TSP/PM/PM ₁₀ /PM _{2.5} ²	0.44	1.94	fuel heat value	6.20	27.16
VOC	0.89	3.90	As currently permitted	12.46	54.60
HCHO ³	0.32	1.39	As currently permitted	4.45	19.50
Total HAPs ³	0.52	2.27	As currently permitted	7.25	31.76

²TSP/PM/PM₁₀/PM_{2.5} emissions were updated with the current facility fuel heat value.

³HAPs & HCHO based on worst-case emission factors from GRI-HAPCalc

GHG Emission Calculations

Pollutant	Emission Factor (kg/MMBtu)	Emission Factor (lb/MMBtu) ⁴	Emissions Per Unit		Total Emissions	
			Hourly (lb/hr)	Annual (tpy)	Hourly (lb/hr)	Annual (tpy)
CO ₂ ⁵	53.06	116.98	1072.65	4698.21	15017.10	65774.91
CH ₄ ⁵	0.001	0.0022	0.020	0.0884	0.28	1.24
N ₂ O ⁵	0.0001	0.00022	0.0020	0.0088	0.03	0.12
			Total CO ₂ e:		15,033	65,843

⁴ Emission factors converted from kg/MMBtu to lb/MMBtu using a 2.2 lb/kg conversion.

⁵ Emission factors as per 40 CFR Part 98, Subpart C, Table C-2 for Natural Gas.

Fugitive Emissions (Insignificant Activity)

Emission Unit: F-001

Source Description: Fugitive Emissions from Fittings

Component Count	EPNG		duty		total
	total ¹	fraction	gas	liquid	
valves	1734	30%	520		520
pumps	28	30%	8		8
pressure relief, etc	27	30%	8		8
connectors	28	30%	4	4	8
flanges	6623	30%	1987		1987
open ended lines	313	30%	94		94
total	8753		2622		2626

VOC Emissions

Light Liquid Duty	count	kg/hr/source ²	kg/hr	lb/hr	tpy
valves	0	2.50E-03	0.00	0.00	0.00
pumps	0	1.30E-02	0.00	0.00	0.00
pressure relief, etc	0	7.50E-03	0.00	0.00	0.00
connectors	4	2.10E-04	8.82E-04	1.94E-03	0.01
flanges	0	1.10E-04	0.00	0.00	0.00
open ended lines	0	1.40E-03	0.00	0.00	0.00
total	4		8.82E-04	1.94E-03	0.0085
VOC fraction				100%	100%
VOC emissions				1.94E-03	0.0085

Gas Duty	count	kg/hr/source ²	kg/hr	lb/hr	tpy
valves	520	4.50E-03	2.34	5.15	22.56
pumps	8	2.40E-03	0.02	0.04	0.19
pressure relief, etc	8	8.80E-03	0.07	0.16	0.69
connectors	4	2.00E-04	8.40E-04	1.85E-03	0.01
flanges	1987	3.90E-04	0.77	1.70	7.47
open ended lines	94	2.00E-03	0.19	0.41	1.81
total	2622		3.40	7.47	32.72
VOC fraction				0.17%	0.17%
VOC emissions				0.013	0.057
Safety factor				100%	100%

Blanco A Total VOC fugitive emissions

0.030 0.13

GHG Emissions

	lb/hr	tpy
Blanco A Total CH ₄ fugitive emissions	14.41	63.13
Blanco A Total CO ₂ fugitive emissions	0.34	1.48
Blanco A Total CO ₂ e fugitive emissions	303	1,580

¹ Component count estimated by EPNG staff on the basis that 30% of the total fugitive emissions presented in the application for OP P048 can be reasonably apportioned to EPNG-Blanco Compressor Station A.

² Emission factors from the EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (1995).

Gas Speciation

Component	MW	Wet	Dry vol/mol%	MW * dry	LHV	Btu/scf * dry	Mass
		vol/mol %		vol %	Btu/scf	vol %	Fraction (dry)
Water	18.02	0.00%					
Nitrogen	28.01	0.34%	0.34%	0.094	0	0.00	0.57%
CO ₂	44.01	0.84%	0.84%	0.371	0	0.00	2.26%
H ₂ S	34.08	0.00%	0.00%	0.000	586.71	0.00	0.00%
Methane	16.04	98.48%	98.48%	15.798	909.1	895.24	96.43%
Ethane	30.07	0.30%	0.30%	0.091	1617.8	4.89	0.55%
Propane	44.10	0.02%	0.02%	0.007	2315.9	0.39	0.05%
I-Butane	58.12	0.00%	0.00%	0.002	3001	0.09	0.01%
N-Butane	58.12	0.01%	0.01%	0.003	3010.5	0.18	0.02%
I-Pentane	72.15	0.00%	0.00%	0.003	3697.9	0.15	0.02%
N-Pentane	72.15	0.00%	0.00%	0.000	3706.8	0.00	0.00%
Hexanes	86.18	0.02%	0.02%	0.013	4403.9	0.66	0.08%
C7+	100.21	0.00%	0.00%	0.000	5796.1	0.00	0.00%
Total		100%	100.0%	16.38		901.59	100%
Dry total		100%		(mixture mol. wt)		(mixture heating value)	

VOC mass fraction

0.17%

Scrubber Blowdown (Insignificant Activity)

Unit: FL-01
Activity: PURGE-01
Source Description: John Zink Emergency Flare

Worst Case Hourly Emissions:

Worst-case Hourly Blowdown Volume: 500 scf/hr
Flared Gas HHV: 1007 Btu/scf
Worst Case Heat Input: 0.50 MMBtu/hr

NO _x	CO	VOC*	
0.14	0.28	0.068	RG 109 high heat value
0.064	0.55		RG 109 low heat value
0.069	0.28	0.034	lb/hr
0.30	1.21	0.15	tpy

Annual Average Emissions:

Weekly Maximum Blowdown Volume: 2000 scf/wk
Annual Maximum Blowdown Volume: 104000 scf/yr
Flared Gas HHV: 1007 Btu/scf
Annual Maximum Heat Input: 104.73 MMBtu/yr

NO _x	CO	VOC*	
0.14	0.55	0.068	lb/MMBtu
14.45	57.56	7.12	lb/yr
0.0072	0.029	0.0036	tpy

*Assumes VOC = THC

SSM- H₂S Emissions

Unit: SSM/M1

Description: Facility-wide startup, shutdown, maintenance and malfunction emissions

Gas Analysis (Typical)

H ₂ S	0.25	gr H ₂ S	Nominal (Max amount allowed in pipeline quality natural gas)
	100	scf	

Compressor Blowdown Venting (BD-Unit)

SSM Emission Rates, Per Event

Event Description: [Planned Maintenance and Normal Shutdown](#)

Volume per event: 0.30 Mscf/event Estimated (varies)

H₂S Emissions: 0.00011 lb/event gr/scf * scf/event * 1lb/7000gr

SSM Emission Rates, Annual

Annual volume: 1384.21 Mscf/yr Expected blowdown volume

H₂S Emissions: 0.00025 tons/yr gr/scf * scf/event * 1lb/7000gr * ton/2000 lb

Facility Blowdown Venting (BD-ESD)

SSM Emission Rates, Per Event

Event Description: [Station ESD](#)

Volume per event: 2300 Mscf/event Estimated (varies)

H₂S Emissions: 0.82 lb/event gr/scf * scf/event * 1lb/7000gr

SSM Emission Rates, Annual

Annual volume: 2300 Mscf/yr Expected blowdown volume

H₂S Emissions: 4.11E-04 tons/yr gr/scf * scf/event * 1lb/7000gr * ton/2000 lb

Facility H₂S Total: 0.00066 tons/yr

Facility Blowdown Total

H₂S Emissions: 0.00091 tons/yr

Facility-Wide SSM/M Total

H₂S
0.00091 tons/yr

SSM Emissions

Unit: SSM
 Description: Facility-wide SSM emissions

Gas Analysis (Typical)

VOC weight %:	2.00%	Nominal
CO2 weight %:	2.00%	Nominal
CH4 weight %:	90.00%	Nominal
Gas molecular weight:	17.00 lb/lb-mol	Nominal
Gas molar volume:	378.61 scf/lb-mol	Constant
Gas density:	0.045 lb/scf	Gas MW / Molar volume

Compressor Blowdown Venting (BD-Unit)

SSM Emission Rates, Per Event

Event Description:	Planned Maintenance and Normal Shutdown	
Volume per event:	0.30 Mscf/event	Estimated (varies)
VOC Emissions:	0.27 lb/event	lb/scf * scf/event * VOC wt %

SSM Emission Rates, Annual

Annual volume:	1384 Mscf/yr	Expected blowdown volume
VOC Emissions:	0.62 tons/yr	lb/scf * scf/event * VOC wt % * ton/2000 lb

Facility Blowdown Venting (BD-ESD)

SSM Emission Rates, Per Event

Event Description:	Station ESD	
Volume per event:	2300 Mscf/event	Estimated (varies)
VOC Emissions:	2065 lb/event	lb/scf * scf/event * VOC wt %

SSM Emission Rates, Annual

Annual volume:	2300 Mscf/yr	Assumes 1 event per year
VOC Emissions:	1.033 tons/yr	lb/event * event/year * ton/2000lb

Facility-wide VOC Total: 1.65 tons/yr

Facility Blowdown Total

VOC Emissions:	10.0 tons/yr	
HAP emissions:	0.069 tons/yr	Assumes same HAP/VOC ratio as fugitives
CO2 Emissions:	10.0 tons/yr	VOC Emissions / %VOC * %CO2
CH4 Emissions:	450.0 tons/yr	VOC Emissions / %VOC * %CH4
CO2e Emissions:	11260.0 tons/yr	

Facility-Wide SSM/M Total

VOC	HAP	CO2	CH4	CO2e	
10.0	0.069	10.0	450.0	11260.0	tons/yr

Section 7

Information Used To Determine Emissions

Information Used to Determine Emissions shall include the following:

- ☒ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
 - ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
 - ☒ If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
 - ☒ If an older version of AP-42 is used, include a complete copy of the section.
 - ☒ If an EPA document or other material is referenced, include a complete copy.
 - ☐ Fuel specifications sheet.
 - ☐ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.
-

The following information used to determine emissions is attached:

COOPER-BESSEMER GMV-10TF ENGINES (UNITS A-01 THROUGH A-14)

- GRI-HAPCalc 3.01 output
- AP-42 Table 3.3.2-1 (April 1976)
- AP-42 Table 3.2-1 (August 2000)
- 40 CFR Part 98, Subpart C, Table C-1 & Table C-2 for Natural Gas.

JOHN ZINK EMERGENCY FLARE (UNIT FL-01, ACTIVITY PURGE-01)

- TNRCC's RG-109 *Air Permit Technical Guidance for Chemical Sources: Flares and Vapor Oxidizers* (10/00)

FUGITIVE EMISSIONS (UNIT F-001)

- EPA Protocol for Equipment Leak Emission Estimates, 1995

GRI-HAPCalc ® 3.01

Engines Report

Facility ID:	BLANCO	Notes:	Units R-A01 through R-A14:
Operation Type:	COMPRESSOR STATION		Cooper Bessemer GMV10-TF
Facility Name:	BLANCO COMPRESSOR STATION		engines (943 site hp / 1100
User Name:			maximum rated hp)
Units of Measure:	U.S. STANDARD		

Note: Emissions less than 5.00E-09 tons (or tonnes) per year are considered insignificant and are treated as zero.

These emissions are indicated on the report with a "0".

Emissions between 5.00E-09 and 5.00E-05 tons (or tonnes) per year are represented on the report with "0.0000".

Engine Unit

Unit Name: A01:14

Hours of Operation: 8,760 Yearly
 Rate Power: 1,100 hp
 Fuel Type: NATURAL GAS
 Engine Type: 2-Stroke, Lean Burn
 Emission Factor Set: EPA > FIELD > LITERATURE
 Additional EF Set: 2SLB COOPER

Calculated Emissions (ton/yr)

Chemical Name	Emissions	Emission Factor	Emission Factor Set
HAPs			
Formaldehyde	1.3927	0.13123430 g/bhp-hr	2SLB COOPER
Methanol	0.0869	0.00818480 g/bhp-hr	EPA
Acetaldehyde	0.2718	0.02561070 g/bhp-hr	EPA
1,3-Butadiene	0.0287	0.00270630 g/bhp-hr	EPA
Acrolein	0.2725	0.02567670 g/bhp-hr	EPA
Benzene	0.0679	0.00640270 g/bhp-hr	EPA
Toluene	0.0337	0.00317820 g/bhp-hr	EPA
Ethylbenzene	0.0038	0.00035640 g/bhp-hr	EPA
Xylenes(m,p,o)	0.0094	0.00088450 g/bhp-hr	EPA
2,2,4-Trimethylpentane	0.0296	0.00279210 g/bhp-hr	EPA
n-Hexane	0.0156	0.00146870 g/bhp-hr	EPA
Phenol	0.0015	0.00013890 g/bhp-hr	EPA
Styrene	0.0019	0.00018090 g/bhp-hr	EPA
Naphthalene	0.0034	0.00031780 g/bhp-hr	EPA
2-Methylnaphthalene	0.0007	0.00007060 g/bhp-hr	EPA
Acenaphthylene	0.0001	0.00001050 g/bhp-hr	EPA
Biphenyl	0.0001	0.00001300 g/bhp-hr	EPA
Acenaphthene	0.0000	0.00000440 g/bhp-hr	EPA
Fluorene	0.0001	0.00000560 g/bhp-hr	EPA
Anthracene	0.0000	0.00000240 g/bhp-hr	EPA
Phenanthrene	0.0001	0.00001170 g/bhp-hr	EPA
Ethylene Dibromide	0.0026	0.00024220 g/bhp-hr	EPA
Fluoranthene	0.0000	0.00000120 g/bhp-hr	EPA

Pyrene	0.0000	0.00000190 g/bhp-hr	EPA
Benz(a)anthracene	0.0000	0.00000110 g/bhp-hr	EPA
Chrysene	0.0000	0.00000220 g/bhp-hr	EPA
Benzo(e)pyrene	0.0000	0.00000010 g/bhp-hr	EPA
Vinyl Chloride	0.0009	0.00008150 g/bhp-hr	EPA
Methylene Chloride	0.0051	0.00048520 g/bhp-hr	EPA
1,1-Dichloroethane	0.0014	0.00012900 g/bhp-hr	EPA
1,3-Dichloropropene	0.0015	0.00014460 g/bhp-hr	EPA
Chlorobenzene	0.0016	0.00014650 g/bhp-hr	EPA
Chloroform	0.0016	0.00015540 g/bhp-hr	EPA
1,1,2-Trichloroethane	0.0018	0.00017390 g/bhp-hr	EPA
1,1,2,2-Tetrachloroethane	0.0023	0.00021880 g/bhp-hr	EPA
Carbon Tetrachloride	0.0021	0.00020030 g/bhp-hr	EPA
Propanal	0.0264	0.00249000 g/bhp-hr	GRI Field

Total 2.2678

Criteria Pollutants

PM	1.6920	0.15943960 g/bhp-hr	EPA
CO	6.6194	0.62374407 g/bhp-hr	2SLB COOPER
NMHC	11.9109	1.12236360 g/bhp-hr	GRI Field
NMEHC	4.2029	0.39604110 g/bhp-hr	EPA
NOx	114.5522	10.79424604 g/bhp-hr	2SLB COOPER
SO2	0.0206	0.00194060 g/bhp-hr	EPA

Other Pollutants

Butyraldehyde	0.0153	0.00144220 g/bhp-hr	EPA
Cyclohexane	0.0685	0.00645500 g/bhp-hr	GRI Field
Methane	26.0854	2.45803026 g/bhp-hr	2SLB COOPER
Ethylene	0.5860	0.05521797 g/bhp-hr	2SLB COOPER
Ethane	2.4832	0.23399430 g/bhp-hr	EPA
Propane	1.0052	0.09471980 g/bhp-hr	EPA
Isobutane	0.1313	0.01237630 g/bhp-hr	EPA
Butane	0.1664	0.01567660 g/bhp-hr	EPA
Cyclopentane	0.0033	0.00031250 g/bhp-hr	EPA
n-Pentane	0.0536	0.00504950 g/bhp-hr	EPA
Cyclohexane	0.0108	0.00101650 g/bhp-hr	EPA
Methylcyclohexane	0.0118	0.00111550 g/bhp-hr	EPA
1,2-Dichloroethane	0.0015	0.00013930 g/bhp-hr	EPA
1,2-Dichloropropane	0.0016	0.00014720 g/bhp-hr	EPA
n-Octane	0.0026	0.00024550 g/bhp-hr	EPA
1,2,3-Trimethylbenzene	0.0012	0.00011680 g/bhp-hr	EPA
1,2,4-Trimethylbenzene	0.0039	0.00036630 g/bhp-hr	EPA
1,3,5-Trimethylbenzene	0.0006	0.00005940 g/bhp-hr	EPA
n-Nonane	0.0011	0.00010170 g/bhp-hr	EPA
CO2	3,852.6775	363.03769350 g/bhp-hr	EPA

3.3.2 Heavy-Duty, Natural-Gas-Fired Pipeline Compressor Engines

by Susan Sercer
Alan Burgess
Tom Lahre

3.3.2.1 General¹ — Engines in the natural gas industry are used primarily to power compressors used for pipeline transportation, field gathering (collecting gas from wells), underground storage, and gas processing plant applications. Pipeline engines are concentrated in the major gas producing states (such as those along the Gulf Coast) and along the major gas pipelines. Both reciprocating engines and gas turbines are utilized, but the trend has been toward use of large gas turbines. Gas turbines emit considerably fewer pollutants than do reciprocating engines; however, reciprocating engines are generally more efficient in their use of fuel.

3.3.2.2 Emissions and Controls^{1,2} — The primary pollutant of concern is NO_x , which readily forms in the high temperature, pressure, and excess air environment found in natural-gas-fired compressor engines. Lesser amounts of carbon monoxide and hydrocarbons are emitted, although for each unit of natural gas burned, compressor engines (particularly reciprocating engines) emit significantly more of these pollutants than do external combustion boilers. Sulfur oxides emissions are proportional to the sulfur content of the fuel and will usually be quite low because of the negligible sulfur content of most pipeline gas.

The major variables affecting NO_x emissions from compressor engines include the air fuel ratio, engine load (defined as the ratio of the operating horsepower divided by the rated horsepower), intake (manifold) air temperature, and absolute humidity. In general, NO_x emissions increase with increasing load and intake air temperature and decrease with increasing absolute humidity and air fuel ratio. (The latter already being, in most compressor engines, on the "lean" side of that air fuel ratio at which maximum NO_x formation occurs.) Quantitative estimates of the effects of these variables are presented in Reference 2.

Because NO_x is the primary pollutant of significance emitted from pipeline compressor engines, control measures to date have been directed mainly at limiting NO_x emissions. For gas turbines, the most effective method of controlling NO_x emissions is the injection of water into the combustion chamber. Nitrogen oxides reductions as high as 80 percent can be achieved by this method. Moreover, water injection results in only nominal reductions in overall turbine efficiency. Steam injection can also be employed, but the resulting NO_x reductions may not be as great as with water injection, and it has the added disadvantage that a supply of steam must be readily available. Exhaust gas recirculation, wherein a portion of the exhaust gases is recirculated back into the intake manifold, may result in NO_x reductions of up to 50 percent. This technique, however, may not be practical in many cases because the recirculated gases must be cooled to prevent engine malfunction. Other combustion modifications, designed to reduce the temperature and/or residence time of the combustion gases, can also be effective in reducing NO_x emissions by 10 to 40 percent in specific gas turbine units.

For reciprocating gas-fired engines, the most effective NO_x control measures are those that change the air-fuel ratio. Thus, changes in engine torque, speed, intake air temperature, etc., that in turn increase the air-fuel ratio, may all result in lower NO_x emissions. Exhaust gas recirculation may also be effective in lowering NO_x emissions although, as with turbines, there are practical limits because of the large quantities of exhaust gas that must be cooled. Available data suggest that other NO_x control measures, including water and steam injection, have only limited application to reciprocating gas-fired engines.

Emission factors for natural-gas-fired pipeline compressor engines are presented in Table 3.3.2-1.

Table 3.3.2-1. EMISSION FACTORS FOR HEAVY-DUTY, NATURAL-GAS-FIRED PIPELINE COMPRESSOR ENGINES^a

EMISSION FACTOR RATING: A

	Nitrogen oxides (as NO ₂) ^b	Carbon monoxide	Hydrocarbons (as C) ^c	Sulfur dioxide ^d	Particulate ^e
Reciprocating engines					
lb/10 ³ hp-hr	24	3.1	9.7	0.004	NA
g/hp-hr	11	1.4	4.4	0.002	NA
g/kW-hr	15	1.9	5.9	0.003	NA
lb/10 ⁶ scf ^f	3,400	430	1,400	0.6	NA
kg/10 ⁶ Nm ^{3f}	55,400	7,020	21,800	9.2	NA
Gas turbines					
lb/10 ³ hp-hr	2.9	1.1	0.2	0.004	NA
g/hp-hr	1.3	0.5	0.1	0.002	NA
g/kW-hr	1.7	0.7	0.1	0.003	NA
lb/10 ⁶ scf ^g	300	120	23	0.6	NA
kg/10 ⁶ Nm ^{3g}	4,700	1,940	280	9.2	NA

^aAll factors based on References 2 and 3.

^bThese factors are for compressor engines operated at rated load. In general, NO_x emissions will increase with increasing load and intake (manifold) air temperature and decrease with increasing air-fuel ratios (excess air rates) and absolute humidity. Quantitative estimates of the effects of these variables are presented in Reference 2.

^cThese factors represent total hydrocarbons. Nonmethane hydrocarbons are estimated to make up to 5 to 10 percent of these totals, on the average.

^dBased on an assumed sulfur content of pipeline gas of 2000 gr/10⁶ scf (4600 g/Nm³). If pipeline quality natural gas is not fired, a material balance should be performed to determine SO₂ emissions based on the actual sulfur content.

^eNot available from existing data.

^fThese factors are calculated from the above factors for reciprocating engines assuming a heating value of 1050 Btu/scf (9350 kcal/Nm³) for natural gas and an average fuel consumption of 7500 Btu/hp-hr (2530 kcal/kW-hr).

^gThese factors are calculated from the above factors for gas turbines assuming a heating value of 1,050 Btu/scf (9,350 kcal/Nm³) of natural gas and an average fuel consumption of 10,000 Btu/hp-hr (3,380 kcal/kW-hr).

References for Section 3.3.2

1. Standard Support Document and Environmental Impact Statement - Stationary Reciprocating Internal Combustion Engines. Aerotherm/Acurex Corp., Mountain View, Calif. Prepared for Environmental Protection Agency, Research Triangle Park, N.C. under Contract No. 68-02-1318, Task Order No. 7, November 1974.
2. Urban, C.M. and K.J. Springer. Study of Exhaust Emissions from Natural Gas Pipeline Compressor Engines. Southwest Research Institute, San Antonio, Texas. Prepared for American Gas Association, Arlington, Va. February 1975.
3. Dietzmann, H.E. and K.J. Springer. Exhaust Emissions from Piston and Gas Turbine Engines Used in Natural Gas Transmission. Southwest Research Institute, San Antonio, Texas. Prepared for American Gas Association, Arlington, Va. January 1974.

TABLE 3.2-1 UNCONTROLLED EMISSION FACTORS FOR 2-STROKE LEAN-BURN ENGINES^a
(SCC 2-02-002-52)

Pollutant	Emission Factor (lb/MMBtu) ^b (fuel input)	Emission Factor Rating
Criteria Pollutants and Greenhouse Gases		
NO _x ^c 90 - 105% Load	3.17 E+00	A
NO _x ^c <90% Load	1.94 E+00	A
CO ^c 90 - 105% Load	3.86 E-01	A
CO ^c <90% Load	3.53 E-01	A
CO ₂ ^d	1.10 E+02	A
SO ₂ ^e	5.88 E-04	A
TOC ^f	1.64 E+00	A
Methane ^g	1.45 E+00	C
VOC ^h	1.20 E-01	C
PM10 (filterable) ⁱ	3.84 E-02	C
PM2.5 (filterable) ⁱ	3.84 E-02	C
PM Condensable ^j	9.91 E-03	E
Trace Organic Compounds		
1,1,2,2-Tetrachloroethane ^k	6.63 E-05	C
1,1,2-Trichloroethane ^k	5.27 E-05	C
1,1-Dichloroethane	3.91 E-05	C
1,2,3-Trimethylbenzene	3.54 E-05	D
1,2,4-Trimethylbenzene	1.11 E-04	C
1,2-Dichloroethane	4.22 E-05	D
1,2-Dichloropropane	4.46 E-05	C
1,3,5-Trimethylbenzene	1.80 E-05	D
1,3-Butadiene ^k	8.20 E-04	D
1,3-Dichloropropene ^k	4.38 E-05	C
2,2,4-Trimethylpentane ^k	8.46 E-04	B
2-Methylnaphthalene ^k	2.14 E-05	C
Acenaphthene ^k	1.33 E-06	C



Federal Environment and Safety Codified Regulations

TITLE 40—Protection of Environment

PART 98—MANDATORY GREENHOUSE GAS REPORTING

SUBPART C—General Stationary Fuel Combustion Sources

Table C-1 to Subpart C of Part 98 —Default CO₂ Emission Factors and High Heat Values for Various Types of Fuel

Fuel type	Default high heat value	Default CO₂ emission factor
Coal and coke	mmBtu/short ton	kg CO ₂ /mmBtu
Anthracite	25.09	103.69
Bituminous	24.93	93.28
Subbituminous	17.25	97.17
Lignite	14.21	97.72
Coal Coke	24.80	113.67
Mixed (Commercial sector)	21.39	94.27
Mixed (Industrial coking)	26.28	93.90
Mixed (Industrial sector)	22.35	94.67
Mixed (Electric Power sector)	19.73	95.52
Natural gas	mmBtu/scf	kg CO ₂ /mmBtu
(Weighted U.S. Average)	1.026 x 10 ⁻³	53.06
Petroleum products—liquid	mmBtu/gallon	kg CO ₂ /mmBtu
Distillate Fuel Oil No. 1	0.139	73.25
Distillate Fuel Oil No. 2	0.138	73.96
Distillate Fuel Oil No. 4	0.146	75.04
Residual Fuel Oil No. 5	0.140	72.93
Residual Fuel Oil No. 6	0.150	75.10
Used Oil	0.138	74.00
Kerosene	0.135	75.20
Liquefied petroleum gases (LPG) ¹	0.092	61.71
Propane ¹	0.091	62.87
Propylene ²	0.091	67.77
Ethane ¹	0.068	59.60
Ethanol	0.084	68.44
Ethylene ²	0.058	65.96
Isobutane ¹	0.099	64.94
Isobutylene ¹	0.103	68.86
Butane ¹	0.103	64.77
Butylene ¹	0.105	68.72
Naphtha (<401 deg F)	0.125	68.02
Natural Gasoline	0.110	66.88
Other Oil (>401 deg F)	0.139	76.22



Federal Environment and Safety Codified Regulations
TITLE 40—Protection of Environment
PART 98—MANDATORY GREENHOUSE GAS REPORTING
SUBPART C—General Stationary Fuel Combustion Sources

Table C-2 to Subpart C of Part 98 —Default CH₄ and N₂O Emission Factors for Various Types of Fuel

Fuel type	Default CH₄ emission factor (kg CH₄ /mmBtu)	Default N₂O emission factor (kg N₂O/mmBtu)
Coal and Coke (All fuel types in Table C-1)	1.1×10^{-02}	1.6×10^{-03}
Natural Gas	1.0×10^{-03}	1.0×10^{-04}
Petroleum Products (All fuel types in Table C-1)	3.0×10^{-03}	6.0×10^{-04}
Fuel Gas	3.0×10^{-03}	6.0×10^{-04}
Other Fuels—Solid	3.2×10^{-02}	4.2×10^{-03}
Blast Furnace Gas	2.2×10^{-05}	1.0×10^{-04}
Coke Oven Gas	4.8×10^{-04}	1.0×10^{-04}
Biomass Fuels—Solid (All fuel types in Table C-1, except wood and wood residuals)	3.2×10^{-02}	4.2×10^{-03}
Wood and wood residuals	7.2×10^{-03}	3.6×10^{-03}
Biomass Fuels—Gaseous (All fuel types in Table C-1)	3.2×10^{-03}	6.3×10^{-04}
Biomass Fuels—Liquid (All fuel types in Table C-1)	1.1×10^{-03}	1.1×10^{-04}

Note: Those employing this table are assumed to fall under the IPCC definitions of the “Energy Industry” or “Manufacturing Industries and Construction”. In all fuels except for coal the values for these two categories are identical. For coal combustion, those who fall within the IPCC “Energy Industry” category may employ a value of 1g of CH₄ /mmBtu.

[75 FR page 79154, Dec. 17, 2010; 78 FR page 71952, Nov. 29, 2013; 81 FR page 89252, Dec. 9, 2016]

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October 2000
RG-109 (Draft)

Air Permit Technical Guidance for Chemical Sources:

Flares and Vapor Oxidizers

printed on
recycled paper

Air Permits Division

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Waste Stream	Destruction/Removal Efficiency (DRE)		
VOC	98 percent (generic) 99 percent for compounds containing no more than 3 carbons that contain no elements other than carbon and hydrogen in addition to the following compounds: methanol, ethanol, propanol, ethylene oxide and propylene oxide		
H ₂ S	98 percent		
NH ₃	case by case		
CO	case by case		
Air Contaminants	Emission Factors		
thermal NO _x	steam-assist:	high Btu low Btu	0.0485 lb/MMBtu 0.068 lb/MMBtu
	other:	high Btu low Btu	0.138 lb/MMBtu 0.0641 lb/MMBtu
fuel NO _x	NO _x is 0.5 wt percent of inlet NH ₃ , other fuels case by case		
CO	steam-assist:	high Btu low Btu	0.3503 lb/MMBtu 0.3465 lb/MMBtu
	other:	high Btu low Btu	0.2755 lb/MMBtu 0.5496 lb/MMBtu
PM	none, required to be smokeless		
SO ₂	100 percent S in fuel to SO ₂		

*The only exception of this is if inorganics might be emitted from the flare. In the case of landfills, the AP-42 PM factor may be used. In other cases, the emissions should be based on the composition of the waste stream routed to the flare.



Protocol for Equipment Leak Emission Estimates

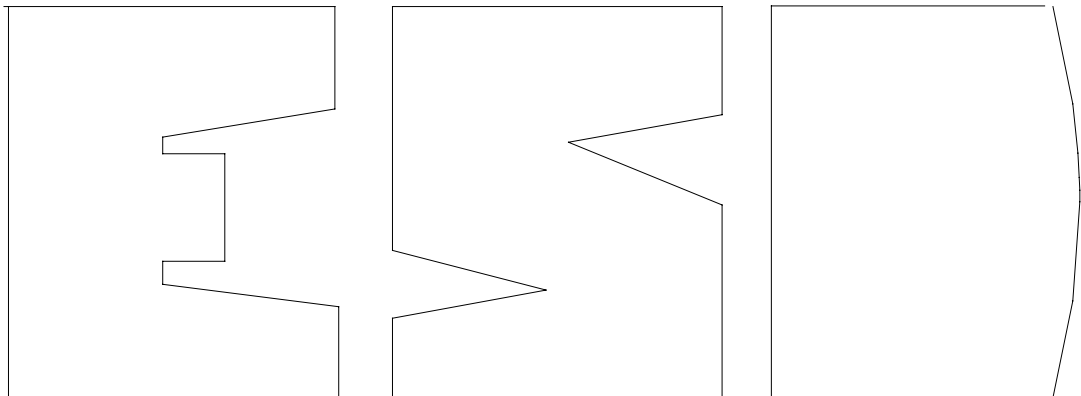
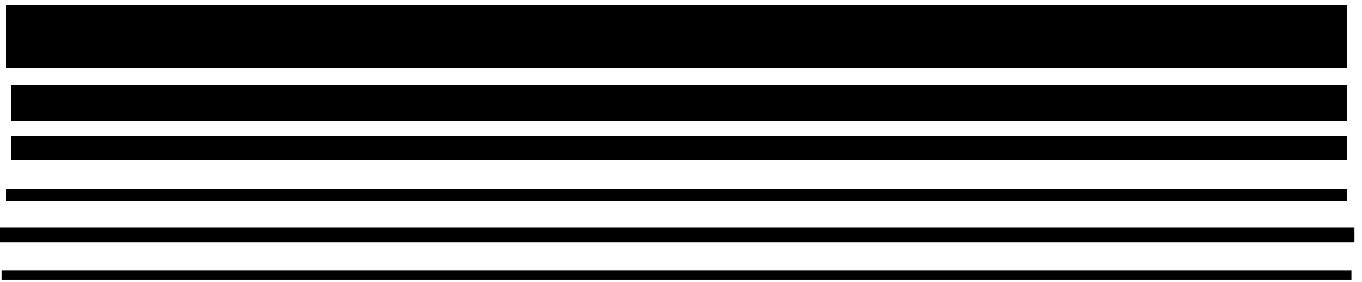


TABLE 2-4. OIL AND GAS PRODUCTION OPERATIONS AVERAGE EMISSION FACTORS (kg/hr/source)

Equipment Type	Service ^a	Emission Factor (kg/hr/source) ^b
Valves	Gas	4.5E-03
	Heavy Oil	8.4E-06
	Light Oil	2.5E-03
	Water/Oil	9.8E-05
Pump seals	Gas	2.4E-03
	Heavy Oil	NA
	Light Oil	1.3E-02
	Water/Oil	2.4E-05
Others ^c	Gas	8.8E-03
	Heavy Oil	3.2E-05
	Light Oil	7.5E-03
	Water/Oil	1.4E-02
Connectors	Gas	2.0E-04
	Heavy Oil	7.5E-06
	Light Oil	2.1E-04
	Water/Oil	1.1E-04
Flanges	Gas	3.9E-04
	Heavy Oil	3.9E-07
	Light Oil	1.1E-04
	Water/Oil	2.9E-06
Open-ended lines	Gas	2.0E-03
	Heavy Oil	1.4E-04
	Light Oil	1.4E-03
	Water/Oil	2.5E-04

^aWater/Oil emission factors apply to water streams in oil service with a water content greater than 50%, from the point of origin to the point where the water content reaches 99%. For water streams with a water content greater than 99%, the emission rate is considered negligible.

^bThese factors are for total organic compound emission rates (including non-VOC's such as methane and ethane) and apply to light crude, heavy crude, gas plant, gas production, and off shore facilities. "NA" indicates that not enough data were available to develop the indicated emission factor.

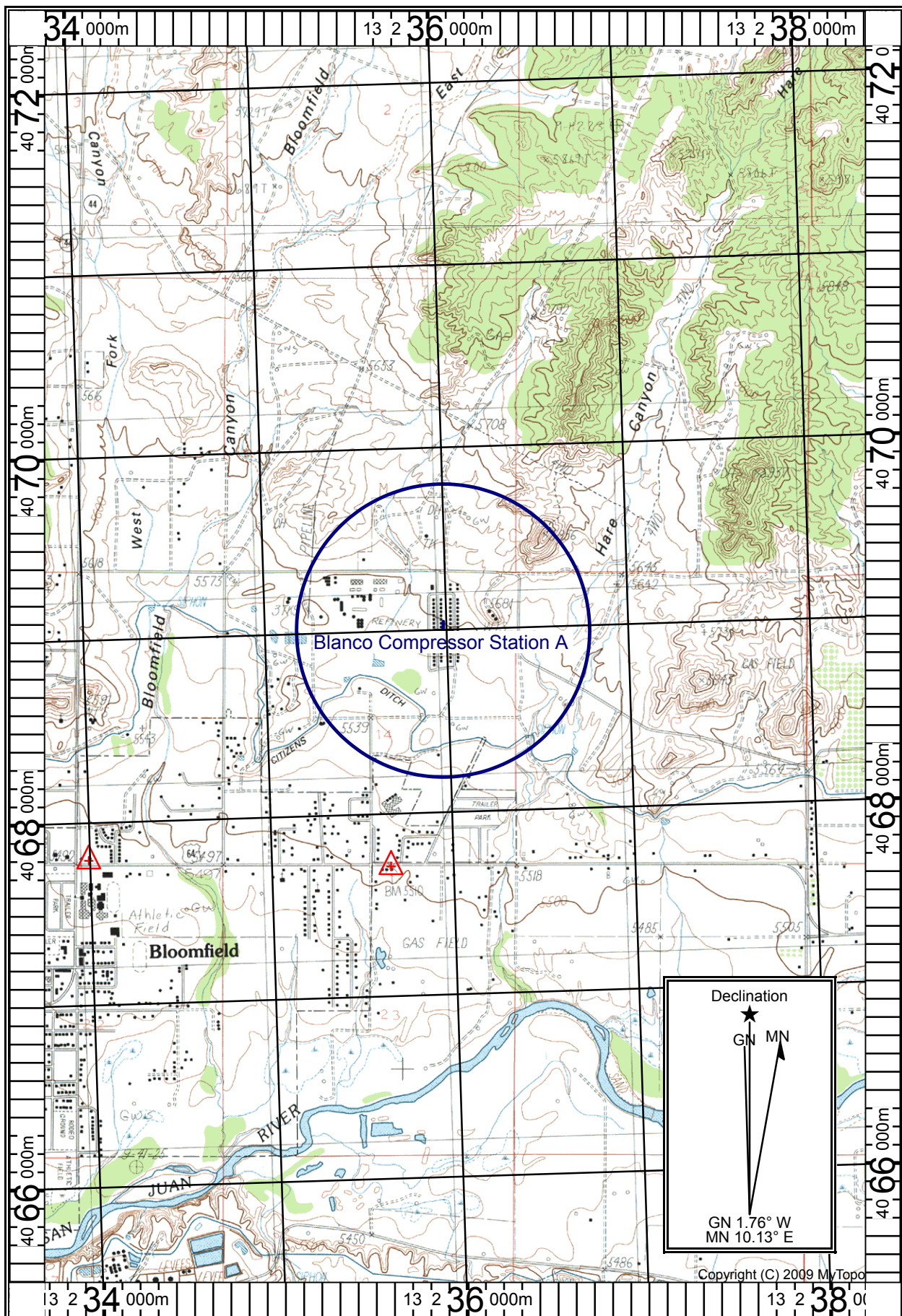
^cThe "other" equipment type was derived from compressors, diaphragms, drains, dump arms, hatches, instruments, meters, pressure relief valves, polished rods, relief valves, and vents. This "other" equipment type should be applied for any equipment type other than connectors, flanges, open-ended lines, pumps, or valves.

Section 8

Map(s)

A map such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	



Map Name: BLOOMFIELD
 Print Date: 02/06/19

Scale: 1 inch = 2,500 ft.
 Map Center: 13 0236040 m E 4068810 m N

Horizontal Datum: WGS84

Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

(This proof is required by: 20.2.72.203.A.14 NMAC “Documentary Proof of applicant’s public notice”)

☐ **I have read the AQB “Guidelines for Public Notification for Air Quality Permit Applications”**

This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant’s Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and Significant Permit Revision public notices must include all items in this list.

Technical Revision public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1. ☐ A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
2. ☐ A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
3. ☐ A copy of the property tax record (20.2.72.203.B NMAC).
4. ☐ A sample of the letters sent to the owners of record.
5. ☐ A sample of the letters sent to counties, municipalities, and Indian tribes.
6. ☐ A sample of the public notice posted and a verification of the local postings.
7. ☐ A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
8. ☐ A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
9. ☐ A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
10. ☐ A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
11. ☐ A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.

N/A—This is an application for Title V operating permit renewal; therefore, no public notice is required.

Section 10

Written Description of the Routine Operations of the Facility

A written description of the routine operations of the facility. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

Blanco A Compressor Station is a natural gas station that compresses natural gas and delivers the compressed gas to a pipeline for mainline transportation. This facility consists primarily of 14 natural gas fueled Cooper-Bessemer GMV-10TF compressor engines, site rated at 943 hp. The facility is currently designed to compress and transport approximately 1,280 MMscf/day of pipeline quality natural gas. An emergency flare (unit FL-01) shared with Enterprise Field Services, LLC Blanco C&D Compressor Station is used to combust scrubber blowdown gas (PURGE-01), which is considered an insignificant activity.

Startup, shutdown, and routine maintenance (unit SSM/M) emissions result from compressor and facility blowdowns. Insignificant activities include fugitive emissions (unit F-001), scrubber blowdown emissions (unit PURGE-01), storage tanks, and small heaters used for space heat.

Section 11

Source Determination

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

A. Identify the emission sources evaluated in this section: Please refer to Table 2-A

B. Apply the 3 criteria for determining a single source:

SIC Code: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, OR surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

☒ **Yes** ☐ **No**

Common Ownership or Control: Surrounding or associated sources are under common ownership or control as this source.

☒ **Yes** ☐ **No**

Contiguous or Adjacent: Surrounding or associated sources are contiguous or adjacent with this source.

☒ **Yes** ☐ **No**

C. Make a determination:

☒ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "**YES**" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "**NO**" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.

☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

NOTE: EPA has used the definition of control established by the Securities and Exchange Commission (SEC). The SEC defines control as “the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person (or organization or association) whether through ownership of voting shares, contract, or otherwise.” The possession of the power to direct the management and policies of an organization” can only be determined through a detailed review of business agreements and all relevant facts. If there is no common owner, control is based on agreements (such as contracts and lease information).

In this case Blanco C&D, Blanco A, and San Juan Basin Gas Plant, constitute a single source as control is established by federally enforceable New Source Review Permit No. 0613-M10R1 issued jointly to Enterprise Products Operating/Enterprise Field Services, El Paso Natural Gas, and ConocoPhillips. At this facility control is held in common by all three companies and any modification to the facility or application for revision of the NSR permit must be agreed to by all three parties. Therefore each of the three parties has an equal but minority stake in control of the facility.

Section 12

Section 12.A

PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

A PSD applicability determination for all sources. For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

A. This facility is:

- ☐ a minor PSD source before and after this modification (if so, delete C and D below).
- ☐ a major PSD source before this modification. This modification will make this a PSD minor source.
- ☐ an existing PSD Major Source that has never had a major modification requiring a BACT analysis.
- ☐ an existing PSD Major Source that has had a major modification requiring a BACT analysis
- ☐ a new PSD Major Source after this modification.

B. This facility **[is or is not]** one of the listed 20.2.74.501 Table I – PSD Source Categories. The “project” emissions for this modification are **[significant or not significant]**. **[Discuss why.]** The “project” emissions listed below **[do or do not]** only result from changes described in this permit application, thus no emissions from other **[revisions or modifications, past or future]** to this facility. Also, specifically discuss whether this project results in “de-bottlenecking”, or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:

- a. NOx: **XX.X** TPY
- b. CO: **XX.X** TPY
- c. VOC: **XX.X** TPY
- d. SOx: **XX.X** TPY
- e. TSP (PM): **XX.X** TPY
- f. PM10: **XX.X** TPY
- g. PM2.5: **XX.X** TPY
- h. Fluorides: **XX.X** TPY
- i. Lead: **XX.X** TPY
- j. Sulfur compounds (listed in Table 2): **XX.X** TPY
- k. GHG: **XX.X** TPY

C. Netting **[is required, and analysis is attached to this document.] OR [is not required (project is not significant)] OR [Applicant is submitting a PSD Major Modification and chooses not to net.]**

D. BACT is **[not required for this modification, as this application is a minor modification.] OR [required, as this application is a major modification. List pollutants subject to BACT review and provide a full top down BACT determination.]**

E. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

N/A – This is an application for a Title V renewal under 20.2.70 NMAC and no modifications are being requested; therefore, a PSD applicability determination is not required.

Section 13

Determination of State & Federal Air Quality Regulations

This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau's regulation page to see the full set of air quality regulations.

Required Information for Specific Equipment:

For regulations that apply to specific source types, in the 'Justification' column **provide any information needed to determine if the regulation does or does not apply.** For example, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

Required Information for Regulations that Apply to the Entire Facility:

See instructions in the 'Justification' column for the information that is needed to determine if an 'Entire Facility' type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

Regulatory Citations for Regulations That Do Not, but Could Apply:

If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must **provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation.** For example if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). **We don't want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not.** For example, if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

Regulatory Citations for Emission Standards:

For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard. Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. **Here are examples:** a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

Federally Enforceable Conditions:

All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility's potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVANT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc: <http://cfpub.epa.gov/adi/>

Table for STATE REGULATIONS:

<u>STATE REGU- LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQs	Yes	Facility	20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. This facility meets maximum allowable concentrations of TSP, SO ₂ , H ₂ S, CO, NO _x , and CO under this regulation.
20.2.7 NMAC	Excess Emissions	Yes	Facility	This regulation establishes requirements for the facility if operations at the facility result in any excess emissions. The owner or operator will operate the source at the facility having an excess emission, to the extent practicable, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The facility will also notify the NMED of any excess emission per 20.2.7.110 NMAC. All Title V major sources are subject to Air Quality Control Regulations, as defined in 20.2.7 NMAC, and are thus subject to the requirements of this regulation.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	Blanco Compressor Station A does not have existing gas burning equipment with a heat input of greater than 1,000,000 million British Thermal Units per year per unit. The facility is not subject to this regulation and does not have emission sources that meet the applicability requirements under 20.2.33.108 NMAC.
20.2.34 NMAC	Oil Burning Equipment: NO ₂	No	N/A	This facility does not have oil burning equipment with a heat input of greater than 1,000,000 million British Thermal Units per year per unit. The facility is not subject to this regulation and does not have emission sources that meet the applicability requirements under 20.2.34.108 NMAC.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	N/A	This regulation establishes sulfur emission standards for natural gas processing plants. The facility is not a “natural gas processing plant” as defined in 20.2.35.7 NMAC. The facility is not subject to this regulation.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	No	N/A	The purpose of this regulation is to minimize emissions from petroleum or natural gas processing facilities. Blanco Compressor Station A is not a “petroleum processing facility” as defined in the 20.2.37.7 NMAC.
<u>20.2.38</u> NMAC	Hydrocarbon Storage Facility	No	N/A	Blanco A Compressor Station is not a petroleum processing or production facility and does not have a tank battery as defined in 20.2.38.7 NMAC. This regulation is not applicable.
<u>20.2.39</u> NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	This regulation establishes sulfur emission standards for sulfur recovery plants which are not part of petroleum or natural gas processing facilities. This regulation does not apply to the facility because Blanco A does not have a sulfur recovery plant.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	A-01 through A-14	This regulation establishes controls on smoke and visible emissions from certain sources, including stationary combustion equipment. The facility's engines (A-01 through A-14) are stationary combustion equipment and comply with this regulation by the sole use of pipeline quality natural gas as fuel.
20.2.70 NMAC	Operating Permits	Yes	Facility	This regulation establishes requirements for obtaining an operating permit. The source is major for NO _x , CO, Formaldehyde, and Total HAPs.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This regulation establishes a schedule of operating permit emission fees. This facility is subject to 20.2.70 NMAC and is in turn subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	Yes	Facility	This regulation establishes the requirements for obtaining a construction permit. The facility is a stationary source that has potential emission rates greater than 10 pounds per hour and 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Air Quality Standard. This regulation applies and this facility complies with NSR Permit number 613-M10R1.

<u>STATE REGU- LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	This regulation establishes emission inventory requirements. The facility meets the applicability requirements of 20.2.73.300 NMAC. The facility will meet all applicable reporting requirements under 20.2.73.300.B.1 NMAC.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	Facility	This regulation establishes requirements for obtaining a prevention of significant deterioration permit. The facility is an existing PSD major source for NO _x . The facility has not undergone a major modification and therefore does not currently require a PSD permit.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This regulation establishes a schedule of operating permit emission fees. The facility is subject to 20.2.72 NMAC and is therefore subject to requirements of this regulation.
20.2.77 NMAC	New Source Performance	No	Units subject to 40 CFR 60	This regulation establishes state authority to implement new source performance standards (NSPS) for stationary sources. This regulation is not applicable as there are no NSPS-affected sources at the facility.
20.2.78 NMAC	Emission Standards for HAPS	No	Units Subject to 40 CFR 61	This regulation establishes state authority to implement emission standards for hazardous air pollutants subject to 40 CFR Part 61. This facility could emit hazardous air pollutants which are subject to the requirements of 40 CFR Part 61, as amended through January 15, 2017. In the case of asbestos demolition, one NESHAP would apply.
20.2.79 NMAC	Permits – Nonattainment Areas	No	Facility	This regulation establishes the requirements for obtaining a nonattainment area permit. The facility is not located in a non-attainment area and therefore is not subject to this regulation
20.2.80 NMAC	Stack Heights	No	Facility	This regulation does not apply as the source was in existence prior to December 31, 1970. [20.2.80.110.A]
20.2.82 NMAC	MACT Standards for source categories of HAPS	No	Units Subject to 40 CFR 63	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63. This regulation is not applicable as there are no MACT-affected sources at the facility.

Table for Applicable FEDERAL REGULATIONS:

<u>FEDERAL REGU- LATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	This regulation defines national ambient air quality standards. The facility meets all applicable national ambient air quality standards for NO _x , CO, SO ₂ , H ₂ S, PM ₁₀ , and PM _{2.5} under this regulation.
NSPS 40 CFR 60, Subpart A	General Provisions	No	Units subject to 40 CFR 60	This regulation defines general provisions for relevant standards that have been set under this part. No NSPS subparts apply therefore this regulation does not apply.
NSPS 40 CFR 60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No	N/A	This regulation establishes standards of performance for electric utility steam generating units. This regulation does not apply because the facility does not operate any electric utility steam generating units.

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR 60.40b Subpart Db	Electric Utility Steam Generating Units	No	N/A	This regulation establishes standards of performance for industrial-commercial-institutional steam generating units. This regulation does not apply because the facility does not operate any industrial-commercial-institutional steam-generating unit.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No	N/A	This regulation establishes standards of performance for small industrial-commercial-institutional steam generating units. This regulation does not apply because the facility does not operate any industrial-commercial-institutional steam generating units.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No	N/A	This regulation establishes performance standards for storage vessels for petroleum liquids with a storage capacity greater than 40,000 gallons for which construction, reconstruction, or modification commenced after May 18, 1978, and prior to July 23, 1984. The capacities of the tanks at the facility are less than 40,000 gallons and are not subject to this regulation. [60.110a(a)]
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No	N/A	This regulation establishes performance standards for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984. This facility does not have storage vessels with a capacity greater than or equal to 75 cubic meters (m³) that are used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification commenced after July 23, 1984. Blanco A is not subject to this regulation. [60.110b(a)]
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No	N/A	This subpart establishes emission standards and monitoring requirements for the control of emissions from stationary combustion turbines that commenced construction, modification, or reconstruction after October 3, 1977. This facility does not contain any stationary gas turbines; therefore, this regulation does not apply.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	No	N/A	This regulation defines standards of performance for equipment leaks of VOC emissions from onshore natural gas processing plants for which construction, reconstruction, or modification commenced after January 20, 1984, and on or before August 23, 2011. This facility is not a natural gas processing plant; therefore, this regulation does not apply.

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing : SO ₂ Emissions	No	N/A	This regulation establishes standards of performance for SO ₂ emissions from onshore natural gas processing for which construction, reconstruction, or modification of the amine sweetening unit commenced after January 20, 1984 and on or before August 23, 2011. This regulation does not apply as the facility is not a natural gas processing plant.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No	N/A	All equipment at the facility was installed prior to August 23, 2011; therefore, no units are subject to this regulation.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	No	N/A	The facility was constructed prior to the applicability date of the regulation and all equipment at the facility was installed prior to September 18, 2015; therefore, no units are subject to this regulation.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	This regulation establishes standards of performance for stationary compression ignition internal combustion engines. The facility does not contain any stationary compression ignition internal combustion engines; therefore, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No	N/A	This regulation establishes standards of performance for stationary spark ignition combustion engines. This regulation is not applicable as all RICE at Blanco Compressor Station A were constructed prior to June 12, 2006, the applicability date of this regulation.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	This regulation establishes standards of performance for greenhouse gas emissions for electric generating units. This regulation is not applicable because the facility does not contain any electric generating units.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	This regulation establishes standards of performance for greenhouse gas emissions and compliance times for electric utility generating units. This regulation is not applicable because the facility does not contain any electric generating units.

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	This regulation establishes standards of performance for municipal solid waste landfills. This regulation is not applicable because the facility is not a landfill.
NESHAP 40 CFR 61 Subpart A	General Provisions	No (potentially)	N/A (potentially)	NSPS 40 CFR 61 does not apply to the facility because the facility does not emit or have the triggering substances on site and/or the facility is not involved in the triggering activity. The facility is not subject to this regulation. None of the subparts of Part 61 apply to the facility.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for Mercury	No	N/A	This regulation establishes a national emission standard for mercury. The facility does not have stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, or incinerate or dry wastewater treatment plant sludge [40 CFR Part 61.50]. The facility is not subject to this regulation.
NESHAP 40 CFR 61 Subpart M	National Emission Standards for Asbestos	N/A (potentially)	N/A (potentially)	Although this standard does not apply to this facility under routine operating conditions, in the case of asbestos demolition, Subpart M would apply.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No	N/A	This regulation establishes national emission standards for equipment leaks (fugitive emission sources). The facility does not have equipment that operates in volatile hazardous air pollutant (VHAP) service [40 CFR Part 61.240]. The regulated activities subject to this regulation do not take place at this facility. The facility is not subject to this regulation.
MACT 40 CFR 63, Subpart A	General Provisions	No	Units Subject to 40 CFR 63	This regulation defines general provisions for relevant standards that have been set under this part. Subpart ZZZZ does not apply to RICE units A-01 to A-14 because the engines are existing lean burn engines that were installed at a major source of HAPs prior to December 19, 2002 in accordance with 40 CFR 63.6590(a)(1)(i)
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	No	N/A	This regulation establishes national emission standards for hazardous air pollutants from oil and natural gas production facilities. This facility does not have any affected sources as specified under this subpart and is therefore not subject to the requirements of this subpart. [63.760(d)]
MACT 40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities	No	N/A	This regulation establishes national emission standards for hazardous air pollutants from natural gas transmission and storage facilities. This facility does not have an affected source listed under 63.1270(b) and is therefore not subject to the requirements of this subpart. [63.1270(c)]
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	N/A	This regulation establishes the national emission standards for hazardous air pollutant for major industrial, commercial, and institutional boilers & process heaters. The facility does not have a commercial and institutional boiler or process heater; therefore, this regulation does not apply.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	This regulation establishes the national emission standards for hazardous air pollutants coal and oil fire electric utility steam generating units. This regulation does not apply because the facility does not have steam-generating units.

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	No	A-01 through A-14	Per 40 CFR 63.6590(a)(1)(i), the engines are existing stationary RICE as they were installed at a major source of HAPs prior to December 19, 2002. Per 40 CFR 63.6590(b)(3), existing lean burn stationary RICE at a major HAP source are not subject to the requirements of 40 CFR 63, Subparts A and ZZZZ.
40 CFR 64	Compliance Assurance Monitoring	N/A	No	This regulation defines compliance assurance monitoring. This facility has no units meeting the criteria of this part; specifically no emission units are controlled major sources. Although Blanco Compressor Station A is a Title V major source with a part 70 permit, none of the units at this facility use a control device (as defined by the CAM rule) to achieve compliance with emission limits.
40 CFR 68	Chemical Accident Prevention	N/A	No	Facility is regulated under DOT Office of Pipeline Safety Regulations (49 CFR 192, 193 and 195); therefore, it is not subject to this regulation. This regulation arises from section 112(r) of the Clean Air Act and establishes thresholds based on inventoried quantities of specific substances in process. As established at 40 CFR 68.3, the term “stationary source” does not apply to the transportation of any regulated substance or any other extremely hazardous substance under the provisions of this part, provided that such transportation is regulated under 49 CFR parts 192, 193, or 195 (DOT Office of Pipeline Safety Regulations).
Title IV – Acid Rain 40 CFR 72	Acid Rain	No	N/A	This part establishes the acid rain program. This part does not apply because the facility is not covered by this regulation. [40 CFR Part 72.6]
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No	N/A	This regulation establishes sulfur dioxide allowance emissions for certain types of facilities. This part does not apply because the facility is not the type covered by this regulation [40 CFR Part 73.2].
Title IV- Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No	N/A	This facility does not generate commercial electric power or electric power for sale, therefore this regulation does not apply
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No	N/A	This regulation establishes an acid rain nitrogen oxides emission reduction program. This regulation applies to each coal-fired utility unit that is subject to an acid rain emissions limitation or reduction requirement for SO ₂ . This part does not apply because the facility does not operate any coal-fired units [40 CFR Part 76.1].
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No	N/A	EPNG owns appliances containing CFCs and is therefore subject to this requirement. However, this requirement imposes no obligations on the facility beyond those imposed on any individual or corporate owner of such appliances, and is mentioned here only in the interest of being thorough. EPNG uses only certified technicians for the maintenance, service, repair and disposal of appliances and maintains the appropriate records for this requirement.
CAA Section 112(r)	Hazardous Air Pollutants Prevention of Accidental Releases	No	N/A	As established at 40 CFR 68.3, the term “stationary source” does not apply to the transportation of any regulated substance or any other extremely hazardous substance under the provisions of this part, provided that such transportation is regulated under 49 CFR parts 192, 193, or 195 (DOT Office of Pipeline Safety Regulations).

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

- ☒ **Title V Sources** (20.2.70 NMAC): By checking this box and certifying this application the permittee certifies that it has developed an Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- ☐ **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- ☒ **Title V** (20.2.70 NMAC), **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.
-

EPNG maintains the required planning and excess emission mitigation documents at Blanco Compressor Station A.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

Construction Scenarios: When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: https://www.env.nm.gov/aqb/permit/aqb_pol.html. Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title “Construction Scenarios”, specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc.

The term “alternative operating scenario” is not defined by regulation. EPNG understands this term to apply to one or more sources that may routinely operate with alternative fuels or raw materials and/or on a significantly different schedule that may potentially affect emissions. Based on this understanding, Blanco A does not have any alternative operating scenarios.

Units at the facility may be shut down from time to time due to factors including but not limited to market demand, maintenance, malfunctions, and emergency shutdowns. Operating in alternative modes and temporary shutdowns are not alternative operating scenarios as EPNG understands the term.

Section 16

Air Dispersion Modeling

- 1) Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
- 2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions modeling requirements.
- 3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC). See #1 above. Note: Neither modeling nor a modeling waiver is required for VOC emissions.	
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 above.	X
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling Guidelines.	

Check each box that applies:

- ☐ See attached, approved modeling **waiver for all** pollutants from the facility.
- ☐ See attached, approved modeling **waiver for some** pollutants from the facility.
- ☐ Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.
- ☐ Attached in UA4 is a **modeling report for some** pollutants from the facility.
- ☒ No modeling is required.

Dispersion modeling is not required as part of this Title V operating permit renewal application. A modeled demonstration of compliance with National Ambient Air Quality Standards (NAAQS) and New Mexico Ambient Air Quality Standards (NMAAQs) was submitted with the application for NSR Permit 613-M5, and the permit was issued on the basis of that demonstration.

Section 17

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

Unit No.	Test Description	Test Date
A-01	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	3/28/17; 579 hours in 2018 (not tested)
A-02	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	14.75 hours in 2017 (not tested); 4.25 hours in 2018 (not tested)
A-03	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	3/28/2017; 4/3/2018
A-04	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	2.5 hours in 2017 (not tested); 2 hours in 2018 (not tested)
A-05	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	5 hours in 2017 (not tested); 9.5 hours in 2018 (not tested)
A-06	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	3/29/2017; 4/3/2018
A-07	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	3/29/2017; 4/3/2018
A-08	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	1.25 hours in 2017 (not tested); 1.75 hours in 2018 (not tested)
A-09	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	183.5 hours in 2017 (not tested); 866.5 hours in 2018 (not tested)
A-10	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	1.75 hours in 2017 (not tested); 6.5 hours in 2018 (not tested)
A-11	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	3/30/2017; 4/3/2018
A-12	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	2.25 hours in 2017 (not tested); 4/3/2018
A-13	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	5/31/2017; 10/23/2018
A-14	Testing in accordance with the Conditions of A314 in Permit P048-R3 (unless Condition B108D is met).	1.25 hours in 2017 (not tested); tested 4/3/2018

Section 19

Requirements for Title V Program

Do not print this section unless this is a Title V application.

Who Must Use this Attachment:

- * Any major source as defined in 20.2.70 NMAC.
 - * Any source, including an area source, subject to a standard or other requirement promulgated under Section 111 - Standards of Performance for New Stationary Sources, or Section 112 Hazardous Air Pollutants, of the 1990 federal Clean Air Act ("federal Act"). Non-major sources subject to Sections 111 or 112 of the federal Act are exempt from the obligation to obtain an 20.2.70 NMAC operating permit until such time that the EPA Administrator completes rulemakings that require such sources to obtain operating permits. In addition, sources that would be required to obtain an operating permit solely because they are subject to regulations or requirements under Section 112(r) of the federal Act are exempt from the requirement to obtain an Operating Permit.
 - * Any Acid Rain source as defined under title IV of the federal Act. The Acid Rain program has additional forms. See <http://www.env.nm.gov/aqb/index.html>. Sources that are subject to both the Title V and Acid Rain regulations are encouraged to submit both applications simultaneously.
 - * Any source in a source category designated by the EPA Administrator ("Administrator"), in whole or in part, by regulation, after notice and comment.
-

Blanco Compressor Station A is a major source as defined in 20.2.70 NMAC.

19.1 - 40 CFR 64, Compliance Assurance Monitoring (CAM) (20.2.70.300.D.10.e NMAC)

Any source subject to 40CFR, Part 64 (Compliance Assurance Monitoring) must submit all the information required by section 64.7 with the operating permit application. The applicant must prepare a separate section of the application package for this purpose; if the information is already listed elsewhere in the application package, make reference to that location. Facilities not subject to Part 64 are invited to submit periodic monitoring protocols with the application to help the AQB to comply with 20.2.70 NMAC. Sources subject to 40 CFR Part 64, must submit a statement indicating your source's compliance status with any enhanced monitoring and compliance certification requirements of the federal Act.

Based on information and belief formed after reasonable inquiry, EPNG states that the facility does not meet the applicability requirements of 40 CFR 64.2. Specifically, no sources at the facility are controlled major sources of regulated pollutants, and enhanced monitoring requirements are not applicable to this facility at this time. EPNG will submit the necessary statement should the facility or requirements change such that this requirement becomes applicable.

19.2 - Compliance Status (20.2.70.300.D.10.a & 10.b NMAC)

Describe the facility's compliance status with each applicable requirement at the time this permit application is submitted. This statement should include descriptions of or references to all methods used for determining compliance. This statement should include descriptions of monitoring, recordkeeping and reporting requirements and test methods used to determine compliance with all applicable requirements. Refer to Section 2, Tables 2-N and 2-O of the Application Form as necessary. (20.2.70.300.D.11 NMAC) For facilities with existing Title V permits, refer to most recent Compliance Certification for existing requirements. Address new requirements such as CAM, here, including steps being taken to achieve compliance.

As described here and based on information and belief formed after reasonable inquiry, EPNG believes that Blanco Compressor Station A is in compliance with each applicable requirement identified in Section 19.2 and as discussed here. In the event that EPNG should discover new information affecting the compliance status of the facility, EPNG will make appropriate notifications and/or take corrective actions.

Pursuant to Condition 6.1 of Permit P048-R3, EPNG has certified to compliance with the terms and conditions of that permit. The most recent such certification was submitted by the January 30th deadline. Since that time, EPNG has continued to be in compliance with applicable requirements.

19.3 - Continued Compliance (20.2.70.300.D.10.c NMAC)

Provide a statement that your facility will continue to be in compliance with requirements for which it is in compliance at the time of permit application. This statement must also include a commitment to comply with other applicable requirements as they come into effect during the permit term. This compliance must occur in a timely manner or be consistent with such schedule expressly required by the applicable requirement.

As described Section 19.2 and based on information and belief formed after reasonable inquiry, EPNG states that Blanco Compressor Station A will continue to be operated in compliance with applicable requirements for which it is in compliance as of the date of submittal of this application.

In addition, EPNG will meet additional applicable requirements that become effective during the permit term in a timely manner or on such a time schedule as expressly required by the applicable requirement. In the event that EPNG should discover new information affecting the compliance status of the facility, EPNG will make appropriate notifications and/or take corrective actions as appropriate.

19.4 - Schedule for Submission of Compliance (20.2.70.300.D.10.d NMAC)

You must provide a proposed schedule for submission to the department of compliance certifications during the permit term. This certification must be submitted annually unless the applicable requirement or the department specifies a more frequent period. A sample form for these certifications will be attached to the permit.

Condition A308 of Operating Permit P048-R3 specifies that EPNG must submit compliance certification reports to the New Mexico Environment Department (NMED) Air Quality Bureau (AQB) and to the EPA by no later than January 30th of each year.

19.5 - Stratospheric Ozone and Climate Protection

In addition to completing the four (4) questions below, you must submit a statement indicating your source's compliance status with requirements of Title VI, Section 608 (National Recycling and Emissions Reduction Program) and Section 609 (Servicing of Motor Vehicle Air Conditioners).

1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances? ☒ **Yes** ☐ **No**
2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs? ☐ **Yes** ☒ **No**
(If the answer is yes, describe the type of equipment and how many units are at the facility.)
3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82. 152)? ☐ **Yes** ☒ **No**
4. Cite and describe which Title VI requirements are applicable to your facility (i.e. 40 CFR Part 82, Subpart A through G.)

Based on information and belief formed after reasonable inquiry, El Paso Natural Gas Company states that Title VI, Section 608 (National Recycling and Emissions Reduction Program) of the Clean Air Act may apply to this facility, as EPNG may own CFC-containing refrigeration equipment meeting the criteria of this Section, specifically, 40 CFR 82, Subpart F, which applies to owners of CFC-containing appliances (40 CFR 82.150 (b) and 40 CFR 82.152). EPNG may own appliances affected by this subpart, and abides by this regulation. EPNG is in compliance with the requirements of this Section.

EPNG does not service motor vehicle air conditioners at this facility and therefore Section 609 does not apply.

Blanco Compressor Station A will continue to be operated in compliance with the requirements of Title VI, Section 608 of the Clean Air Act as they apply to this facility.

19.6 - Compliance Plan and Schedule

Applications for sources, which are not in compliance with all applicable requirements at the time the permit application is submitted to the department, must include a proposed compliance plan as part of the permit application package. This plan shall include the information requested below:

A. Description of Compliance Status: (20.2.70.300.D.11.a NMAC)

A narrative description of your facility's compliance status with respect to all applicable requirements (as defined in 20.2.70 NMAC) at the time this permit application is submitted to the department.

B. Compliance plan: (20.2.70.300.D.11.B NMAC)

A narrative description of the means by which your facility will achieve compliance with applicable requirements with which it is not in compliance at the time you submit your permit application package.

C. Compliance schedule: (20.2.70.300D.11.c NMAC)

A schedule of remedial measures that you plan to take, including an enforceable sequence of actions with milestones, which will lead to compliance with all applicable requirements for your source. This schedule of compliance must be at least as stringent as that contained in any consent decree or administrative order to which your source is subject. The obligations of any consent decree or administrative order are not in any way diminished by the schedule of compliance.

D. Schedule of Certified Progress Reports: (20.2.70.300.D.11.d NMAC)

A proposed schedule for submission to the department of certified progress reports must also be included in the compliance schedule. The proposed schedule must call for these reports to be submitted at least every six (6) months.

E. Acid Rain Sources: (20.2.70.300.D.11.e NMAC)

If your source is an acid rain source as defined by EPA, the following applies to you. For the portion of your acid rain source subject to the acid rain provisions of title IV of the federal Act, the compliance plan must also include any additional requirements under the acid rain provisions of title IV of the federal Act. Some requirements of title IV regarding the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations may supersede the requirements of title V and 20.2.70 NMAC. You will need to consult with the Air Quality Bureau permitting staff concerning how to properly meet this requirement.

NOTE: The Acid Rain program has additional forms. See <http://www.env.nm.gov/aqb/index.html>. Sources that are subject to both the Title V and Acid Rain regulations are **encouraged** to submit both applications **simultaneously**.

Based on information and belief formed after reasonable inquiry and as described in Section 19.2, and with this filing, EPNG states that Blanco A is in compliance with applicable requirements. No compliance plan, compliance schedule, or compliance reports are required.

19.7 - 112(r) Risk Management Plan (RMP)

Any major sources subject to section 112(r) of the Clean Air Act must list all substances that cause the source to be subject to section 112(r) in the application. The permittee must state when the RMP was submitted to and approved by EPA.

Based on information and belief formed after reasonable inquiry, El Paso Natural Gas Company states that Blanco Compressor Station A is not subject to 40 CFR 68, Chemical Accident Prevention Provisions.

As per 40 CFR 68.3 (definitions), the term “stationary source” does not apply to transportation of any regulated substance or any other extremely hazardous substance under the provisions of this part, provided that such transportation is regulated under 49 CFR parts 192, 193 or 195 (DOT Office of Pipeline Safety Regulations).

EPNG’s Blanco Compressor Station A is regulated under DOT Office of Pipeline Safety Regulations (49 CFR 192, 193 and 195). Therefore, it is not subject to 112(r).

19.8 - Distance to Other States, Bernalillo, Indian Tribes and Pueblos

Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B NMAC)?

(If the answer is yes, state which apply and provide the distances.)

Mesa Verde National Park (39 miles); Navajo Nation (15 miles); Jicarilla Apache Reservation (35 miles); Colorado (20 miles)

19.9 - Responsible Official

Provide the Responsible Official as defined in 20.2.70.7.AD NMAC:

- Responsible Official: Donald W. Perkins
 - o Title: Director, Operations
 - o Email: Don_Perkins@kindermorgan.com
 - o Phone: 970-208-1268
 - o Address: 2527 Foresight Circle, Grand Junction, CO 81505
- Alternative Responsible Official: Joe McLaughlin
 - o Title: Vice President, Operations
 - o Phone: 713-369-9847
 - o Email: Joe_McLaughlin@kindermorgan.com
 - o Address: 1001 Louisiana St., Suite 1000, Houston, TX, 77022

Section 20

Other Relevant Information

Other relevant information. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

EPNG would like to identify the North American Energy Standards Board (NAESB) Gas Day as the basis for records tracking at Blanco Compressor Station A and other facilities.

The United States uses six different standardized time zones from east to west; the energy industry uses a seventh time zone developed by the NAESB. This Board serves as an industry platform for the development and promotion of industry practices and standards that lead to the seamless marketing of wholesale and retail natural gas and electricity. Since 2003, the NAESB Gas Day has been recognized by its customers, the business community, participants, and federal and state regulatory entities. As such, a NAESB Gas Day is a 24-hour period derived from a uniform time zone that occurs simultaneously nationwide and is the basis of EPNG's COMET data acquisition system "day" data. Unit information defined and stored according to the NAESB Gas Day includes monitored gas flows or volumes, hours of operation, maintenance and repair activities, and routine emissions.

Data obtained from outside agencies (including test reports and summaries) or submitted pursuant to 20.2.7 NMAC reporting requirements is based on the "day" as defined by the local time zone.

Section 22: Certification

Company Name: El Paso Natural Gas Company, L.L.C.

I, Donald W. Perkins, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this 12 day of February, 2019, upon my oath or affirmation, before a notary of the State of

Utah

[Signature]
*Signature

2/12/19
Date

Donald W. Perkins
Printed Name

Director, Operations
Title

Scribed and sworn before me on this 12 day of February, 2019.

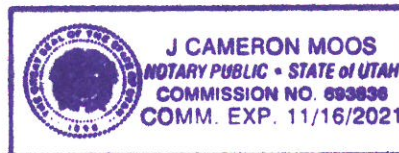
My authorization as a notary of the State of Utah expires on the

16 day of November, 2021.

J. Cameron Moos
Notary's Signature

2/12/19
Date

J. Cameron Moos
Notary's Printed Name



*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.

ATTACHMENT R



MICHELLE LUJAN GRISHAM
GOVERNOR

HOWIE C. MORALES
LT. GOVERNOR

New Mexico
ENVIRONMENT DEPARTMENT

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JAMES C. KENNEY
CABINET SECRETARY

JENNIFER J. PRUETT
DEPUTY SECRETARY

Air Quality Bureau
TITLE V OPERATING PERMIT
Issued under 20.2.70 NMAC

Operating Permit No:	P048-R4
Facility Name:	Blanco Compressor Station A
Permittee Name:	El Paso Natural Gas Company, L.L.C.
Mailing Address:	2 North Nevada Avenue Colorado Springs, CO 80903
TEMPO/IDEA ID No:	1147 - PRT20190001
AIRS No:	350450008
Permitting Action:	Permit Renewal
Source Classification:	Major-TV and Major PSD w/ no BACT
Facility Location:	235,600 m E by 4,069,000 m N, Zone 13; Datum WGS84
County:	San Juan
Air Quality Bureau Contact Main AQB Phone No.	Joseph Kimbrell (505) 476-4300
TV Permit Expiration Date:	<u>September 18, 2025</u>
TV Renewal Application Due:	<u>September 18, 2024</u>
_____ Liz Bisbey-Kuehn Bureau Chief Air Quality Bureau	<u>September 18, 2020</u> Date

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PART A FACILITY SPECIFIC REQUIREMENTS**A100 Introduction**

- A. Title V Permit P048-R4 is El Paso Natural Gas Company Blanco A Compressor Station's portion of NSR 0613-M12 which represents a combined Air Quality Permits for Harvest Pipeline Company LLC-San Juan Gas Plant (Section A200), El Paso Natural Gas – Blanco A Compressor Station (Section A300) and Enterprise Field Services, L.L.C. – Blanco C&D Compressor Station (Section A400).
- B. The Department with US EPA Region VI agreement (see letter dated October 19, 1984) established "common control" between the Companies owning these facilities at the time through the issuance of Permit 0613 on May 6, 1985. The purpose of requiring common control was to ensure that the contemporaneous decrease in emissions will be permanent and the permit holders are responsible for decreases as well as increases in emissions. The permittees mutually agreed to maintain the emission offsets between Harvest Pipeline Company LLC-San Juan Gas Plant and the El Paso Natural Gas – Blanco Compressor Station.
- C. The NSR 0613 was issued jointly to the three companies because Conoco (now Harvest Pipeline Company LLC), in 1985, relied on reductions in emissions from the adjacent EPNG Blanco Compressor Station to net out of the federal Prevention of Significant Deterioration (PSD) program for the newly constructed San Juan Gas Plant. In order for Harvest Pipeline Company LLC to take credit for the emissions reductions at the El Paso Natural Gas (EPNG) Blanco station, common control of both plants had to be established. Therefore, any separation of this permit into independent permits for the three permittees will require an examination of the PSD implications of such a separation. In a letter dated March 19, 2001 the Bureau was informed that "Train N" (plant "A") of the Blanco Compressor Station continues to be owned by EPNG but "Trains C and D" (plants "C" and "D") of the Blanco Compressor Station were owned by El Paso Field Services. Ownership of Blanco C&D Compressor Station was transferred to Enterprise Field Services, L.L.C. and Enterprise Products Operating, L.L.C. on December 7, 2004.

A101 Permit Duration (expiration)

- A. The term of this permit is five (5) years. It will expire five years from the date of issuance. Application for renewal of this permit is due twelve (12) months prior to the date of expiration. (20.2.70.300.B.2 and 302.B NMAC)
- B. If a timely and complete application for a permit renewal is submitted, consistent with 20.2.70.300 NMAC, but the Department has failed to issue or disapprove the renewal

permit before the end of the term of the previous permit, then the permit shall not expire and all the terms and conditions of the permit shall remain in effect until the renewal permit has been issued or disapproved. (20.2.70.400.D NMAC)

A102 Facility: Description

- A. The Blanco Compressor Station A is a natural gas compressor station that compresses natural gas for the purpose of transportation to another facility or a major transportation pipeline.
- B. This facility is located approximately 1.5 km NE of Bloomfield in San Juan County, NM. (20.2.70.302.A(7) NMAC)
- C. This renewal consists of no physical changes, no changes in emissions, and renewal of Title V Operating permit. The description of this modification is for informational purposes only and is not enforceable.

HARVEST PIPELINE COMPANY LLC – SAN JUAN GAS PLANT

A200 Harvest Pipeline Company LLC – San Juan Gas Plant - Reserved

EL PASO NATURAL GAS - BLANCO COMPRESSOR STATION A

A300 El Paso Natural Gas - Blanco Compressor Station A

- A. Introduction

A301 Total Potential to Emit (PTE) from Entire Facility

- A. Table 301.A and Table 301.B show the total potential to emit (PTE) from this facility for information only, not an enforceable condition, excluding exempt sources or activities.

Table 301.A: Total Potential to Emit (PTE) from Entire Facility

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NO _x)	1344.00
Carbon Monoxide (CO)	173.6
Volatile Organic Compounds (VOC) ¹	64.6
Sulfur Dioxide (SO ₂)	0.3
Particulate Matter (PM) ²	28.1

Pollutant	Emissions (tons per year)
Particulate Matter less than 10 microns (PM ₁₀)	28.1
Particulate Matter less than 2.5 microns (PM _{2.5})	28.1
Hydrogen Sulfide (H ₂ S)	0.82 pph
Greenhouse Gas (GHG- CO ₂ e)	79,302.1

1 VOC total includes emissions from HAPs, Fugitives, SSM and Malfunctions

2 PM is a regulated new source review pollutant per 20.2.74 NMAC Prevention of Significant Deterioration and 20.2.70 NMAC, Title V. No ambient air quality standards apply to TSP or PM.

Table 301.B: Total Potential to Emit (PTE) for *Hazardous Air Pollutants (HAPs) that exceed 1.0 tons per year

Pollutant	Emissions (tons per year)
Acrolein	3.8
Formaldehyde	19.5
Acetaldehyde; (Ethyl aldehyde)	3.8
Total HAPS**	31.8

* HAP emissions are already included in the VOC emission total.

** The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 tons per year are listed here.

A302 Facility: Applicable Regulations and Non-Applicable Regulations

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 302.A.

Table 302.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
NSR Permit No: 0613-M8, M8R1, M8R2, M9 (Per 20.2.72 NMAC)	X	Entire Facility
20.2.1 NMAC General Provisions	X	Entire Facility
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.61 NMAC Control of Smoke and Visible Emissions	X	A01 to A14
20.2.70 NMAC Operating Permits	X	Entire Facility
20.2.71 NMAC Operating Permit Emission Fees	X	Entire Facility
20.2.72 NMAC Construction Permit	X	Entire Facility
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	Entire Facility
20.2.74 NMAC Permits – Prevention of Significant Deterioration (PSD)	X	Entire Facility
40 CFR 50 National Ambient Air Quality Standards	X	Entire Facility

- B. Table 302.B lists requirements that are **not** applicable to this facility. This table only includes those requirements cited in the application as applicable and determined by the Department to be not applicable, or the Department determined that the requirement does not impose any conditions on a regulated piece of equipment.

Table 302.B: Non-Applicable Requirements

Non-Applicable Requirements	(1)	(2)	Justification For Non-Applicability
20.2.3 NMAC Ambient Air Quality Standards	X		
40 CFR 63, Subpart ZZZZ		X	Units A-01 to A-14 existed prior to 12/19/2002 thus are not subject to the requirements of 40 CFR 63, Subparts A and ZZZZ.

1. Not Applicable For This Facility: No existing or planned operation/activity at this facility triggers the applicability of these requirements.
2. No Requirements: Although these regulations may apply, they do not impose any specific requirements on the operation of the facility as described in this permit.

- C. Compliance with the terms and conditions of this permit regarding source emissions and operation demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for the facility's NSR Permit 0613-M4 (SO₂), M5 (NO_x), M6 (CO) and M9 (H₂S).

A303 Facility: Regulated Sources

- A. Table 303.A lists the emission units authorized for this facility. Emission units identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and/or equipment not regulated pursuant to the Act are not included.

Table 303.A: Regulated Sources List

Unit No.	Source Description	Make Model	Capacity	Serial No.	Construction Date
A01	NG Reci. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43051	8/1/1953
A02	NG Reci. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43050	8/1/1953
A03	NG Reci. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43052	8/1/1953
A04	NG Reci. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43058	8/1/1953
A05	NG Reci. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43054	8/1/1953
A06	NG Reci. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43057	8/1/1953

Unit No.	Source Description	Make Model	Capacity	Serial No.	Construction Date
A07	NG Rec. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43053	8/1/1953
A08	NG Rec. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43055	8/1/1953
A09	NG Rec. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43056	8/1/1953
A10	NG Rec. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43400	8/1/1953
A11	NG Rec. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43999	8/1/1953
A12	NG Rec. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43998	8/1/1953
A13	NG Rec. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	43397	8/1/1953
A14	NG Rec. Engine*	Cooper Bessemer , GMV10 - TF	943 HP	42008	8/1/1953

* NA means Not Available; NG means Natural gas fueled.

1 Units are exempt under 20.2.72 NMAC but are applicable to MACT for notification purposes only. These units will not have emission limits or specific conditions added to the MACT requirements.

A304 Facility: Control Equipment

A. The facility has no pollution control equipment.

A305 Facility: Allowable Emissions

A. The following Section lists the emission units, and their allowable emission limits. (40CFR50, Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC and NSR Permit 0613-M8, M8R1, M8R2, and M9).

Table 305.A: Allowable Emissions

Unit No.	¹ NO _x pph	NO _x tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO ₂ pph	SO ₂ tpy
A01	21.9	95.97	2.83	12.4	<	3.88	<	<
A02	21.9	95.97	2.83	12.4	<	3.88	<	<
A03	21.9	95.97	2.83	12.4	<	3.88	<	<
A04	21.9	95.97	2.83	12.4	<	3.88	<	<
A05	21.9	95.97	2.83	12.4	<	3.88	<	<
A06	21.9	95.97	2.83	12.4	<	3.88	<	<

Unit No.	¹ NO _x pph	NO _x tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO ₂ pph	SO ₂ tpy
A07	21.9	95.97	2.83	12.4	<	3.88	<	<
A08	21.9	95.97	2.83	12.4	<	3.88	<	<
A09	21.9	95.97	2.83	12.4	<	3.88	<	<
A10	21.9	95.97	2.83	12.4	<	3.88	<	<
A11	21.9	95.97	2.83	12.4	<	3.88	<	<
A12	21.9	95.97	2.83	12.4	<	3.88	<	<
A13	21.9	95.97	2.83	12.4	<	3.88	<	<
A14	21.9	95.97	2.83	12.4	<	3.88	<	<

- 1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂.
 - 2 Title V annual fee assessments are based on the sum of allowable tons per year emission limits in Sections A305 and A306.
 - 3 To report excess emissions for sources with no pound per hour and/or ton per year emission limits, see condition B110.E.
- “<” indicates that the application represented the uncontrolled mass emission rates are less than 1.0 pph or 1.0 tpy for this emissions unit and this air pollutant. The Department determined that allowable mass emission limits were not required for this unit and this pollutant.

A306 Facility: Allowable Startup, Shutdown, & Maintenance (SSM)

- A. The maximum allowable SSM and Malfunction emission limits for this Facility are listed in Table 306.A and were relied upon by the Department to determine compliance with applicable regulations.

Table 306.A: Allowable SSM and Malfunction Units, Activities, and Emission Limits

Unit No.	Description	VOC (tpy)	H ₂ S (pph)	H ₂ S (tpy)
SSM/M	¹ Venting of Gas Due to SSM and Malfunction	10	0.82	<

1. This authorization does not include VOC combustion emissions.
- “<” indicates the application represented that uncontrolled venting, blowdown, or pigging emissions of H₂S are less than 0.1 pph or 0.44 tpy. Allowable limits, monitoring, and recordkeeping are not required on this level of H₂S venting, blowdown, or pigging emissions.

- B. The authorization of emission limits for startup, shutdown, maintenance, and malfunction does not supersede the requirements to minimize emissions according to General Conditions B101.C and B107.A.

C. Combined SSM and Malfunction Emissions (VOCs & H₂S >0.1 pph)**Requirement:****(1) Compliance Method**

The permittee shall meet the following requirements to demonstrate compliance with the allowable emission limits in Table 306.A for routine or predictable startup, shutdown, and maintenance (SSM); and/or malfunctions (M) herein referred to as SSM/M.

- (a) Limit the H₂S content of the vented gas to 0.25 grains per 100 standard cubic feet (gr/100 scf) of gas vented.
- (b) Perform a facility inlet gas analysis once every year that measures the VOC and H₂S content of the vented gas
- (c) Complete the monitoring and recordkeeping required by this condition.

(2) Emissions included in Permit Limit and/or Reported as Excess Emissions

- (a) All emissions due to routine or predictable startup, shutdown, and/or maintenance (SSM) must be included under and shall not exceed the SSM/M emission limits in this permit. For emissions due to malfunctions, the permittee has the option to report these malfunction emissions as excess emissions under 20.2.7.110.A(2) NMAC or include the emissions under the permitted emission limits.
- (b) Once emissions from a malfunction event are submitted in the Final Report (due no later than ten days after the end of the excess emissions event) per 20.2.7.110.A(2) NMAC, the event is considered an excess emission and cannot be applied toward the SSM/M limits in this permit.

(3) Emissions Exceeding the Permit Limit

If the pound per hour (pph) SSM/M emissions and/or the ton per year (tpy) SSM/M emissions exceed the permitted emission limits, the permittee shall report the emissions as excess emissions in accordance with 20.2.7.110 NMAC.

(4) Emissions Due to Preventable Events

Emissions that are due entirely or in part to poor maintenance, careless operation, or any other preventable equipment breakdown shall not be included under the permitted SSM/M emission limits. These emissions shall be reported as excess emissions in accordance with 20.2.7.110 NMAC.

Monitoring: The permittee shall monitor all SSM/M events.

Recordkeeping:**(1) Compliance Method**

- (a) Each month records shall be kept of the cumulative total of all VOC emissions related to SSM/M during the first 12 months and, thereafter of the monthly rolling 12 month total of SSM/M VOC emissions. Any malfunction emissions that have been reported in a Final Excess Emissions Report per 20.2.7.110.A(2) NMAC, shall be excluded from this tpy total.

- (b) For each venting event that is at or exceeds the maximum volume of gas used to establish the H₂S pph emission limit, the permittee shall calculate and record the maximum pph emission rate of H₂S using the total volume of the gas that was vented in an hour and the H₂S content of the gas based on the most recent gas analysis. A copy of the permit application calculations used to determine the maximum volume of gas used to establish the H₂S pph emission limit and copied of the venting event H₂S calculations shall be kept.
- (c) Records shall also be kept of the inlet gas analysis, the weight percent VOC of the gas based on the most recent gas analysis; the volume of total gas vented in MMscf used to calculate the VOC emissions; and the total grains of H₂S/100 scf of gas based on the most recent gas analysis. Records of venting event, including the date and volume shall be made available upon request.
- (d) The permittee shall identify the equipment or activity and shall describe the event that is the source of emissions.

(2) Emissions included Under Permit Limit or Reported as Excess Emissions

The permittee shall record whether emissions are included under the permitted limit SSM/M emission limits or if the event is included in a Final excess emissions report per 20.2.7.110.A(2) NMAC.

(3) Condition B109 Records

The permittee shall keep records in accordance with Condition B109 of this permit except for the following:

- (a) The requirement to record the start and end times of SSM/M events shall not apply to venting of known quantities of VOCs and H₂S as long as the emissions do not exceed the SSM/M emission limits.
- (b) The requirement to record a description of the cause of the event shall not apply to SSM/M events as long as the emissions do not exceed the SSM/M emission limits.

Reporting: The permittee shall report in accordance with Section B110.

A307 Facility: Hours of Operation

- A. This facility is authorized for continuous operation. Monitoring, recordkeeping, and reporting are not required to demonstrate compliance with continuous hours of operation.

A308 Facility: Reporting Schedules

- A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on January 1st and July 1st of each year.

- B. The Annual Compliance Certification Report is due within 30 days of the end of every 12-month reporting period. The 12-month reporting period starts on January 1st of each year.
- C. The Semi-Annual and Annual Compliance Reports sent to the Department shall, at the same time, be sent to the other parties to this permit.

Enterprise Field Services, L.L.C. and Enterprise Products Operating, L.L.C.

Attn: Robert Havalda

PO Box 4324 Houston, TX 77210-4324

El Paso Natural Gas Company, L.L.C.

Attn: Travis Ray

2 North Nevada Avenue,

Colorado Springs, CO 80903

Harvest Pipeline Company LLC

Attn: Matt Henderson

PO Box 217 Bloomfield, NM 87413

A309 Facility: Fuel and Fuel Sulfur Requirements

A. Fuel and Fuel Sulfur Requirements

Requirement: All combustion emission units shall combust only natural gas containing no more than 0.25 grains of total sulfur per 100 dry standard cubic feet. (Added by Title V Permit)

Monitoring: None. Compliance is demonstrated through records.

Recordkeeping: The permittee shall demonstrate compliance with the natural gas limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel gas analysis, specifying the allowable limit or less. Alternatively, compliance may be demonstrated by keeping a receipt or invoice from a commercial fuel supplier, with each fuel delivery, which shall include the delivery date, the fuel type delivered, the amount of fuel delivered, and the maximum sulfur content of the fuel. If fuel gas analysis is used, the analysis shall not be older than one year. The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

A310 Facility: 20.2.61 NMAC Opacity

A. 20.2.61 NMAC Opacity Limit (Units A01 to A14)

Requirement: Visible emissions from all stationary combustion emission stacks shall not equal or exceed an opacity of 20 percent in accordance with the requirements at 20.2.61.109 NMAC. (NSR 0613-M8, Condition A301.A and revised)

Monitoring: Use of natural gas fuel constitutes compliance with 20.2.61 NMAC unless opacity

equals or exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during operation other than during startup mode, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Reference Method 9 (EPA Method 9) as required by 20.2.61.114 NMAC, or the operator will be allowed to shut down the equipment to perform maintenance/repair to eliminate the visible emissions. Following completion of equipment maintenance/repair, the operator shall conduct visible emission observations following startup in accordance with the following procedures:

- Visible emissions observations shall be conducted over a 10-minute period during operation after completion of startup mode in accordance with the procedures at 40 CFR 60, Appendix A, Reference Method 22 (EPA Method 22). If no visible emissions are observed, no further action is required.
- If any visible emissions are observed during completion of the EPA Method 22 observation, subsequent opacity observations shall be conducted over a 10-minute period, in accordance with the procedures at EPA Method 9 as required by 20.2.61.114 NMAC.

For the purposes of this condition, *Startup mode* is defined as the startup period that is described in the facility's startup plan.

Recordkeeping:

If any visible emissions observations were conducted, the permittee shall keep records in accordance with the requirements of Section B109 and as follows:

- For any visible emissions observations conducted in accordance with EPA Method 22, record the information on the form referenced in EPA Method 22, Section 11.2.

For any opacity observations conducted in accordance with the requirements of EPA Method 9, record the information on the form referenced in EPA Method 9, Sections 2.2 and 2.4.

Reporting: The permittee shall report in accordance with Section B110.

A311 Alternative Operating Scenario – not required

A312 Compliance Plan – not required

A313 Reducing Facility Emissions – not required

EQUIPMENT SPECIFIC REQUIREMENTS

A314 Engines

A. Periodic Emissions Test (Units A01 to A14)

Requirement: Compliance with the allowable emission limits in Table 305.A shall be demonstrated by annual emission tests. (NSR 0613-M12, Condition A314.A)

Monitoring: The permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements.

For periodic testing of NOx and CO, emissions tests shall be carried out as described below. Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

- (1) The monitoring period shall be annual based on the reporting period stated in A308.B.
- (2) The tests shall continue based on the existing testing schedule.
- (3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.
- (4) The permittee shall follow the General Testing Procedures of Section B111.
- (5) Performance testing required by 40 CFR 63, Subpart ZZZZ may be used to satisfy these periodic testing requirements if they meet the requirements of this condition and are completed during the specified monitoring period.

Recordkeeping: The permittee shall maintain records in accordance with Section B109, B110, and B111.

Reporting: The permittee shall report in accordance with Section B109, B110, and B111.

B. Maintenance and Repair Monitoring (Units A01 to A14)

Requirement: Compliance with the allowable emission limits in Table 305.A shall be demonstrated by properly maintaining and repairing the units. (NSR 0613-M12, Condition A314.B)

Monitoring: Maintenance and repair shall meet the minimum manufacturer's or permittee's recommended maintenance schedule. Activities that involve maintenance, adjustment, replacement, or repair of functional components with the potential to affect the operation of an emission unit shall be documented as they occur for the following events:

- (1) Routine Maintenance that takes a unit out of service for more than two hours during any twenty-four hour period.
- (2) Unscheduled repairs that require a unit to be taken out of service for more than two hours in any twenty-four hour period.

Recordkeeping: The permittee shall maintain records in accordance with Section B109, including records of maintenance and repairs activities and a copy of the manufacturer's or permittee's recommended maintenance schedule.

Reporting: The permittee shall report in accordance with Section B110.

ENTERPRISE – BLANCO C&D COMPRESSOR STATION

A400 Enterprise Field Services, LLC – Blanco C&D Compressor Station - Reserved

PART B GENERAL CONDITIONS (ATTACHED)

PART C MISCELLANEOUS: SUPPORTING ON-LINE DOCUMENTS; DEFINITIONS; ACRONYMS (ATTACHED)

Air Quality Bureau
TITLE V OPERATING PERMIT
Issued under 20.2.70 NMAC

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PART B GENERAL CONDITIONS

B100 Introduction

A. Not Applicable

B101 Legal

A. Permit Terms and Conditions (20.2.70 sections 7, 201.B, 300, 301.B, 302, 405 NMAC)

- (1) The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the Federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the Federal Act. (20.2.70.302.A.2.a NMAC)
- (2) Emissions trading within a facility (20.2.70.302.H.2 NMAC)
 - (a) The Department shall, if an applicant requests it, issue permits that contain terms and conditions allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit in addition to any applicable requirements. Such terms and conditions shall include all terms and conditions required under 20.2.70.302 NMAC to determine compliance. If applicable requirements apply to the requested emissions trading, permit conditions shall be issued only to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval.
 - (b) The applicant shall include in the application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Department shall not include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall require compliance with all applicable requirements.
- (3) It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (20.2.70.302.A.2.b NMAC)
- (4) If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC. (20.2.70.302.A.2.c NMAC)
- (5) The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or

terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee. (20.2.70.302.A.2.f NMAC)

- (6) A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit. (20.2.70.302.A.2.d NMAC)
- (7) This permit does not convey property rights of any sort, or any exclusive privilege. (20.2.70.302.A.2.e NMAC)
- (8) In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA. (20.2.70.301.B NMAC)
- (9) The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or Federal Acts, or any applicable state or federal regulation or law. (20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2)
- (10) If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. (20.2.70.302.A.1.d NMAC)
- (11) A responsible official (as defined in 20.2.70.7.AE NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. (20.2.70.300.E NMAC)
- (12) Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. (20.2.70.201.B NMAC)
- (13) The permittee shall continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the permittee shall meet such requirements on a timely basis. (Sections 300.D.10.c and 302.G.3 of 20.2.70 NMAC)

B. Permit Shield (20.2.70.302.J NMAC)

- (1) Compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in [Table 103.A](#). The requirements in [Table 103.A](#) are applicable to this facility with specific requirements identified for individual emission units.

- (2) The Department has determined that the requirements in [Table 103.B](#) as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.
 - (3) This permit shield does not extend to administrative amendments (Subsection A of 20.2.70.404 NMAC), to minor permit modifications (Subsection B of 20.2.70.404 NMAC), to changes made under Section 502(b)(10), changes under Paragraph 1 of subsection H of 20.2.70.302 of the Federal Act, or to permit terms for which notice has been given to reopen or revoke all or part under 20.2.70.405 and 20.2.70.302J(6).
 - (4) This permit shall, for purposes of the permit shield, identify any requirement specifically identified in the permit application or significant permit modification that the department has determined is not applicable to the source, and state the basis for any such determination. (20.2.70.302.A.1.f NMAC)
- C. The owner or operator of a source having an excess emission shall, to the extent practicable, operate the source, including associated air pollution control equipment, in a manner consistent with good air pollutant control practices for minimizing emissions. (20.2.7.109 NMAC). The establishment of allowable malfunction emission limits does not supersede this requirement.

B102 Authority

- A. This permit is issued pursuant to the federal Clean Air Act ("Federal Act"), the New Mexico Air Quality Control Act ("State Act") and regulations adopted pursuant to the State and Federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits.
- B. This permit authorizes the operation of this facility. This permit is valid only for the named permittee, owner, and operator. A permit modification is required to change any of those entities.
- C. The Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued. (20.2.70.302.A.1 NMAC)
- D. Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed to limit this facility's potential to emit, are enforceable by the Department. All terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency ("EPA") and citizens under the Federal Act, unless the term or condition is specifically designated in this permit as not being enforceable under the Federal Act. (20.2.70.302.A.5 NMAC)

- E. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the Modification and Exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

B103 Annual Fee

- A. The permittee shall pay Title V fees to the Department consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. The fees will be assessed and invoiced separately from this permit. (20.2.70.302.A.1.e NMAC)

B104 Appeal Procedures
(20.2.70.403.A NMAC)

- A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition shall be made in writing to the board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered, and attach a copy of the permitting action for which review is sought. Unless a timely request for a hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to:

For Mailing:

Administrator, New Mexico Environmental Improvement Board
P.O. Box 5469
Santa Fe, NM 87502-5469

For Hand Delivery:

Administrator, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Harold Runnels Bldg.
Santa Fe, New Mexico 87505

B105 Submittal of Reports and Certifications

- A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to Stacktest.AQB@state.nm.us or as directed by the Department.
- B. Excess Emission Reports shall be submitted as directed by the Department. (20.2.7.110 NMAC)
- C. Compliance Certification Reports, Semi-Annual monitoring reports, compliance schedule progress reports, and any other compliance status information required by this permit shall

be certified by the responsible official and submitted to the mailing address below, or as directed by the Department:

Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez Suite 1
Santa Fe, NM 87505-1816

- D. Compliance Certification Reports shall also be submitted to the Administrator at the address below (20.2.70.302.E.3 NMAC):

Chief, Air Enforcement Section
US EPA Region-6, R6 ECD-A
1201 Ross Avenue, Suite 500
Dallas, TX 75270

B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

- A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c).
- B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart. (20.2.70.302.A.1 and A.4 NMAC)

B107 Startup, Shutdown, and Maintenance Operations

- A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (20.2.7.14.A NMAC)

B108 General Monitoring Requirements
(20.2.70. 302.A and C NMAC)

- A. These requirements do not supersede or relax requirements of federal regulations.
- B. The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- C. If the emission unit is shutdown at the time when periodic monitoring is due to be completed, the permittee is not required to restart the unit for the sole purpose of conducting the monitoring. Using electronic or written mail, the permittee shall notify the Department's Compliance and Enforcement Section of a delay in emission tests prior to the deadline for completing the tests. Upon recommencing operation, the permittee shall submit pre-test notification(s) to the Department's Compliance and Enforcement Section and shall complete the monitoring.
- D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring period exemptions at B108.D(2), hours of operation shall be monitored and recorded.
 - (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
 - (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
 - (3) If invoking the monitoring period exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.
- E. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will

be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.

- F. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- G. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance. All monitoring periods, unless stated otherwise in the specific permit condition or federal requirement, shall commence at the beginning of the 12 month reporting period as defined at condition A109.B.
- H. Unless otherwise indicated by Specific Conditions or regulatory requirements, all instrumentation used to measure parameters including but not limited to flow, temperature, pressure and chemical composition, or used to continuously monitor emission rates and/or other process operating parameters, shall be subject to the following requirements:
 - (1) The owner or operator shall install, calibrate, operate and maintain monitoring instrumentation (monitor) according to the manufacturer's procedures and specifications and the following requirements:
 - (a) The monitor shall be located in a position that provides a representative measurement of the parameter that is being monitored.
 - (b) At a minimum, the monitor shall complete one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
 - (c) At a minimum, the monitor shall be spanned to measure the normal range +/- 5% of the parameter that is being monitored.
 - (d) At least semi-annually, perform a visual inspection of all components of the monitor for physical and operational integrity and all electrical connections for oxidation and galvanic corrosion.
 - (e) Recalibrate the monitor in accordance with the manufacturer's procedures and specifications at the frequency specified by the manufacturer, or every two years, whichever is less.
 - (2) Except for malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall operate and maintain all monitoring equipment at all times that the emissions unit or the associated process is operating.

- (3) The monitor shall measure data for a minimum of 90 percent of the time that the emissions unit or the associated process is in operation, based on a calendar monthly average.
 - (4) The owner or operator shall maintain records in accordance with Section B109 to demonstrate compliance with the requirements in B108H (1)-(3) above, as applicable.
- I. The permittee is not required to report a deviation for any monitoring or testing in a Specific Condition if the deviation was authorized in this General Condition [B108](#).

B109 General Recordkeeping Requirements
(20.2.70.302.D NMAC)

- A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any applicable requirements that become effective during the term of this permit. The minimum information to be included in these records is as follows (20.2.70.302.D.1 NMAC):
- (1) Records required for testing and sampling:
 - (a) equipment identification (include make, model and serial number for all tested equipment and emission controls)
 - (b) date(s) and time(s) of sampling or measurements
 - (c) date(s) analyses were performed
 - (d) the qualified entity that performed the analyses
 - (e) analytical or test methods used
 - (f) results of analyses or tests
 - (g) operating conditions existing at the time of sampling or measurement
 - (2) Records required for equipment inspections and/or maintenance required by this permit:
 - (a) equipment identification number (including make, model and serial number)
 - (b) date(s) and time(s) of inspection, maintenance, and/or repair
 - (c) date(s) any subsequent analyses were performed (if applicable)
 - (d) name of the person or qualified entity conducting the inspection, maintenance, and/or repair
 - (e) copy of the equipment manufacturer's or the owner or operator's maintenance or repair recommendations (if required to demonstrate compliance with a permit condition)
 - (f) description of maintenance or repair activities conducted

- (g) all results of any required parameter readings
 - (h) a description of the physical condition of the equipment as found during any required inspection
 - (i) results of required equipment inspections including a description of any condition which required adjustment to bring the equipment back into compliance and a description of the required adjustments
- B. The permittee shall keep records of all monitoring data, equipment calibration, maintenance, and inspections, Data Acquisition and Handling System (DAHS) if used, reports, and other supporting information required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall clearly identify the emissions unit and/or monitoring equipment, and the date the data was gathered. (20.2.70.302.D.2 NMAC)
- C. If the permittee has applied and received approval for an alternative operating scenario, then the permittee shall maintain a log at the facility, which documents, contemporaneously with any change from one operating scenario to another, the scenario under which the facility is operating. (20.2.70.302.A.3 NMAC)
- D. The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. (20.2.70.302.I.2 NMAC)
- E. Unless otherwise indicated by Specific Conditions, the permittee shall keep the following records for malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):
 - (1) The owner or operator of a source subject to a permit, shall establish and implement a plan to minimize emissions during routine or predictable startup, shutdown, and scheduled maintenance through work practice standards and good air pollution control practices. This requirement shall not apply to any affected facility defined in and subject to an emissions standard and an equivalent plan under 40 CFR Part 60 (NSPS), 40 CFR Part 63 (MACT), or an equivalent plan under 20.2.72 NMAC - Construction Permits, 20.2.70 NMAC - Operating Permits, 20.2.74 NMAC - Permits - Prevention of Significant Deterioration (PSD), or 20.2.79 NMAC - Permits - Nonattainment Areas. (20.2.7.14.A NMAC) The permittee shall keep records of all sources subject to the plan to minimize emissions during routine or predictable SSM and shall record if the source is subject to an alternative plan and therefore, not subject to the plan requirements under 20.2.7.14.A NMAC.
 - (2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, a description of the event, and a description of the cause of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that

occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.

- (3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits. The permittee shall also include the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction. (20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized malfunction emission limit.
- (4) The owner or operator of a source shall meet the operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup or shutdown. (20.2.72.203.A(5) NMAC)

B110 General Reporting Requirements
(20.2.70.302.E NMAC)

- A. Reports of required monitoring activities for this facility shall be submitted to the Department on the schedule in section A109. Monitoring and recordkeeping requirements that are not required by a NSPS or MACT shall be maintained on-site or (for unmanned sites) at the nearest company office, and summarized in the semi-annual reports, unless alternative reporting requirements are specified in the equipment specific requirements section of this permit.
- B. Reports shall clearly identify the subject equipment showing the emission unit ID number according to this operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the reports required by section A109. (20.2.70.302.E.1 NMAC)
- C. The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be submitted as follows:
 - (1) Deviations resulting in excess emissions as defined in 20.2.7.7 NMAC (including those classified as emergencies as defined in section B114.A) shall be reported in

accordance with the timelines specified by 20.2.7.110 NMAC and in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)

- (2) All other deviations shall be reported in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC).
- D. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.
- E. Allowable Emission Limits for Excess Emissions Reporting for Flares and Other Regulated Sources with No Pound per Hour (pph) and/or Ton per Year (tpy) Emission Limits.
- (1) When a flare has no allowable pph and/or tpy emission limits in Sections A106 and/or A107, the authorized allowable emissions include only the combustion of pilot and/or purge gas. Compliance is demonstrated by limiting the gas stream to the flare to only pilot and/or purge gas.
 - (2) For excess emissions reporting as required by 20.2.7 NMAC, the allowable emission limits are 1.0 pph and 1.0 tpy for each regulated air pollutant (except for H₂S) emitted by that source as follows:
 - (a) For flares, when there are no allowable emission limits in Sections A106 and/or A107.
 - (b) For regulated sources with emission limits in Sections A106 or A107 represented by the less than sign (“<”).
 - (c) For regulated sources that normally would not emit any regulated air pollutants, including but not limited to vents, pressure relief devices, connectors, etc.
 - (3) For excess emissions reporting as required by 20.2.7 NMAC for H₂S, the allowable limits are 0.1 pph and 0.44 tpy for each applicable scenario addressed in paragraph (2) above.
- F. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.
- G. At such time as new units are installed as authorized by the applicable NSR Permit, the permittee shall fulfill the notification requirements in the NSR permit.
- H. Periodic Emissions Test Reporting: The permittee shall report semi-annually a summary of the test results.

- I. The permittee shall submit an emissions inventory report for this facility in accordance with the schedule in subparagraph (5), provided one or more of the following criteria is met in subparagraphs (1) to (4): (20.2.73 NMAC)
- (1) The facility emits, or has the potential to emit, 5 tons per year or more of lead or lead compounds, or 100 tons per year or more of PM₁₀, PM_{2.5}, sulfur oxides, nitrogen oxides, carbon monoxide, or volatile organic compounds.
 - (2) The facility is defined as a major source of hazardous air pollutants under 20.2.70 NMAC (Operating Permits).
 - (3) The facility is located in an ozone nonattainment area and which emits, or has the potential to emit, 25 tons per year or more of nitrogen oxides or volatile organic compounds.
 - (4) Upon request by the department.
 - (5) The permittee shall submit the emissions inventory report by April 1 of each year, unless a different deadline is specified by the current operating permit.
- J. Emissions trading within a facility (20.2.70.302.H.2 NMAC)
- (1) For each such change, the permittee shall provide written notification to the department and the administrator at least seven (7) days in advance of the proposed changes. Such notification shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.
 - (2) The permittee and department shall attach each such notice to their copy of the relevant permit.

B111 General Testing Requirements

Unless otherwise indicated by Specific Conditions or regulatory requirements, the permittee shall conduct testing in accordance with the requirements in Sections B111A, B, C, D and E, as applicable.

A. Initial Compliance Tests

The permittee shall conduct initial compliance tests in accordance with the following requirements:

- (1) Initial compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)
- (2) Initial compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then

the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.

- (3) The default time period for each test run shall be at least 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.
- (4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate.
- (5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.
- (6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

B. EPA Reference Method Tests

The test methods in Section B111.B(1) shall be used for all initial compliance tests and all Relative Accuracy Test Audits (RATAs), and shall be used if a permittee chooses to use EPA test methods for periodic monitoring. Test methods that are not listed in Section B111.B(1) may be used in accordance with the requirements at Section B111.B(2).

- (1) All compliance tests required by this permit shall be conducted in accordance with the requirements of CFR Title 40, Part 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by CFR Title 40, Part 60, Appendix A:
 - (a) Methods 1 through 4 for stack gas flowrate
 - (b) Method 5 for particulate matter (PM)
 - (c) Method 6C for SO₂
 - (d) Method 7E for NO_x (test results shall be expressed as nitrogen dioxide (NO₂) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO₂ is equivalent to 1.194×10^{-7} lb/SCF))
 - (e) Method 9 for visual determination of opacity
 - (f) Method 10 for CO

- (g) Method 19 for particulate, sulfur dioxide and nitrogen oxides emission rates. In addition, Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate. The permittee shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months prior to the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test report.
 - (h) Method 7E or 20 for Turbines per §60.335 or §60.4400
 - (i) Method 22 for visual determination of fugitive emissions from material sources and smoke emissions from flares
 - (j) Method 25A for VOC reduction efficiency
 - (k) Method 29 for Metals
 - (l) Method 30B for Mercury from Coal-Fired Combustion Sources Using Carbon Sorbent Traps
 - (m) Method 201A for filterable PM₁₀ and PM_{2.5}
 - (n) Method 202 for condensable PM
 - (o) Method 320 for organic Hazardous Air Pollutants (HAPs)
- (2) Permittees may propose test method(s) that are not listed in Section B111.B(1). These methods may be used if prior approval is received from the Department.

C. Periodic Monitoring and Portable Analyzer Requirements for the Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters

Periodic emissions tests (periodic monitoring) shall be conducted in accordance with the following requirements:

- (1) Periodic emissions tests may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of the current version of ASTM D 6522. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.
- (2) The default time period for each test run shall be **at least** 20 minutes.
Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.
- (3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.E.
- (4) During emissions tests, pollutant and diluent concentration shall be monitored and recorded. Fuel flow rate shall be monitored and recorded if stack gas flow rate is

determined utilizing Reference Method 19. This information shall be included with the test report furnished to the Department.

- (5) Stack gas flow rate shall be calculated in accordance with Reference Method 19 utilizing fuel flow rate (scf) determined by a dedicated fuel flow meter and fuel heating value (Btu/scf). The permittee shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months prior to the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test report. Alternatively, stack gas flow rate may be determined by using EPA Reference Methods 1-4.
- (6) The permittee shall submit a notification and protocol for periodic emissions tests upon the request of the Department.

D. Initial Compliance Test and RATA Procedures

Permittees required to conduct initial compliance tests and/or RATAs shall comply with the following requirements:

- (1) The permittee shall submit a notification and test protocol to the Department's Program Manager, Compliance and Enforcement Section, at least thirty (30) days before the test date and allow a representative of the Department to be present at the test. Proposals to use test method(s) that are not listed in Section B111.B(1) (if applicable) shall be included in this notification.
- (2) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (3) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.
- (4) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed

E. General Compliance Test Procedures

The following requirements shall apply to all initial compliance and periodic emissions tests and all RATAs:

- (1) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (2) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Reference Method 1 or the current version of ASTM D 6522, as applicable.

- (3) Test reports shall be submitted to the Department no later than 30 days after completion of the test.

B112 Compliance

- A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)
- B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.70.302.G.3 NMAC)
- C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit. (20.2.70.302.A.1 and G.3 NMAC)
- D. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall be made on the pre-populated Compliance Certification Report Form that is provided to the permittee by the Department, and shall be submitted to the Department and to EPA at least every 12 months. For the most current form, please contact the Compliance Reports Group at: submittals.aqb@state.nm.us. For additional reporting guidance see <https://www.env.nm.gov/air-quality/compliance-submittal-forms/> (20.2.70.302.E.3 NMAC)
- E. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following (20.2.70.302.G.1 NMAC):
 - (1) enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept;
 - (2) have access to and copy, at reasonable times, any records that are required by this permit to be maintained;

- (3) inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operations regulated or required under this permit; and
- (4) sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the Federal Act.

B113 Permit Reopening and Revocation

- A. This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when A(3) or A(4) occurs. (20.2.70.405.A.1 NMAC)
- (1) Additional applicable requirements under the Federal Act become applicable to a major source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.
 - (2) Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the Federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.
 - (3) The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.
 - (4) The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.
- B. Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. (20.2.70.405.A.2 NMAC)

B114 Emergencies
(20.2.70.304 NMAC)

- A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

- B. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) This facility was at the time being properly operated;
 - (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
 - (4) The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of 20.2.70.302.E.2 NMAC. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- C. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- D. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

B115 Stratospheric Ozone
(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to 40 CFR 82, Subpart F, the permittee shall comply with the following standards for recycling and emissions reductions:
- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices, except for motor vehicle air conditioners (MVAC) and MVAC-like appliances. (40 CFR 82.156)
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment. (40 CFR 82.158)
 - (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program. (40 CFR 82.161)

B116 Acid Rain Sources
(20.2.70.302.A.9 NMAC)

- A. If this facility is subject to the federal acid rain program under 40 CFR 72, this section applies.

- B. Where an applicable requirement of the Federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Federal Act, both provisions are incorporated into this permit and are federally enforceable.
- C. Emissions exceeding any allowances held by the permittee under Title IV of the Federal Act or the regulations promulgated thereunder are prohibited.
- D. No modification of this permit is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit modification under any other applicable requirement.
- E. The permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
- F. No limit is placed on the number of allowances held by the acid rain source. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Federal Act.
- G. The acid rain permit is an enclosure of this operating permit.

B117 Risk Management Plan
(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to the federal risk management program under 40 CFR 68, this section applies.
- B. The owner or operator shall certify annually that they have developed and implemented a RMP and are in compliance with 40 CFR 68.
- C. If the owner or operator of the facility has not developed and submitted a risk management plan according to 40 CFR 68.150, the owner or operator shall provide a compliance schedule for the development and implementation of the plan. The plan shall describe, in detail, procedures for assessing the accidental release hazard, preventing accidental releases, and developing an emergency response plan to an accidental release. The plan shall be submitted in a method and format to a central point as specified by EPA prior to the date specified in 40 CFR 68.150.b.

PART C MISCELLANEOUS**C100 Supporting On-Line Documents**

- A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.
- (1) Excess Emission Form (for reporting deviations and emergencies)
 - (2) Compliance Certification Report Form
 - (3) Universal Stack Test Notification, Protocol and Report Form and Instructions

C101 Definitions

- A. **"Daylight"** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmers Almanac or from <http://www.almanac.com/rise/>).
- B. **"Decommission"** and **"Decommissioning"** applies to units left on site (not removed) and is defined as the complete disconnecting of equipment, emission sources or activities from the process by disconnecting all connections necessary for operation (i.e. piping, electrical, controls, ductwork, etc.).
- C. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 permitting action.
- D. **"Fugitive emission"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. (20.2.70.7M NMAC)
- E. **"Insignificant Activities"** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. (20.2.70.7Q NMAC)
- F. **"Malfunction"** for the requirements under 20.2.7 NMAC, means any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction.
- G. **"Natural Gas"** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either

- composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.331)
- H. **“Natural Gas Liquids”** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)
- I. **“National Ambient Air Quality Standards”** means the primary (health-based) and secondary (welfare-related) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act. (20.2.72.7Q NMAC)
- J. **“NO₂”** or **“Nitrogen dioxide”** means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **“nitrogen dioxide,”** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NO_x or NO₂. (20.2.2.7U NMAC)
- K. **“NO_x”** see NO₂
- L. **“Paved Road”** is a road with a permanent solid surface that can be swept essentially free of dust or other material to reduce air re-entrainment of particulate matter. To the extent these surfaces remain solid and contiguous they qualify as paved roads: concrete, asphalt, chip seal, recycled asphalt and other surfaces approved by the Department in writing.
- M. **“Potential Emission Rate”** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the Federal Act. (20.2.72.7Y NMAC)
- N. **“Restricted Area-Non Military”** is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.
- O. **“Shutdown”** for requirements under 20.2.72.7BB NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.

- P. **"SSM"** for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.
- (1) **"Shutdown"** for requirements under 20.2.7.7H NMAC, means the cessation of operation of any air pollution control equipment or process equipment.
 - (2) **"Startup"** for requirements under 20.2.7.7I NMAC, means the setting into operation of any air pollution control equipment or process equipment.
- Q. **"Startup"** for requirements under 20.2.7.7DD NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

C102 Acronyms

2SLB	2-stroke lean burn
4SLB	4-stroke lean burn
4SRB	4-stroke rich burn
acfm	actual cubic feet per minute
AFR	air fuel ratio
AP-42	EPA Air Pollutant Emission Factors
AQB	Air Quality Bureau
AQCR	Air Quality Control Region
ASTM	American Society for Testing & Materials
Btu	British thermal unit
CAA	Clean Air Act of 1970 and 1990 Amendments
CEM	continuous emissions monitoring
cfh	cubic feet per hour
cfm	cubic feet per minute
CFR	Code of Federal Regulation
CI	compression ignition
CO	carbon monoxide
COMS	continuous opacity monitoring system
EIB	Environmental Improvement Board
EPA	United States Environmental Protection Agency
gr/100 cf	grains per one hundred cubic feet
gr/dscf	grains per dry standard cubic foot
GRI	Gas Research Institute
H ₂ S	hydrogen sulfide
HAP	hazardous air pollutant
hp	horsepower
IC	Internal Combustion
KW/hr	kilowatts per hour
lb/hr	pounds per hour
lb/MMBtu	pounds per million British thermal unit
MACT	Maximum Achievable Control Technology

MMcf/hr	million cubic feet per hour
MMscf	million standard cubic feet
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NG	natural gas
NGL	natural gas liquids
NMAAQs	New Mexico Ambient Air Quality Standards
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMSA	New Mexico Statutes Annotated
NO _x	nitrogen oxides
NSCR	non-selective Catalytic Reduction
NSPS	New Source Performance Standard
NSR	New Source Review
PEM	parametric emissions monitoring
PM	particulate matter (equivalent to TSP, total suspended particulate)
PM ₁₀	particulate matter 10 microns and less in diameter
PM _{2.5}	particulate matter 2.5 microns and less in diameter
pph	pounds per hour
ppmv	parts per million by volume
PSD	Prevention of Significant Deterioration
RATA	relative accuracy test assessment
RICE	reciprocating internal combustion engine
rpm	revolutions per minute
scfm	standard cubic feet per minute
SI	spark ignition
SO ₂	sulfur dioxide
SSM	Startup Shutdown Maintenance (see SSM definition)
TAP	Toxic Air Pollutant
TBD	to be determined
THC	total hydrocarbons
TSP	Total Suspended Particulates
tpy	tons per year
ULSD	ultra-low sulfur diesel
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator Coordinate System
UTMH	Universal Transverse Mercator Horizontal
UTMV	Universal Transverse Mercator Vertical
VHAP	volatile hazardous air pollutant
VOC	volatile organic compounds