



ATMOS Energy - Mid-Tex / APT
 Gas Measurement Services
 5420 LBJ Freeway, Suite 1800
Analysis General Report

3/1/2018 12:10 PM
 Mercer, Dannie

01 - Jan - 2018 To 31 - Jan - 2018

Analysis ID:	69091800					Alternate ID:					
Default Type:	Composite					Default Origin:	Lab Analysis				
Chrom Rule:	Set to Effective Date Provided in Import Record										
Composite Rule:	Set to Date Received by PGAS										
Spot Rule:	Set to Date Received by PGAS										
Sample Frequency:	Monthly										
Sample Date:	01/05/2018	11/28/2017	10/27/2017	09/28/2017	07/31/2017						
Effective Date:	01/10/2018 20:16	12/12/2017 20:16	11/15/2017 20:16	10/06/2017 20:16	08/14/2017 20:16						
Valid Thru Date:	12/31/2078 00:00	01/10/2018 20:16	12/12/2017 20:16	11/15/2017 20:16	10/06/2017 20:16						
Last Update:	01/10/2018 20:16	12/12/2017 20:16	11/15/2017 20:16	10/06/2017 20:16	08/14/2017 20:16						
Saturated HV:	995.0	985.7	979.6	988.0	970.8						
As Delivered HV:	0.0	0.0	0.0	0.0	0.0						
Dry HV:	1012.7	1003.2	997.1	1005.6	988.1						
Measured HV:											
WOBBE Index:	1317.0	1305.8	1297.0	1302.6	1286.0						
Real Relative	0.5913	0.5902	0.5910	0.5959	0.5904						
Source:	Spot	Spot	Spot	Spot	Composite						

CAREY MIDDLE SCHOOL

Mole Percent					
Methane	93.6600	94.4400	94.5700	93.7500	95.1100
Ethane	3.3200	2.3600	2.0200	2.8600	1.3400
Propane	0.2400	0.2000	0.1800	0.2300	0.1000
I Butane	0.0200	0.0300	0.0200	0.0300	0.0100
N Butane	0.0300	0.0400	0.0300	0.0300	0.0200
I Pentane	0.0100	0.0100	0.0000	0.0100	0.0100
N Pentane	0.0100	0.0100	0.0000	0.0100	0.0100
Hexane	0.0100	0.0100	0.0200	0.0100	0.0100
Heptane	0.0000	0.0000	0.0000	0.0000	0.0000
Octane	0.0000	0.0000	0.0000	0.0000	0.0000
Nonane	0.0000	0.0000	0.0000	0.0000	0.0000
Decane	0.0000	0.0000	0.0000	0.0000	0.0000
Nitrogen	1.7100	1.4000	1.3100	1.1400	1.0500
CO2	0.9900	1.5000	1.8500	1.9300	2.3400
Oxygen	0.0000	0.0000	0.0000	0.0000	0.0000
H2O	0.0000	0.0000	0.0000	0.0000	0.0000
CO	0.0000	0.0000	0.0000	0.0000	0.0000
H2S	0.0000	0.0000	0.0000	0.0000	0.0000
Hydrogen	0.0000	0.0000	0.0000	0.0000	0.0000
Helium	0.0000	0.0000	0.0000	0.0000	0.0000
Argon	0.0000	0.0000	0.0000	0.0000	0.0000

Sample ID:	422080	421576	421160	420760	419800
Sample Type:	Spot	Spot	Spot	Spot	Composite
Sample Pres.Base:	14.650	14.650	14.650	14.650	14.650
Sample Temp:	60.0	60.0	60.0	82.0	60.0
Sample Pressure:	27.0	22.0	24.0	27.0	29.0
Water Content:					



ATMOS Energy - Mid-Tex / APT
 Gas Measurement Services
 5420 LBJ Freeway, Suite 1800
Analysis General Report

3/1/2018 12:11 PM
 Mercer, Dannie

01 - Jan - 2018 To 28 - Feb - 2018

Analysis ID:	16000601		Alternate ID:		
Default Type:	Composite		Default Origin: Lab Analysis		
Chrom Rule:	Set to Effective Date Provided in Import Record				
Composite Rule:	Set to Date Received by PGAS		<i>DALLAS NORTH (Ford Rd.)</i>		
Spot Rule:	Set to Date Received by PGAS				
Sample Frequency:	Monthly				
Sample Date:	02/13/2018	01/18/2018	12/14/2017	11/15/2017	10/13/2017
Effective Date:	02/19/2018 20:16	01/30/2018 20:18	01/03/2018 20:16	12/04/2017 20:16	10/30/2017 20:16
Valid Thru Date:	12/31/2078 00:00	02/19/2018 20:16	01/30/2018 20:18	01/03/2018 20:16	12/04/2017 20:16
Last Update:	02/19/2018 20:16	01/30/2018 20:18	01/03/2018 20:16	12/04/2017 20:16	10/30/2017 20:16
Saturated HV:	1004.0	993.5	989.9	984.6	978.4
As Delivered HV:	0.0	0.0	0.0	0.0	0.0
Dry HV:	1021.9	1011.2	1007.5	1002.1	995.8
Measured HV:					
WOBBE Index:	1326.3	1318.3	1311.0	1305.2	1296.1
Real Relative	0.5936	0.5883	0.5906	0.5895	0.5903
Source:	Composite	Composite	Composite	Composite	Composite

Mole Percent

Methane	93.0000	94.2600	94.2600	94.5800	94.7900
Ethane	4.1700	2.9200	2.7000	2.2500	1.8800
Propane	0.2500	0.2200	0.2300	0.2100	0.1600
I Butane	0.0200	0.0200	0.0200	0.0300	0.0200
N Butane	0.0300	0.0300	0.0300	0.0400	0.0300
I Pentane	0.0100	0.0100	0.0100	0.0000	0.0000
N Pentane	0.0100	0.0100	0.0100	0.0000	0.0000
Hexane	0.0200	0.0100	0.0100	0.0100	0.0100
Heptane	0.0000	0.0000	0.0000	0.0000	0.0000
Octane	0.0000	0.0000	0.0000	0.0000	0.0000
Nonane	0.0000	0.0000	0.0000	0.0000	0.0000
Decane	0.0000	0.0000	0.0000	0.0000	0.0000
Nitrogen	1.7400	1.5600	1.3300	1.3400	1.1400
CO2	0.7500	0.9600	1.4000	1.5400	1.9700
Oxygen	0.0000	0.0000	0.0000	0.0000	0.0000
H2O	0.0000	0.0000	0.0000	0.0000	0.0000
CO	0.0000	0.0000	0.0000	0.0000	0.0000
H2S	0.0000	0.0000	0.0000	0.0000	0.0000
Hydrogen	0.0000	0.0000	0.0000	0.0000	0.0000
Helium	0.0000	0.0000	0.0000	0.0000	0.0000
Argon	0.0000	0.0000	0.0000	0.0000	0.0000

Sample ID:	422586	422232	421857	421401	420906
Sample Type:	Composite	Composite	Composite	Composite	Composite
Sample Pres.Base:	14.650	14.650	14.650	14.650	14.650
Sample Temp:	60.0	60.0	60.0	60.0	60.0
Sample Pressure:	310.0	260.0	250.0	340.0	250.0
Water Content:					



ATMOS Energy - Mid-Tex / APT
 Gas Measurement Services
 5420 LBJ Freeway, Suite 1800
Analysis General Report

3/1/2018 12:12 PM
 Mercer, Dannie

01 - Jan - 2018 To 28 - Feb - 2018

Analysis ID: 27002300	Alternate ID:
Default Type: Spot	Default Origin: Lab Analysis
Chrom Rule: Set to Effective Date Provided in Import Record	
Composite Rule: Set to Date Received by PGAS	
Spot Rule: Set to Date Received by PGAS	
Sample Frequency: Monthly	<i>Line W to W8 (Feeds Line D)</i>

Sample Date:	01/02/2018	12/01/2017	10/09/2017	09/05/2017	08/03/2017
Effective Date:	01/24/2018 20:16	01/03/2018 20:16	10/27/2017 20:16	10/02/2017 20:16	08/29/2017 20:16
Valid Thru Date:	12/31/2078 00:00	01/24/2018 20:16	01/03/2018 20:16	10/27/2017 20:16	10/02/2017 20:16
Last Update:	01/24/2018 20:16	01/03/2018 20:16	10/27/2017 20:16	10/02/2017 20:16	08/29/2017 20:16
Saturated HV:	971.8	967.5	972.5	977.6	974.0
As Delivered HV:	989.1	984.7	989.8	995.0	991.4
Dry HV:	989.1	984.8	989.8	995.0	991.4
Measured HV:					
WOBBE Index:	1301.6	1291.3	1303.6	1314.4	1307.6
Real Relative	0.5775	0.5816	0.5765	0.5731	0.5748
Source:	Composite	Spot	Composite	Spot	Composite

Mole Percent

Methane	96.7500	96.3300	96.9300	97.2100	97.0900
Ethane	0.6900	0.7000	0.6400	0.7800	0.6700
Propane	0.0200	0.0200	0.0100	0.0200	0.0000
I Butane	0.0000	0.0000	0.0000	0.0000	0.0000
N Butane	0.0100	0.0000	0.0100	0.0000	0.0000
I Pentane	0.0000	0.0000	0.0000	0.0000	0.0000
N Pentane	0.0000	0.0000	0.0000	0.0000	0.0000
Hexane	0.0000	0.0000	0.0000	0.0000	0.0000
Heptane	0.0000	0.0000	0.0000	0.0000	0.0000
Octane	0.0000	0.0000	0.0000	0.0000	0.0000
Nonane	0.0000	0.0000	0.0000	0.0000	0.0000
Decane	0.0000	0.0000	0.0000	0.0000	0.0000
Nitrogen	0.9900	0.9600	0.8900	0.8900	0.8900
CO2	1.5400	1.9900	1.5200	1.1000	1.3500
Oxygen	0.0000	0.0000	0.0000	0.0000	0.0000
H2O	0.0000	0.0000	0.0000	0.0000	0.0000
CO	0.0000	0.0000	0.0000	0.0000	0.0000
H2S	0.0000	0.0000	0.0000	0.0000	0.0000
Hydrogen	0.0000	0.0000	0.0000	0.0000	0.0000
Helium	0.0000	0.0000	0.0000	0.0000	0.0000
Argon	0.0000	0.0000	0.0000	0.0000	0.0000

Sample ID:	422151	421788	420898	420475	419933
Sample Type:	Composite	Spot	Composite	Spot	Composite
Sample Pres.Base:	14.650	14.650	14.650	14.650	14.650
Sample Temp:	56.0	67.0	77.0	60.0	87.0
Sample Pressure:	225.0	20.0	400.0	200.0	250.0
Water Content:					

ATMOS Energy - Mid-Tex / APT
Gas Measurement Services
5420 LBJ Freeway, Suite 1800



Chromatograph Report

from Contract Day 12/01/2017 to Contract Day 02/28/2018

Station ID: 20310001
Analysis ID: 20310001
Analysis Name: D HEADER TO D NORTH PRIMARY
Company Name: ATMOS ENERGY-MID TEX / APT

Effective Date	Sat. HV	As Del HV	Dry HV	Meas. HV	Water Content	Wobbe	Real Gravity	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	N2	CO2	O2	H2O	CO	H2S	H2	He	
12/01/2017 09:00	993.0	1010.7	1010.7	1010.7	0.0	1317.0	0.5890	94.2259	2.9541	0.2315	0.0181	0.0229	0.0050	0.0036	0.0026	0.0026	0.0000	0.0000	0.0000	1.4236	1.1040	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/02/2017 09:00	994.2	1011.9	1011.9	1011.9	0.0	1318.0	0.5894	94.1104	3.0529	0.2497	0.0184	0.0255	0.0054	0.0043	0.0027	0.0027	0.0000	0.0000	0.0000	1.4626	1.0653	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/03/2017 09:00	995.2	1012.9	1012.9	1012.9	0.0	1318.3	0.5903	93.9177	3.1899	0.2689	0.0185	0.0280	0.0057	0.0049	0.0027	0.0027	0.0000	0.0000	0.0000	1.5274	1.0358	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/04/2017 09:00	994.8	1012.5	1012.5	1012.5	0.0	1318.7	0.5896	94.0724	3.0976	0.2551	0.0178	0.0272	0.0056	0.0047	0.0027	0.0027	0.0000	0.0000	0.0000	1.4722	1.0419	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/05/2017 09:00	995.5	1013.2	1013.2	1013.2	0.0	1318.5	0.5897	93.8207	3.3368	0.2412	0.0123	0.0208	0.0037	0.0033	0.0016	0.0016	0.0000	0.0000	0.0000	1.8610	0.8970	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/06/2017 09:00	996.0	1013.7	1013.7	1013.7	0.0	1320.2	0.5896	93.9995	3.2808	0.2351	0.0163	0.0241	0.0025	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	1.5300	0.9599	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/07/2017 09:00	997.9	1015.7	1015.7	1015.7	0.0	1321.7	0.5906	93.5909	3.6327	0.2393	0.0135	0.0241	0.0046	0.0040	0.0022	0.0022	0.0000	0.0000	0.0000	1.7538	0.7927	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/08/2017 09:00	998.9	1017.7	1017.7	1017.7	0.0	1323.4	0.5914	93.4497	3.7488	0.2511	0.0153	0.0263	0.0056	0.0050	0.0041	0.0041	0.0000	0.0000	0.0000	1.6751	0.8150	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/09/2017 09:00	1001.6	1019.4	1019.4	1019.4	0.0	1324.5	0.5924	93.1551	3.9808	0.2685	0.0152	0.0283	0.0056	0.0053	0.0047	0.0047	0.0000	0.0000	0.0000	1.8140	0.7167	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/10/2017 09:00	1001.4	1019.2	1019.2	1019.2	0.0	1323.6	0.5930	92.8939	4.1629	0.2551	0.0122	0.0246	0.0042	0.0042	0.0038	0.0038	0.0000	0.0000	0.0000	1.9844	0.6510	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/11/2017 09:00	998.3	1016.1	1016.1	1016.1	0.0	1321.7	0.5911	93.1912	3.9097	0.2081	0.0089	0.0185	0.0032	0.0032	0.0026	0.0026	0.0000	0.0000	0.0000	2.0094	0.6415	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/12/2017 09:00	1001.5	1019.3	1019.3	1019.3	0.0	1326.4	0.5906	93.3786	3.8082	0.2281	0.0122	0.0229	0.0046	0.0043	0.0041	0.0041	0.0000	0.0000	0.0000	1.8886	0.5642	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/13/2017 09:00	999.3	1017.1	1017.1	1017.1	0.0	1323.1	0.5909	93.3786	3.8082	0.2281	0.0122	0.0229	0.0046	0.0043	0.0041	0.0041	0.0000	0.0000	0.0000	1.8161	0.7169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/14/2017 09:00	998.4	1016.2	1016.2	1016.2	0.0	1324.7	0.5912	93.3041	3.8008	0.2401	0.0099	0.0209	0.0034	0.0043	0.0025	0.0025	0.0000	0.0000	0.0000	1.8981	0.7156	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/15/2017 09:00	1001.5	1019.3	1019.3	1019.3	0.0	1324.7	0.5921	93.0934	4.0236	0.2670	0.0133	0.0284	0.0053	0.0054	0.0036	0.0036	0.0000	0.0000	0.0000	1.9252	0.6302	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/16/2017 09:00	1000.2	1018.2	1018.2	1018.2	0.0	1324.4	0.5910	93.2950	3.9138	0.2339	0.0116	0.0230	0.0044	0.0042	0.0035	0.0035	0.0000	0.0000	0.0000	1.8486	0.6586	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/17/2017 09:00	1002.4	1020.0	1020.0	1020.0	0.0	1327.0	0.5909	93.2992	3.9768	0.2429	0.0138	0.0286	0.0056	0.0053	0.0035	0.0035	0.0000	0.0000	0.0000	1.8262	0.5948	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/18/2017 09:00	999.9	1017.7	1017.7	1017.7	0.0	1324.2	0.5906	93.3628	3.8511	0.2312	0.0116	0.0247	0.0044	0.0042	0.0023	0.0023	0.0000	0.0000	0.0000	1.8491	0.6562	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/19/2017 09:00	999.6	1017.4	1017.4	1017.4	0.0	1324.2	0.5903	93.3861	3.8424	0.2212	0.0108	0.0227	0.0041	0.0039	0.0023	0.0023	0.0000	0.0000	0.0000	1.8659	0.6384	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/20/2017 09:00	994.1	1011.8	1011.8	1011.8	0.0	1319.8	0.5877	94.3544	3.0083	0.1922	0.0152	0.0215	0.0047	0.0037	0.0023	0.0023	0.0000	0.0000	0.0000	1.3713	1.0243	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/21/2017 09:00	994.8	1012.5	1012.5	1012.5	0.0	1321.0	0.5875	94.3493	3.0479	0.1948	0.0145	0.0218	0.0046	0.0038	0.0025	0.0025	0.0000	0.0000	0.0000	1.3906	0.9677	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/22/2017 09:00	997.7	1015.5	1015.5	1015.5	0.0	1321.3	0.5907	93.5193	3.6483	0.2302	0.0114	0.0206	0.0040	0.0037	0.0029	0.0029	0.0000	0.0000	0.0000	1.7458	0.8109	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/23/2017 09:00	999.7	1017.5	1017.5	1017.5	0.0	1322.8	0.5917	93.2916	3.8598	0.2364	0.0128	0.0254	0.0052	0.0050	0.0038	0.0038	0.0000	0.0000	0.0000	1.7904	0.7659	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/24/2017 09:00	1000.2	1018.0	1018.0	1018.0	0.0	1323.7	0.5914	93.3371	3.8520	0.2406	0.0136	0.0258	0.0053	0.0049	0.0038	0.0038	0.0000	0.0000	0.0000	1.7638	0.7493	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/25/2017 09:00	999.1	1016.9	1016.9	1016.9	0.0	1322.5	0.5912	93.3184	3.8027	0.2355	0.0143	0.0266	0.0056	0.0051	0.0041	0.0041	0.0000	0.0000	0.0000	1.8825	0.7012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/26/2017 09:00	999.5	1017.3	1017.3	1017.3	0.0	1322.4	0.5918	93.2377	3.8686	0.2436	0.0131	0.0250	0.0051	0.0048	0.0038	0.0038	0.0000	0.0000	0.0000	1.8563	0.7384	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/27/2017 09:00	1000.0	1017.8	1017.8	1017.8	0.0	1322.8	0.5920	93.3737	3.7821	0.2529	0.0153	0.0261	0.0062	0.0055	0.0059	0.0059	0.0000	0.0000	0.0000	1.6722	0.8544	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/28/2017 09:00	1000.1	1017.9	1017.9	1017.9	0.0	1323.1	0.5919	93.1909	3.9319	0.2383	0.0120	0.0242	0.0049	0.0049	0.0052	0.0052	0.0000	0.0000	0.0000	1.8746	0.7078	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/29/2017 09:00	998.1	1015.9	1015.9	1015.9	0.0	1320.2	0.5922	93.1684	3.8742	0.2152	0.0095	0.0196	0.0043	0.0049	0.0064	0.0064	0.0000	0.0000	0.0000	1.9102	0.7807	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/30/2017 09:00	998.4	1016.2	1016.2	1016.2	0.0	1320.7	0.5920	93.2208	3.8422	0.2173	0.0111	0.0254	0.0053	0.0059	0.0061	0.0061	0.0000	0.0000	0.0000	1.8785	0.7804	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/31/2017 09:00	1000.2	1018.0	1018.0	1018.0	0.0	1323.1	0.5920	93.2555	3.8949	0.2315	0.0132	0.0249	0.0058	0.0057	0.0066	0.0066	0.0000	0.0000	0.0000	1.7922	0.7630	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/01/2018 09:00	1001.7	1018.5	1018.5	1018.5	0.0	1324.8	0.5922	93.1540	4.0160	0.2438	0.0142	0.0273	0.0060	0.0058	0.0061	0.0061	0.0000	0.0000	0.0000	1.8252	0.6955	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/02/2018 09:00	1004.7	1022.6	1022.6	1022.6	0.0	1323.0	0.5975	92.6238	4.2971	0.3584	0.0226	0.0318	0.0081	0.0066	0.0071	0.0071	0.0000	0.0000	0.0000	1.5763	1.0631	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/03/2018 09:00	1004.6	1022.5	1022.5	1022.5	0.0	1324.2	0.5963	92.7897	4.2029	0.3200	0.0256	0.0368	0.0107	0.0089	0.0105	0.0105	0.0000	0.0000	0.0000	1.6288	0.9576	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/04/2018 09:00	1002.7	1020.6	1020.6	1020.6	0.0	1320.0	0.5960	92.6141	4.3232	0.3176	0.0127	0.0255	0.0075	0.0078	0.0117	0.0117	0.0000	0.0000	0.0000	1.8579	0.8662	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/05/2018 09:00	1002.3	1020.1	1020.1	1020.1	0.0	1320.9	0.5964	92.4457	4.3943	0.2681	0.01																	

ATMOS Energy - Mid-Tex / APT
Gas Measurement Services
5420 LBJ Freeway, Suite 1800



Chromatograph Report

from Contract Day 12/01/2017 to Contract Day 02/28/2018

Station ID: 20310001
Analysis ID: 20310001
Analysis Name: D HEADER TO D NORTH PRIMARY
Company Name: ATMOS ENERGY-MID TEX / APT

Effective Date	Sat. HV	As Del HV	Dry HV	Meas. HV	Water Content	Webbe	Real Gravity	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	N2	CO2	O2	H2O	CO	H2S	H2	He	
01/11/2018 09:00	998.3	1016.1	1016.1	0.0	0.0	1322.1	0.5907	93.7721	3.4393	0.2372	0.0164	0.0284	0.0077	0.0075	0.0113	0.0113	0.0000	0.0000	0.0000	1.5568	0.9120	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/12/2018 09:00	1002.6	1020.5	1020.5	0.0	0.0	1324.6	0.5936	93.0529	4.0603	0.2645	0.0162	0.0296	0.0076	0.0074	0.0102	0.0102	0.0000	0.0000	0.0000	1.7505	0.7907	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/13/2018 09:00	1002.4	1020.2	1020.2	0.0	0.0	1324.0	0.5938	92.8654	4.1505	0.2632	0.0140	0.0323	0.0069	0.0076	0.0068	0.0068	0.0000	0.0000	0.0000	1.9165	0.7060	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/14/2018 09:00	999.9	1017.7	1017.7	0.0	0.0	1321.4	0.5932	93.0715	3.9645	0.2364	0.0119	0.0261	0.0057	0.0063	0.0080	0.0080	0.0000	0.0000	0.0000	1.8479	0.8137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/15/2018 09:00	998.7	1016.5	1016.5	0.0	0.0	1320.4	0.5926	93.1694	3.8593	0.2320	0.0115	0.0249	0.0056	0.0061	0.0066	0.0066	0.0000	0.0000	0.0000	1.8504	0.8277	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/16/2018 09:00	1003.5	1021.4	1021.4	0.0	0.0	1326.4	0.5930	92.9737	4.2269	0.2457	0.0129	0.0265	0.0059	0.0066	0.0066	0.0066	0.0000	0.0000	0.0000	1.8153	0.6742	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/17/2018 09:00	1004.1	1022.0	1022.0	0.0	0.0	1326.4	0.5937	92.8188	4.3654	0.2453	0.0116	0.0232	0.0051	0.0052	0.0054	0.0054	0.0000	0.0000	0.0000	1.8225	0.6922	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/18/2018 09:00	1002.6	1020.5	1020.5	0.0	0.0	1324.6	0.5935	92.9671	4.1656	0.2475	0.0138	0.0243	0.0063	0.0061	0.0079	0.0079	0.0000	0.0000	0.0000	1.7856	0.7677	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/19/2018 09:00	1001.6	1019.4	1019.4	0.0	0.0	1323.1	0.5936	93.1635	3.9057	0.2575	0.0188	0.0308	0.0094	0.0087	0.0127	0.0127	0.0000	0.0000	0.0000	1.6732	0.8869	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/20/2018 09:00	998.9	1016.7	1016.7	0.0	0.0	1322.7	0.5908	93.6900	3.5731	0.2144	0.0147	0.0239	0.0068	0.0063	0.0107	0.0107	0.0000	0.0000	0.0000	1.5511	0.8988	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/21/2018 09:00	996.6	1014.3	1014.3	0.0	0.0	1321.6	0.5890	94.0378	3.3168	0.1886	0.0119	0.0186	0.0048	0.0047	0.0077	0.0077	0.0000	0.0000	0.0000	1.4588	0.9426	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/22/2018 09:00	997.7	1015.5	1015.5	0.0	0.0	1322.1	0.5900	93.8187	3.4968	0.2048	0.0135	0.0202	0.0046	0.0040	0.0049	0.0049	0.0000	0.0000	0.0000	1.4969	0.9308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/23/2018 09:00	999.0	1016.8	1016.8	0.0	0.0	1322.2	0.5914	93.7573	3.4718	0.2405	0.0214	0.0311	0.0102	0.0089	0.0113	0.0113	0.0000	0.0000	0.0000	1.4781	0.9272	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/24/2018 09:00	999.6	1017.4	1017.4	0.0	0.0	1321.6	0.5926	93.4074	3.6927	0.2413	0.0176	0.0271	0.0086	0.0079	0.0147	0.0147	0.0000	0.0000	0.0000	1.4588	0.9426	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/25/2018 09:00	998.6	1016.4	1016.4	0.0	0.0	1320.3	0.5926	93.2696	3.7746	0.2281	0.0137	0.0216	0.0062	0.0058	0.0115	0.0115	0.0000	0.0000	0.0000	1.7814	0.8760	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/26/2018 09:00	997.5	1015.7	1015.7	0.0	0.0	1319.4	0.5926	93.1671	3.8440	0.2181	0.0109	0.0182	0.0046	0.0044	0.0090	0.0090	0.0000	0.0000	0.0000	1.8738	0.8410	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/27/2018 09:00	997.5	1015.3	1015.3	0.0	0.0	1322.7	0.5848	94.9210	2.6485	0.1838	0.0157	0.0223	0.0057	0.0049	0.0069	0.0069	0.0000	0.0000	0.0000	1.2566	0.9277	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/28/2018 09:00	996.4	1014.1	1014.1	0.0	0.0	1324.8	0.5912	93.4194	3.6687	0.2052	0.0095	0.0156	0.0033	0.0030	0.0046	0.0046	0.0000	0.0000	0.0000	1.8119	0.8541	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/29/2018 09:00	997.1	1014.9	1014.9	0.0	0.0	1319.3	0.5918	93.3578	3.7065	0.2132	0.0125	0.0193	0.0054	0.0048	0.0064	0.0064	0.0000	0.0000	0.0000	1.7954	0.8723	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/30/2018 09:00	999.5	1017.3	1017.3	0.0	0.0	1321.7	0.5924	93.0579	3.9650	0.2181	0.0107	0.0208	0.0049	0.0050	0.0071	0.0071	0.0000	0.0000	0.0000	1.9133	0.7403	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/31/2018 09:00	995.5	1013.2	1013.2	0.0	0.0	1321.5	0.5878	94.2666	3.1088	0.1874	0.0136	0.0205	0.0057	0.0052	0.0082	0.0082	0.0000	0.0000	0.0000	1.4566	0.9192	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/01/2018 09:00	993.8	1011.5	1011.5	0.0	0.0	1322.0	0.5848	94.9210	2.6485	0.1838	0.0157	0.0223	0.0057	0.0049	0.0069	0.0069	0.0000	0.0000	0.0000	1.2566	0.9277	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/02/2018 09:00	996.0	1013.7	1013.7	0.0	0.0	1324.8	0.5882	93.9473	3.4482	0.2079	0.0128	0.0217	0.0047	0.0043	0.0048	0.0048	0.0000	0.0000	0.0000	1.6226	0.7208	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/03/2018 09:00	995.6	1013.3	1013.3	0.0	0.0	1323.4	0.5863	94.5515	2.9269	0.2040	0.0177	0.0256	0.0072	0.0062	0.0070	0.0070	0.0000	0.0000	0.0000	1.4345	0.8324	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/04/2018 09:00	999.4	1017.2	1017.2	0.0	0.0	1322.6	0.5915	93.6641	3.5167	0.2532	0.0215	0.0324	0.0098	0.0086	0.0109	0.0109	0.0000	0.0000	0.0000	1.5482	0.9219	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/05/2018 09:00	999.4	1017.2	1017.2	0.0	0.0	1323.6	0.5924	93.4925	3.6672	0.2608	0.0224	0.0341	0.0107	0.0094	0.0131	0.0131	0.0000	0.0000	0.0000	1.5769	0.8998	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/06/2018 09:00	1000.9	1018.7	1018.7	0.0	0.0	1323.6	0.5919	93.2437	4.0067	0.2442	0.0159	0.0273	0.0072	0.0066	0.0098	0.0098	0.0000	0.0000	0.0000	1.7517	0.6772	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/07/2018 09:00	1002.9	1020.8	1020.8	0.0	0.0	1326.8	0.5889	94.0956	3.2631	0.2184	0.0176	0.0287	0.0080	0.0076	0.0107	0.0107	0.0000	0.0000	0.0000	1.4688	0.8708	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/08/2018 09:00	998.0	1015.8	1015.8	0.0	0.0	1323.7	0.5889	94.0956	3.2631	0.2184	0.0176	0.0287	0.0080	0.0076	0.0107	0.0107	0.0000	0.0000	0.0000	1.4688	0.8708	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/09/2018 09:00	994.8	1012.5	1012.5	0.0	0.0	1322.0	0.5859	94.7314	2.7637	0.1914	0.0165	0.0285	0.0069	0.0069	0.0102	0.0102	0.0000	0.0000	0.0000	1.3223	0.9141	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/10/2018 09:00	999.2	1017.0	1017.0	0.0	0.0	1324.5	0.5896	93.8384	3.5056	0.2274	0.0161	0.0262	0.0064	0.0057	0.0066	0.0066	0.0000	0.0000	0.0000	1.5444	0.8167	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/11/2018 09:00	1002.8	1020.7	1020.7	0.0	0.0	1326.3	0.5923	93.1919	4.0992	0.2396	0.0142	0.0264	0.0063	0.0057	0.0064	0.0064	0.0000	0.0000	0.0000	1.7720	0.6918	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/12/2018 09:00	1000.7	1020.6	1020.6	0.0	0.0	1325.1	0.5933	93.1710	3.9691	0.2702	0.0206	0.0334	0.0098	0.0087	0.0103	0.0103	0.0000	0.0000	0.0000	1.6909	0.8058	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/13/2018 09:00	1000.9	1018.7	1018.7	0.0	0.0	1323.1	0.5928	93.4942	3.6128	0.2623	0.0260	0.0382	0.0135	0.0118	0.0170	0.0170	0.0000	0.0000	0.0000	1.5802	0.9268	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/14/2018 09:00	995.4	1013.1	1013.1	0.0	0.0	1322.0	0.5873	94.4833	2.9434	0.1870	0.0158	0.0232	0.0074	0.0070	0.0126	0.0126	0.0000	0.0000	0.0000	1.3580	0.9506	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/15/2018 09:00	995.2	1012.9	1012.9	0.0	0.0	1321.9	0.5872	94.4941	2.9025	0.1951	0.0163	0.0254	0.0074	0.0071	0.0129	0.0129	0.0000	0.0000	0.0000	1.4043	0.9220</							

ATMOS Energy - Mid-Tex / APT
Gas Measurement Services
5420 LBJ Freeway, Suite 1800



Chromatograph Report

from Contract Day 12/01/2017 to Contract Day 02/28/2018

Station ID: 20310001

Analysis ID: 20310001

Analysis Name: D HEADER TO D NORTH PRIMARY

Company Name: ATMOS ENERGY - MID TEX / APT

Effective Date	Sat. HV	As Del HV	Dry HV	Meas. HV	Water Content	Wobbe	Real Gravity	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	N2	CO2	O2	H2O	CO	H2S	H2	He		
02/21/2018 09:00	994.5	1012.2	1012.2	1012.2	0.0	1321.0	0.5871	94.4351	2.9623	0.1960	0.0145	0.0221	0.0050	0.0041	0.0048	0.0048	0.0000	0.0000	0.0000	1.4044	0.9468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/22/2018 09:00	994.5	1012.2	1012.2	1012.2	0.0	1321.0	0.5871	94.4351	2.9623	0.1960	0.0145	0.0221	0.0050	0.0041	0.0048	0.0048	0.0000	0.0000	0.0000	1.4044	0.9468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/23/2018 09:00	994.5	1012.2	1012.2	1012.2	0.0	1321.0	0.5871	94.4351	2.9623	0.1960	0.0145	0.0221	0.0050	0.0041	0.0048	0.0048	0.0000	0.0000	0.0000	1.4044	0.9468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/24/2018 09:00	994.5	1012.2	1012.2	1012.2	0.0	1321.0	0.5871	94.4351	2.9623	0.1960	0.0145	0.0221	0.0050	0.0041	0.0048	0.0048	0.0000	0.0000	0.0000	1.4044	0.9468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/25/2018 09:00	994.5	1012.2	1012.2	1012.2	0.0	1321.0	0.5871	94.4351	2.9623	0.1960	0.0145	0.0221	0.0050	0.0041	0.0048	0.0048	0.0000	0.0000	0.0000	1.4044	0.9468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/26/2018 09:00	994.5	1012.2	1012.2	1012.2	0.0	1321.0	0.5871	94.4351	2.9623	0.1960	0.0145	0.0221	0.0050	0.0041	0.0048	0.0048	0.0000	0.0000	0.0000	1.4044	0.9468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/27/2018 09:00	994.5	1012.2	1012.2	1012.2	0.0	1321.0	0.5871	94.4351	2.9623	0.1960	0.0145	0.0221	0.0050	0.0041	0.0048	0.0048	0.0000	0.0000	0.0000	1.4044	0.9468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/28/2018 09:00	994.5	1012.2	1012.2	1012.2	0.0	1321.0	0.5871	94.4351	2.9623	0.1960	0.0145	0.0221	0.0050	0.0041	0.0048	0.0048	0.0000	0.0000	0.0000	1.4044	0.9468	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Flow Weighted
Average: 1000.3 1018.1 1018.1 0.0

0.5839 93.1092 3.9317 0.2454 0.0186 0.0285 0.0079 0.0069 0.0093 0.0000 1.7074 0.9315 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 1.4044 0.9468 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000



ATMOS Energy - Mid-Tex / APT
 Gas Measurement Services
 5420 LBJ Freeway, Suite 1800

3/1/2018 12:19 PM
 Mercer, Dannie

Chromatograph Report
 from Contract Day 12/01/2017 to Contract Day 02/28/2018

Station ID: 20310101
 Analysis ID: 20310101
 Analysis Name: V-HEADER TO D NORTH PRIM
 Company Name: ATMOS ENERGY - MID TEX / APT

Effective Date	Sat. HV	As Del HV	Dry HV	Meas. HV	Water Content	Mobile	Real Gravity	C1	C2	C3	IC4	N4	IC5	N5	C6	C7	C8	C9	C10	N2	CO2	O2	H2O	CO	H2S	H2	He	
12/01/2017 09:00	992.7	1010.4	1010.4	1010.4	0.0	1316.8	0.5887	94.3574	2.8473	0.2379	0.0205	0.0239	0.0058	0.0038	0.0027	0.0027	0.0000	0.0000	0.0000	1.3361	1.1620	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/02/2017 09:00	998.7	1016.5	1016.5	1016.5	0.0	1320.2	0.5929	93.3570	3.5754	0.3421	0.0200	0.0373	0.0068	0.0067	0.0028	0.0028	0.0000	0.0000	0.0000	1.7245	0.9248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/03/2017 09:00	996.3	1014.0	1014.0	1014.0	0.0	1319.3	0.5907	93.6560	3.2491	0.2876	0.0192	0.0309	0.0062	0.0056	0.0027	0.0027	0.0000	0.0000	0.0000	1.5129	1.0271	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/04/2017 09:00	994.7	1012.4	1012.4	1012.4	0.0	1319.1	0.5891	94.1324	3.0696	0.2519	0.0165	0.0276	0.0053	0.0047	0.0024	0.0024	0.0000	0.0000	0.0000	1.4742	1.0129	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/05/2017 09:00	995.5	1013.2	1013.2	1013.2	0.0	1319.5	0.5896	93.8186	3.3472	0.2359	0.0120	0.0201	0.0056	0.0032	0.0021	0.0021	0.0000	0.0000	0.0000	1.6669	0.8855	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/06/2017 09:00	996.1	1013.8	1013.8	1013.8	0.0	1320.5	0.5894	93.9797	3.2739	0.2281	0.0166	0.0236	0.0052	0.0041	0.0023	0.0028	0.0000	0.0000	0.0000	1.4982	0.9650	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/07/2017 09:00	998.7	1016.5	1016.5	1016.5	0.0	1322.3	0.5908	93.3991	3.7465	0.2413	0.0128	0.0264	0.0046	0.0041	0.0023	0.0023	0.0000	0.0000	0.0000	1.8190	0.7419	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/08/2017 09:00	1000.3	1018.1	1018.1	1018.1	0.0	1323.6	0.5918	93.4122	3.7872	0.2523	0.0158	0.0264	0.0057	0.0051	0.0053	0.0000	0.0000	0.0000	0.0000	1.6658	0.8195	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/09/2017 09:00	1003.0	1020.9	1020.9	1020.9	0.0	1325.8	0.5928	92.9775	4.1465	0.2786	0.0153	0.0313	0.0057	0.0056	0.0046	0.0046	0.0000	0.0000	0.0000	1.8858	0.6446	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/10/2017 09:00	1000.6	1018.4	1018.4	1018.4	0.0	1322.4	0.5931	92.8349	4.1745	0.2482	0.0109	0.0218	0.0056	0.0036	0.0032	0.0032	0.0000	0.0000	0.0000	2.0487	0.6477	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/11/2017 09:00	998.1	1015.9	1015.9	1015.9	0.0	1321.8	0.5907	93.1960	3.9252	0.1970	0.0078	0.0167	0.0028	0.0028	0.0017	0.0017	0.0000	0.0000	0.0000	2.0387	0.6088	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/12/2017 09:00	1001.5	1019.3	1019.3	1019.3	0.0	1326.2	0.5908	93.2678	3.9937	0.2289	0.0118	0.0240	0.0046	0.0044	0.0032	0.0032	0.0000	0.0000	0.0000	1.8732	0.5852	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/13/2017 09:00	998.8	1016.6	1016.6	1016.6	0.0	1322.7	0.5907	93.4224	3.7634	0.2229	0.0117	0.0222	0.0044	0.0041	0.0036	0.0036	0.0000	0.0000	0.0000	1.8151	0.7266	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/14/2017 09:00	999.0	1016.8	1016.8	1016.8	0.0	1321.6	0.5920	93.1651	3.8787	0.2620	0.0102	0.0222	0.0034	0.0035	0.0024	0.0024	0.0000	0.0000	0.0000	1.9246	0.7235	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/15/2017 09:00	1001.7	1019.5	1019.5	1019.5	0.0	1325.2	0.5919	93.1164	4.0212	0.2626	0.0138	0.0301	0.0055	0.0056	0.0038	0.0038	0.0000	0.0000	0.0000	1.9246	0.6130	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/16/2017 09:00	1000.4	1018.2	1018.2	1018.2	0.0	1324.6	0.5908	93.3437	3.8916	0.2309	0.0118	0.0224	0.0045	0.0041	0.0032	0.0032	0.0000	0.0000	0.0000	1.8139	0.6708	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/17/2017 09:00	1002.5	1020.4	1020.4	1020.4	0.0	1327.3	0.5911	93.2902	3.9871	0.2492	0.0149	0.0307	0.0062	0.0057	0.0039	0.0039	0.0000	0.0000	0.0000	1.8043	0.6038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/18/2017 09:00	999.3	1017.1	1017.1	1017.1	0.0	1323.6	0.5905	93.3885	3.8153	0.2274	0.0112	0.0240	0.0042	0.0039	0.0019	0.0019	0.0000	0.0000	0.0000	1.8523	0.6694	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/19/2017 09:00	999.5	1017.3	1017.3	1017.3	0.0	1324.5	0.5899	93.3761	3.8794	0.2080	0.0093	0.0202	0.0035	0.0034	0.0014	0.0014	0.0000	0.0000	0.0000	1.9102	0.5872	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/20/2017 09:00	992.1	1009.8	1009.8	1009.8	0.0	1317.9	0.5871	94.6404	2.7947	0.1877	0.0172	0.0216	0.0050	0.0037	0.0023	0.0023	0.0000	0.0000	0.0000	1.2198	1.1652	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/21/2017 09:00	991.7	1009.4	1009.4	1009.4	0.0	1318.5	0.5861	94.8164	2.6356	0.1793	0.0160	0.0198	0.0046	0.0034	0.0021	0.0021	0.0000	0.0000	0.0000	1.1850	1.1358	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/22/2017 09:00	998.6	1016.4	1016.4	1016.4	0.0	1321.2	0.5919	93.2803	3.8118	0.2428	0.0113	0.0207	0.0041	0.0039	0.0037	0.0037	0.0000	0.0000	0.0000	1.8113	0.8066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/23/2017 09:00	1000.3	1018.1	1018.1	1018.1	0.0	1323.3	0.5918	93.2047	3.6975	0.2368	0.0127	0.0287	0.0054	0.0052	0.0035	0.0035	0.0000	0.0000	0.0000	1.8277	0.7363	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/24/2017 09:00	1000.5	1018.3	1018.3	1018.3	0.0	1323.3	0.5918	93.2977	3.8729	0.2482	0.0145	0.0271	0.0058	0.0053	0.0046	0.0046	0.0000	0.0000	0.0000	1.7592	0.7893	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/25/2017 09:00	999.1	1016.9	1016.9	1016.9	0.0	1322.5	0.5912	93.2909	3.8179	0.2370	0.0143	0.0273	0.0056	0.0051	0.0036	0.0036	0.0000	0.0000	0.0000	1.9171	0.6778	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/26/2017 09:00	999.8	1017.6	1017.6	1017.6	0.0	1322.6	0.5920	93.2341	3.8778	0.2462	0.0133	0.0250	0.0053	0.0049	0.0045	0.0045	0.0000	0.0000	0.0000	1.8265	0.7583	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/27/2017 09:00	1000.1	1017.9	1017.9	1017.9	0.0	1322.7	0.5923	93.3885	3.7638	0.2569	0.0159	0.0261	0.0064	0.0057	0.0073	0.0073	0.0000	0.0000	0.0000	1.6255	0.8955	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/28/2017 09:00	1000.3	1018.1	1018.1	1018.1	0.0	1323.1	0.5921	93.1339	3.9714	0.2402	0.0118	0.0245	0.0049	0.0050	0.0054	0.0054	0.0000	0.0000	0.0000	1.8970	0.7705	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/29/2017 09:00	997.7	1015.5	1015.5	1015.5	0.0	1319.7	0.5922	93.1882	3.8438	0.2134	0.0091	0.0194	0.0042	0.0049	0.0064	0.0064	0.0000	0.0000	0.0000	1.9081	0.7982	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/30/2017 09:00	996.6	1016.4	1016.4	1016.4	0.0	1320.8	0.5922	93.1962	3.8616	0.2163	0.0111	0.0280	0.0055	0.0061	0.0067	0.0067	0.0000	0.0000	0.0000	1.8796	0.7844	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12/31/2017 09:00	1000.5	1018.3	1018.3	1018.3	0.0	1320.5	0.5920	93.2599	3.9074	0.2332	0.0126	0.0249	0.0058	0.0056	0.0070	0.0070	0.0000	0.0000	0.0000	1.7828	0.7590	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/01/2018 09:00	1001.9	1019.7	1019.7	1019.7	0.0	1325.1	0.5922	93.1398	4.0318	0.2457	0.0144	0.0281	0.0061	0.0059	0.0061	0.0061	0.0000	0.0000	0.0000	1.8378	0.6783	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/02/2018 09:00	1004.6	1023.5	1023.5	1023.5	0.0	1323.0	0.5985	92.5096	4.3672	0.3791	0.0254	0.0328																



ATMOS Energy - Mid-Tex / APT
 Gas Measurement Services
 5420 LBJ Freeway, Suite 1800

3/1/2018 12:19 PM
 Mercer, Dannie

Chromatograph Report

from Contract Day 12/01/2017 to Contract Day 02/28/2018

Station ID: 20310101
 Analysis ID: 20310101
 Analysis Name: V-HEADER TO D NORTH PRIM
 Company Name: ATMOS ENERGY - MID TEX / APT

Effective Date	Sat. HV	As Del HV	Dry HV	Meas. HV	Water Content	Wobbe	Real Gravity	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	N2	CO2	O2	H2O	CO	H2S	H2	He		
01/12/2018 09:00	999.5	1017.3	1017.3	1017.3	0.0	1322.2	0.5920	93.4426	3.6706	0.2559	0.0162	0.0302	0.0076	0.0077	0.0103	0.0103	0.0000	0.0000	0.0000	1.6928	0.8558	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/13/2018 09:00	1002.5	1020.4	1020.4	1020.4	0.0	1324.5	0.5936	93.0371	4.0762	0.2624	0.0157	0.0288	0.0074	0.0072	0.0097	0.0097	0.0000	0.0000	0.0000	1.7584	0.7874	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/14/2018 09:00	999.9	1016.8	1016.8	1016.8	0.0	1320.4	0.5930	93.8467	4.1826	0.2890	0.0142	0.0341	0.0069	0.0076	0.0076	0.0000	0.0000	0.0000	0.0000	1.9366	0.6982	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/15/2018 09:00	998.9	1016.7	1016.7	1016.7	0.0	1320.3	0.5930	93.0970	3.9031	0.2393	0.0115	0.0248	0.0056	0.0061	0.0066	0.0000	0.0000	0.0000	0.0000	1.8722	0.8273	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/16/2018 09:00	1003.9	1021.8	1021.8	1022.2	0.0	1327.0	0.5929	92.9527	4.2874	0.2446	0.0125	0.0261	0.0056	0.0056	0.0055	0.0055	0.0000	0.0000	0.0000	1.8208	0.6538	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/17/2018 09:00	1004.3	1022.2	1022.2	1022.2	0.0	1326.5	0.5938	92.7878	4.3972	0.2451	0.0114	0.0225	0.0049	0.0051	0.0053	0.0053	0.0000	0.0000	0.0000	1.8283	0.6860	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/18/2018 09:00	1002.6	1020.5	1020.5	1020.5	0.0	1324.6	0.5936	92.9824	4.1522	0.2490	0.0145	0.0253	0.0067	0.0064	0.0064	0.0084	0.0000	0.0000	0.0000	1.7740	0.7727	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/19/2018 09:00	1002.6	1020.5	1020.5	1020.5	0.0	1323.8	0.5943	92.8659	4.1927	0.2544	0.0150	0.0267	0.0074	0.0073	0.0103	0.0103	0.0000	0.0000	0.0000	1.8225	0.7876	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/20/2018 09:00	996.7	1014.4	1014.4	1014.4	0.0	1321.0	0.5907	93.8662	3.4182	0.1961	0.0125	0.0199	0.0048	0.0047	0.0053	0.0053	0.0000	0.0000	0.0000	1.5311	0.9369	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/21/2018 09:00	997.1	1014.9	1014.9	1014.9	0.0	1316.2	0.5926	93.0726	3.9033	0.2072	0.0083	0.0180	0.0038	0.0044	0.0041	0.0041	0.0000	0.0000	0.0000	1.9226	0.8578	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/22/2018 09:00	997.1	1014.9	1014.9	1014.9	0.0	1323.0	0.5894	94.1988	3.2857	0.1995	0.0158	0.0217	0.0050	0.0040	0.0032	0.0032	0.0000	0.0000	0.0000	1.3132	0.9820	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/23/2018 09:00	999.0	1016.8	1016.8	1016.8	0.0	1321.7	0.5919	93.8021	3.3494	0.2499	0.0250	0.0351	0.0129	0.0112	0.0156	0.0185	0.0000	0.0000	0.0000	1.4459	1.0314	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/24/2018 09:00	999.4	1017.2	1017.2	1017.2	0.0	1321.1	0.5929	93.3002	3.7597	0.2445	0.0166	0.0257	0.0079	0.0071	0.0118	0.0118	0.0000	0.0000	0.0000	1.7077	0.9070	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/25/2018 09:00	996.4	1014.1	1014.1	1014.1	0.0	1317.4	0.5925	93.0510	3.8929	0.2056	0.0029	0.0132	0.0029	0.0028	0.0037	0.0037	0.0000	0.0000	0.0000	2.0072	0.8094	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/26/2018 09:00	996.3	1014.0	1014.0	1014.0	0.0	1317.3	0.5926	93.0150	3.8977	0.2130	0.0073	0.0154	0.0026	0.0028	0.0027	0.0027	0.0000	0.0000	0.0000	2.0517	0.7890	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/27/2018 09:00	996.2	1014.4	1014.4	1014.4	0.0	1318.5	0.5919	93.4270	3.6087	0.1967	0.0083	0.0130	0.0022	0.0019	0.0015	0.0015	0.0000	0.0000	0.0000	1.9520	0.7986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/28/2018 09:00	995.2	1012.9	1012.9	1012.9	0.0	1317.8	0.5908	93.4709	3.6087	0.1967	0.0083	0.0130	0.0022	0.0019	0.0015	0.0015	0.0000	0.0000	0.0000	1.8206	0.8746	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/29/2018 09:00	998.4	1016.2	1016.2	1016.2	0.0	1320.1	0.5926	93.2803	3.7505	0.2272	0.0164	0.0248	0.0082	0.0073	0.0099	0.0099	0.0000	0.0000	0.0000	1.7899	0.8756	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/30/2018 09:00	1000.3	1018.1	1018.1	1018.1	0.0	1322.8	0.5923	93.0526	4.0444	0.2209	0.0108	0.0227	0.0052	0.0055	0.0060	0.0060	0.0000	0.0000	0.0000	1.9379	0.6880	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
01/31/2018 09:00	994.1	1011.8	1011.8	1011.8	0.0	1321.6	0.5882	94.7397	2.7468	0.1858	0.0166	0.0226	0.0066	0.0056	0.0068	0.0068	0.0000	0.0000	0.0000	1.2575	1.0015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/01/2018 09:00	993.9	1011.6	1011.6	1011.6	0.0	1321.9	0.5856	94.6390	2.8279	0.1985	0.0145	0.0222	0.0047	0.0041	0.0033	0.0033	0.0000	0.0000	0.0000	1.4267	0.8629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/02/2018 09:00	1000.3	1018.1	1018.1	1018.1	0.0	1327.4	0.5883	93.8089	3.6473	0.2104	0.0123	0.0217	0.0045	0.0042	0.0033	0.0033	0.0000	0.0000	0.0000	1.6725	0.6117	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/03/2018 09:00	995.1	1012.8	1012.8	1012.8	0.0	1322.7	0.5863	94.6574	2.7817	0.2133	0.0212	0.0285	0.0090	0.0076	0.0087	0.0087	0.0000	0.0000	0.0000	1.3695	0.8934	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/04/2018 09:00	996.6	1014.4	1014.4	1014.4	0.0	1323.5	0.5975	94.2859	3.1292	0.2139	0.0171	0.0259	0.0063	0.0055	0.0053	0.0053	0.0000	0.0000	0.0000	1.4617	0.8440	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/05/2018 09:00	1000.8	1018.6	1018.6	1018.6	0.0	1322.7	0.5909	93.5265	3.5889	0.2732	0.0248	0.0366	0.0110	0.0103	0.0170	0.0170	0.0000	0.0000	0.0000	1.5079	0.9819	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/06/2018 09:00	1001.6	1019.4	1019.4	1019.4	0.0	1324.0	0.5928	93.4151	3.7373	0.2644	0.0226	0.0348	0.0110	0.0097	0.0150	0.0150	0.0000	0.0000	0.0000	1.5906	0.8889	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/07/2018 09:00	1003.4	1021.3	1021.3	1021.3	0.0	1327.3	0.5920	93.1601	4.0858	0.2471	0.0156	0.0268	0.0066	0.0061	0.0078	0.0078	0.0000	0.0000	0.0000	1.7943	0.6425	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/08/2018 09:00	998.3	1016.1	1016.1	1016.1	0.0	1322.6	0.5933	93.9919	3.3275	0.2288	0.0184	0.0310	0.0083	0.0080	0.0086	0.0086	0.0000	0.0000	0.0000	1.5159	0.8567	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/09/2018 09:00	993.5	1011.2	1011.2	1011.2	0.0	1322.1	0.5850	94.6996	2.6483	0.1870	0.0159	0.0232	0.0054	0.0048	0.0048	0.0048	0.0000	0.0000	0.0000	1.2439	0.9632	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/10/2018 09:00	996.9	1014.7	1014.7	1014.7	0.0	1325.3	0.5807	93.5681	3.7367	0.2384	0.0160	0.0272	0.0066	0.0060	0.0065	0.0065	0.0000	0.0000	0.0000	1.6273	0.7707	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/11/2018 09:00	1000.2	1020.6	1020.6	1020.6	0.0	1326.5	0.5926	93.0353	4.1871	0.2412	0.0138	0.0261	0.0060	0.0055	0.0053	0.0053	0.0000	0.0000	0.0000	1.8033	0.6714	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/12/2018 09:00	1002.7	1020.6	1020.6	1020.6	0.0	1324.7	0.5936	93																					



ATMOS Energy - Mid-Tex / APT
 Gas Measurement Services
 5420 LBJ Freeway, Suite 1800

3/1/2018 12:19 PM
 Mercer, Dannie

Chromatograph Report

from Contract Day 12/01/2017 to Contract Day 02/28/2018

Station ID: 20310101
 Analysis ID: 20310101
 Analysis Name: V HEADER TO D NORTH PRIM
 Company Name: ATMOS ENERGY - MID-TEX / APT

Effective Date	Sat HV	As Del HV	Dry HV	Meas. HV	Water Content	Wobbe	Real Gravity	C1	C2	C3	IC4	NC4	IC5	NC5	C6	C7	C8	C9	C10	N2	CO2	O2	H2O	CO	H2S	H2	He		
02/21/2018 09:00	994.7	1012.4	1012.4	1012.4	0.0	1318.4	0.5897	93.7952	3.3830	0.1974	0.0107	0.0181	0.0032	0.0026	0.0012	0.0012	0.0000	0.0000	0.0000	1.6558	0.9317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/22/2018 09:00	994.7	1012.4	1012.4	1012.4	0.0	1318.4	0.5897	93.7952	3.3830	0.1974	0.0107	0.0181	0.0032	0.0026	0.0012	0.0012	0.0000	0.0000	0.0000	1.6558	0.9317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/23/2018 09:00	994.7	1012.4	1012.4	1012.4	0.0	1318.4	0.5897	93.7952	3.3830	0.1974	0.0107	0.0181	0.0032	0.0026	0.0012	0.0012	0.0000	0.0000	0.0000	1.6558	0.9317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/24/2018 09:00	994.7	1012.4	1012.4	1012.4	0.0	1318.4	0.5897	93.7952	3.3830	0.1974	0.0107	0.0181	0.0032	0.0026	0.0012	0.0012	0.0000	0.0000	0.0000	1.6558	0.9317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/25/2018 09:00	994.7	1012.4	1012.4	1012.4	0.0	1318.4	0.5897	93.7952	3.3830	0.1974	0.0107	0.0181	0.0032	0.0026	0.0012	0.0012	0.0000	0.0000	0.0000	1.6558	0.9317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/26/2018 09:00	994.7	1012.4	1012.4	1012.4	0.0	1318.4	0.5897	93.7952	3.3830	0.1974	0.0107	0.0181	0.0032	0.0026	0.0012	0.0012	0.0000	0.0000	0.0000	1.6558	0.9317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/27/2018 09:00	994.7	1012.4	1012.4	1012.4	0.0	1318.4	0.5897	93.7952	3.3830	0.1974	0.0107	0.0181	0.0032	0.0026	0.0012	0.0012	0.0000	0.0000	0.0000	1.6558	0.9317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
02/28/2018 09:00	994.7	1012.4	1012.4	1012.4	0.0	1318.4	0.5897	93.7952	3.3830	0.1974	0.0107	0.0181	0.0032	0.0026	0.0012	0.0012	0.0000	0.0000	0.0000	1.6558	0.9317	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Flow Weighted Average:	999.6	1017.4	1017.4	1017.4	0.0	0.5918	83.3686	3.7905	0.2400	0.0146	0.0256	0.0061	0.0057	0.0066	0.0066	0.0000	0.0000	0.0000	1.7271	0.8186	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	