

1REPORT R699660
09/20/2018

PUC_Reports_Q4-2018.txt
PUBLIC SERVICE COMPANY OF COLORADO

DATE RUN:

10:55:21

BTU ZONES ENERGY FACTORS

TIME RUN:

FOURTH QUARTER, 2018					
- HEATING VALUE (BTU/CF, 14.73 PSIA, 60 F, DRY) -					
BTU ZONE	JUNE	JULY	AUGUST	QTR AVG	ENERGY FACTOR
BRUSH	1069.5	1058.7	1063.3	1063.8	1.0638
DENVER	1052.8	1047.3	1054.0	1051.4	1.0514
GRAND JUNCTION	1039.7	1028.5	1018.0	1028.7	1.0287
GREASEWOOD	1057.7	1040.3	1038.3	1045.4	1.0454
MERINO	1066.5	1066.7	1069.5	1067.6	1.0676
MOUNTAIN	1005.0	1041.4	1002.9	1016.4	1.0164
NORTHERN	1107.0	1106.1	1113.8	1109.0	1.1090
PUEBLO	1055.7	1053.4	1057.9	1055.7	1.0557
RIFLE-VAIL	1039.4	1038.7	1035.6	1037.9	1.0378
SOUTHERN	970.3	970.2	970.0	970.2	0.9702
STERLING	996.2	998.0	999.5	997.9	0.9979

The numbers under the "Energy Factor" column are incorporated in the tariffs but are not calculated directly from the numbers under the "Qtr Avg" column.
The "Qtr Avg" numbers are used solely to validate the "Energy Factor" calculation, and there may be slight differences between the last digits of the numbers under the "Energy Factor" and the "Qtr Avg" columns.
The "Energy Factor" for each Btu Zone is calculated from data in the attached work papers by (1) averaging the monthly gas compositions for the measurement quarter*, (2) calculating the heating value corresponding to the resulting quarterly average composition, and (3) taking one thousandth of the resulting average heating value. The heating values under the "Qtr Avg" column are the averages of the three monthly average heating values in the measurement quarter. Each monthly heating value is calculated from the average gas composition in a given month.**
*The measurement quarter is the three months immediately to the left of "Qtr Avg" column on this summary page
**For Zones with multiple measurement sites, the average gas composition is weighted according to the corresponding gas volumes.

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PUBLIC SERVICE COMPANY OF COLORADO

DATE RUN:

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BTU ZONE SUMMARY HEATING VALUES REPORT

TIME RUN:

FOURTH QUARTER, 2018							
BTU ZONE: BRUSH							
SITE ID	SAMPLING SITE NAME	NET FLOW	HV (BTU/CF, 14.73 PSIA, 60 F, DRY)			VOLUME (MCF AT 14.73 PSIA)	
			JUNE	JULY	AUGUST	JUNE	JULY
AUGUST 0 CIGBRU 7,805	CIG BRUSH TOWN BORDER	IN	1069.5	1058.7	1063.3	7,800	7,378
0 7,805	VOLUME WEIGHTED HEATING VALUE:		1069.5	1058.7	1063.3	TOTAL VOL:	7,800 7,378
0	QUARTER AVERAGE HEATING VALUE:		1063.8				

DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.

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09/20/2018

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PUBLIC SERVICE COMPANY OF COLORADO
2018

DATE RUN:
TIME RUN:

10:55:21

0 ZONE NAME: BRUSH

MAX	MTH:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		AVG		MIN	
-----															-----		-----	
1.881	CO2	1.881	1.630	1.734	1.707	1.489	1.470	1.323	1.397						1.678		1.323	
0.000	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000						0.000		0.000	
2.021	NITROGEN	1.024	1.522	1.301	1.262	1.591	1.787	2.021	1.905						1.384		1.024	
89.082	METHANE	85.012	87.188	86.134	86.142	87.660	88.125	89.082	88.656						86.561		85.012	
10.068	ETHANE	10.068	7.376	8.475	8.907	7.313	6.478	5.637	6.064						8.252		5.637	
1.758	PROPANE	1.525	1.721	1.758	1.458	1.430	1.550	1.389	1.399						1.583		1.389	
0.170	I-BUTANE	0.139	0.170	0.168	0.142	0.148	0.165	0.156	0.162						0.155		0.139	
0.294	N-BUTANE	0.245	0.278	0.294	0.252	0.250	0.279	0.251	0.268						0.265		0.245	
0.058	I-PENTANE	0.041	0.048	0.052	0.048	0.047	0.057	0.054	0.058						0.048		0.041	
0.044	N-PENTANE	0.026	0.026	0.039	0.039	0.035	0.044	0.040	0.035						0.032		0.026	
0.056	HEXANES+	0.039	0.041	0.045	0.043	0.037	0.045	0.047	0.056						0.042		0.037	
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00						100.00			
-----															-----		-----	
3.344	N2/O2 %INERTS	2.905	3.152	3.035	2.969	3.080	3.257	3.344	3.302						3.062		2.905	
	REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)																	
40.6	VOL(MMCF)	40.6	37.5	26.0	20.8	10.7	7.8	7.4	7.8						19.8		7.4	

PUC_Reports_Q4-2018.txt										
HIGH BTU/CF 1097.7	1097.7	1079.1	1090.4	1088.0	1073.9	1069.5	1058.7	1063.3		1084.3 1058.7
LOW BTU/CF 992.1	992.1	974.8	985.2	983.1	969.9	965.8	955.8	960.1		979.6 955.8
SPEC GRAV 0.6491	0.6491	0.6385	0.6450	0.6426	0.6336	0.6326	0.6258	0.6288		0.6411 0.6258
WOBBE INDEX 1362.5	1362.5	1350.5	1357.7	1357.2	1349.1	1344.7	1338.3	1340.9		1354.2 1338.3
LIQ GAL/MCF 0.683	0.583	0.661	0.683	0.577	0.566	0.624	0.566	0.580		0.617 0.566

PUBLIC SERVICE COMPANY OF COLORADO										
2018										
VOLUME WEIGHTED DATE RUN:										
TIME RUN:										
REPORT R69629S1 09/20/2018										
10:55:22										
0										
SITE ID: CIGBRU SITE NAME: CIG BRUSH TOWN BORDER										
TARGET WOBBE: 1359										
AIR BLENDED: N										
DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH										
DATA SOURCE: CIG										
MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC AVG MIN										
MAX										
CO2 1.881 1.630 1.734 1.707 1.489 1.470 1.323 1.397										
1.881										
OXYGEN 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000										
0.000										
NITROGEN 1.024 1.522 1.301 1.262 1.591 1.787 2.021 1.905										
2.021										
METHANE 85.012 87.188 86.134 86.142 87.660 88.125 89.082 88.656										
89.082										
ETHANE 10.068 7.376 8.475 8.907 7.313 6.478 5.637 6.064										
10.068										
PROPANE 1.525 1.721 1.758 1.458 1.430 1.550 1.389 1.399										
1.758										
I-BUTANE 0.139 0.170 0.168 0.142 0.148 0.165 0.156 0.162										
0.170										
N-BUTANE 0.245 0.278 0.294 0.252 0.250 0.279 0.251 0.268										
0.294										
I-PENTANE 0.041 0.048 0.052 0.048 0.047 0.057 0.054 0.058										
0.058										
N-PENTANE 0.026 0.026 0.039 0.039 0.035 0.044 0.040 0.035										
0.044										
HEXANES+ 0.039 0.041 0.045 0.043 0.037 0.045 0.047 0.056										

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0.056

TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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100.00		
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N2/O2 %INERTS 3.344	2.905	3.152	3.035	2.969	3.080	3.257	3.344	3.302
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3.062	2.905
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REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL(MMCF) 40.6	40.6	37.5	26.0	20.8	10.7	7.8	7.4	7.8
HIGH BTU/CF 1097.7	1097.7	1079.1	1090.4	1088.0	1073.9	1069.5	1058.7	1063.3
LOW BTU/CF 992.1	992.1	974.8	985.2	983.1	969.9	965.8	955.8	960.1
SPEC GRAV 0.6491	0.6491	0.6385	0.6450	0.6426	0.6336	0.6326	0.6258	0.6288
WOBBE INDEX 1362.5	1362.5	1350.5	1357.7	1357.2	1349.1	1344.7	1338.3	1340.9
%DIF 0.3	0.3	-0.6	-0.1	-0.1	-0.7	-1.1	-1.5	-1.3
LIQ GAL/MCF 0.683	0.583	0.661	0.683	0.577	0.566	0.624	0.566	0.580

19.8	7.4
1084.3	1058.7
979.6	955.8
0.6411	0.6258
1354.2	1338.3
-0.3	-1.5
0.617	0.566

H2O LB/MMCF
*
H2S PPMV
*
O2 PPMV
*

*	*
*	*
*	*

0
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09/20/2018
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PUBLIC SERVICE COMPANY OF COLORADO
BTU ZONE SUMMARY HEATING VALUES REPORT

FOURTH QUARTER, 2018

VOLUME WEIGHTED
DATE RUN:
TIME RUN:

PUC_Reports_Q4-2018.txt								
BTU ZONE: DENVER			HV	(BTU/CF, 14.73 PSIA, 60 F, DRY)			VOLUME (MCF AT 14.73 PSIA)	
SITE ID	SAMPLING SITE NAME	NET FLOW		JUNE	JULY	AUGUST	JUNE	JULY
AMSO	WGR SOUTH (WATTENBERG)	IN		0.0	0.0	0.0	0	0
CIGEDE	CIG EAST DENVER CONTROL	IN		1053.0	1051.0	1055.8	886,772	945,763
CIGMES	CIG MESA PURCHASE POINT	IN		1053.0	1050.4	1055.1	6,328	6,515
CIGQUN	CIG EAST QUINCY	IN		1057.1	0.0	0.0	17,762	0
CIGWHP	CIG WHISPERING PINES	IN		1055.5	1052.4	1057.4	666,584	612,719
DERH	HIGH PLAINS DERBY LAKE	IN		1099.1	0.0	0.0	1	0
MARE	MARSHALL CS EAST	IN		1050.5	0.0	0.0	4,081	0
MARW	MARSHALL CS WEST	OUT		1050.9	1040.4	1051.8	-94,856	-72,946
YONO	YOSEMITE NORTH OUTLET	IN		1048.6	1042.4	0.0	281,311	225,255
YOSO	YOSEMITE SOUTH OUTLET	IN		1052.3	1044.0	1051.8	1,870,231	1,908,515
VOLUME WEIGHTED HEATING VALUE:				1052.8	1047.2	1054.1	TOTAL VOL:	3,638,214
QUARTER AVERAGE HEATING VALUE:				1051.4				3,625,821

1REPORT R69629Z0
 09/20/2018
 DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.
DATE RUN:

2018														TIME RUN:
ZONE NAME: DENVER														
MAX	MTH:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG MIN
CO2	1.929	1.911	1.936	1.904	1.875	1.920	1.921	2.028						1.923 1.875
OXYGEN	1.150	1.103	1.169	1.166	1.164	1.199	1.185	1.243						1.153 1.103
NITROGEN	4.978	4.904	5.153	5.185	5.194	5.406	5.128	5.355						5.078 4.904
METHANE	78.707	79.021	78.143	78.480	78.907	78.117	78.747	77.655						78.595 77.655

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12.011	ETHANE	11.731	11.587	12.011	11.527	10.668	10.995	11.273	11.430		11.569	10.668
1.856	PROPANE	1.187	1.165	1.248	1.352	1.691	1.856	1.372	1.783		1.319	1.165
0.135	I-BUTANE	0.088	0.086	0.093	0.105	0.134	0.135	0.099	0.131		0.099	0.086
0.276	N-BUTANE	0.173	0.167	0.185	0.213	0.276	0.276	0.202	0.274		0.197	0.167
0.041	I-PENTANE	0.024	0.023	0.025	0.029	0.039	0.040	0.030	0.041		0.028	0.023
0.042	N-PENTANE	0.023	0.022	0.025	0.029	0.038	0.040	0.030	0.042		0.027	0.022
0.018	HEXANES+	0.010	0.011	0.012	0.010	0.014	0.016	0.013	0.018		0.012	0.010
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00	

4.509	N2/O2	4.329	4.446	4.408	4.447	4.462	4.509	4.327	4.308		4.403	4.308
8.626	%INERTS	8.057	7.918	8.258	8.255	8.233	8.525	8.234	8.626		8.154	7.918
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)												

3625.8	VOL(MMCF)	18365.0	18161.1	12647.3	9562.5	5355.4	3638.2	3625.8	3653.5		9376.1	
1054.0	HIGH BTU/CF	1048.4	1048.2	1050.0	1049.0	1050.6	1052.8	1047.3	1054.0		1049.3	1047.3
953.2	LOW BTU/CF	947.8	947.5	949.3	948.4	949.9	952.0	946.8	953.2		948.6	946.8
0.6844	SPEC GRAV	0.6741	0.6723	0.6773	0.6765	0.6771	0.6819	0.6753	0.6844		0.6757	0.6723
1278.4	WOBBE INDEX	1276.9	1278.4	1275.8	1275.4	1276.8	1274.9	1274.4	1274.0		1276.5	1274.0
0.678	LIQ GAL/MCF	0.431	0.423	0.456	0.499	0.630	0.678	0.501	0.658		0.483	0.423

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09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

2018

VOLUME WEIGHTED
DATE RUN:
TIME RUN:

10:55:22

SITE ID: AMSO

DATA TYPE: AVG CALCULATED GAS COMPOSITION

TARGET WOBBE: 1207

DATA SOURCE: HPG BRIGHTON

AIR BLENDED: Y

MTH: JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

AVG

MI

MAX

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														*		*	
SPEC GRAV														*		*	
WOBBE INDEX														*		*	
%DIF														*		*	
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0														*		*	
LIQ GAL/MCF														*		*	
-----														-----		-----	
H2O LB/MMCF														*		*	
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0														*		*	
H2S PPMV														*		*	
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0														*		*	
O2 PPMV														*		*	
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0														*		*	
-----														-----		-----	
0													STRAIGHT AVERAGED				
1REPORT R69629S1													DATE RUN:				
09/20/2018																	
10:55:22													TIME RUN:				
0																	
SITE ID: CIGEDE													ONLINE GAS CHROMATOGRAPH				
SITE NAME: CIG EAST DENVER CONTROL																	
TARGET WOBBE: 1275																	
AIR BLENDED: Y																	
MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC														AVG		MIN	
MAX																	
-----														-----		-----	
CO2														1.985		1.866	
2.027														1.302		1.234	
OXYGEN														5.579		5.321	
1.580														77.414		75.946	
NITROGEN														11.035		10.705	
6.247														2.073		1.976	
METHANE																	
78.094																	
ETHANE																	
11.513																	
PROPANE																	
2.212																	

PUC_Reports_Q4-2018.txt									
I-BUTANE 0.189	0.156	0.155	0.159	0.164	0.189	0.186	0.169	0.185	0.165 0.155
N-BUTANE 0.398	0.308	0.303	0.319	0.335	0.394	0.391	0.358	0.398	0.334 0.303
I-PENTANE 0.061	0.042	0.041	0.043	0.047	0.056	0.058	0.054	0.061	0.047 0.041
N-PENTANE 0.063	0.041	0.040	0.042	0.046	0.056	0.058	0.055	0.063	0.046 0.040
HEXANES+ 0.029	0.018	0.019	0.016	0.019	0.022	0.025	0.025	0.029	0.020 0.016
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
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N2/O2 4.593	4.203	4.331	4.363	4.411	4.477	4.593	4.044	3.848	4.292 3.848
%INERTS 9.643	8.614	8.591	8.749	8.839	8.992	9.563	9.265	9.643	8.866 8.591
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REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)									
----- ----- ----- -----									
VOL(MMCF) 3346.8	3346.8	3209.4	2731.3	2327.8	1196.7	886.8	945.8	1241.3	1985.7 886.8
HIGH BTU/CF 1057.6	1055.8	1054.1	1057.6	1056.3	1056.7	1053.0	1051.0	1055.8	1055.5 1051.0
LOW BTU/CF 956.6	954.8	953.2	956.6	955.4	955.8	952.6	950.6	955.2	954.6 950.6
SPEC GRAV 0.6967	0.6855	0.6840	0.6880	0.6878	0.6893	0.6936	0.6890	0.6967	0.6878 0.6840
WOBBE INDEX 1275.2	1275.2	1274.5	1275.1	1273.7	1272.8	1264.4	1266.2	1264.9	1272.7 1264.4
%DIF 0.0	0.0	0.0	0.0	-0.1	-0.2	-0.8	-0.7	-0.8	-0.2 -0.8
LIQ GAL/MCF 0.845	0.757	0.749	0.757	0.754	0.845	0.833	0.762	0.839	0.773 0.749
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H2O LB/MMCF *									* *
H2S PPMV *									* *
O2 PPMV *									* *

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1REPORT R69629S1
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

2018

VOLUME WEIGHTED
DATE RUN:

TIME RUN:

10:55:22

0

SITE ID: CIGMES

SITE NAME: CIG MESA PURCHASE POINT

DATA TYPE: AVG

ONLINE GAS CHROMATOGRAPH

TARGET WOBBE: 1207

DATA SOURCE: CIG

AIR BLENDED: Y

0

MTH: JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

| AVG

| MIN

MAX

CO2	1.998	2.003	1.994	1.932	1.855	1.963	1.907	1.983						
2.003 OXYGEN	1.265	1.234	1.250	1.258	1.303	1.370	1.454	1.582						
1.582 NITROGEN	5.340	5.350	5.456	5.565	5.832	6.277	5.925	6.085						
6.277 METHANE	77.925	78.146	77.384	77.431	77.332	76.349	77.099	75.970						
78.146 ETHANE	10.836	10.680	11.325	11.239	10.750	11.116	10.981	11.493						
11.493 PROPANE	2.083	2.042	2.032	1.978	2.218	2.203	1.975	2.164						
2.218 I-BUTANE	0.156	0.154	0.156	0.162	0.190	0.190	0.171	0.185						
0.190 N-BUTANE	0.308	0.302	0.312	0.333	0.396	0.400	0.364	0.399						
0.400 I-PENTANE	0.041	0.041	0.042	0.047	0.057	0.059	0.055	0.061						
0.061 N-PENTANE	0.040	0.039	0.041	0.046	0.056	0.060	0.056	0.063						
0.063 HEXANES+	0.008	0.009	0.008	0.009	0.011	0.013	0.013	0.015						
0.015 TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00						

4.582 N2/O2	4.221	4.335	4.365	4.424	4.476	4.582	4.075	3.846					
%INERTS	8.603	8.587	8.700	8.755	8.990	9.610	9.286	9.650					

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VOL (MMCF)	43.2	42.0	29.9	20.1	9.7	6.3	6.5	6.1		20.5	6.1
HIGH BTU/CF	1055.1	1053.3	1057.3	1056.2	1056.4	1053.0	1050.4	1055.1		1055.0	1050.4
LOW BTU/CF	954.2	952.5	956.3	955.3	955.6	952.6	950.0	954.6		954.2	950.0
SPEC GRAV	0.6848	0.6835	0.6871	0.6867	0.6890	0.6942	0.6888	0.6963		0.6863	0.6835
WOBBE INDEX	1275.0	1274.0	1275.5	1274.6	1272.7	1263.8	1265.6	1264.4		1273.5	1263.8
%DIF	5.6	5.6	5.7	5.6	5.4	4.7	4.9	4.8		5.5	4.7
LIQ GAL/MCF	0.755	0.741	0.743	0.740	0.844	0.844	0.760	0.834		0.759	0.740

H2O	LB/MMCF		*	*
H2S	PPMV		*	*
O2	PPMV		*	*

REPORT R69629S1 PUBLIC SERVICE COMPANY OF COLORADO												VOLUME WEIGHTED			
09/20/2018												DATE RUN:			
10:55:22												TIME RUN:			
0												2018			
0												ONLINE GAS CHROMATOGRAPH			
0												DATA TYPE: AVG			
0												DATA SOURCE: CIG			
0												AIR BLENDED: Y			
0												TARGET WOBBE: 1207			
0												SIT ID: CIGQUN			
0												SIT NAME: CIG EAST QUINCY			
0												MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC			
0												MAX			
0												----- ----- ----- -----			
0												2.032			
0												CO2 2.031 2.032 1.998 1.966 1.860 1.869 0.000 0.000			
0												2.002 1.860			

PUC_Reports_Q4-2018.txt												
1.472	OXYGEN	1.197	1.119	1.199	1.232	1.313	1.472	0.000	0.000		1.190	1.119
5.963	NITROGEN	5.295	5.183	5.402	5.557	5.684	5.963	0.000	0.000		5.355	5.183
78.114	METHANE	77.791	78.114	77.303	77.152	77.294	76.613	0.000	0.000		77.652	76.613
11.486	ETHANE	10.995	10.895	11.486	11.402	10.873	11.059	0.000	0.000		11.112	10.873
2.327	PROPANE	2.125	2.095	2.051	2.071	2.257	2.327	0.000	0.000		2.105	2.051
0.192	I-BUTANE	0.159	0.158	0.156	0.168	0.192	0.186	0.000	0.000		0.162	0.156
0.399	N-BUTANE	0.312	0.306	0.312	0.344	0.399	0.387	0.000	0.000		0.322	0.306
0.057	I-PENTANE	0.042	0.042	0.042	0.048	0.057	0.055	0.000	0.000		0.044	0.042
0.056	N-PENTANE	0.041	0.040	0.040	0.047	0.056	0.054	0.000	0.000		0.043	0.040
0.016	HEXANES+	0.012	0.016	0.011	0.013	0.015	0.015	0.000	0.000		0.013	0.011
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	0.00	0.00		100.00	
4.632	N2/O2	4.424	4.632	4.505	4.511	4.329	4.051				4.503	4.051
9.304	%INERTS	8.523	8.334	8.599	8.755	8.857	9.304	0.000	0.000		8.547	8.334
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)												
906.0	VOL(MMCF)	906.0	900.1	602.8	457.2	235.2	17.8	.0	.0		519.9	17.8
1060.0	HIGH BTU/CF	1058.2	1058.8	1060.0	1059.5	1059.7	1057.1				1059.0	1057.1
958.8	LOW BTU/CF	957.0	957.6	958.8	958.4	958.6	956.3				957.8	956.3
0.6931	SPEC GRAV	0.6860	0.6843	0.6878	0.6890	0.6898	0.6931				0.6866	0.6843
1279.9	WOBBE INDEX	1277.6	1279.9	1278.1	1276.4	1275.9	1269.7				1278.0	1269.7
6.0	%DIF	5.8	6.0	5.9	5.7	5.7	5.2	0.0	0.0		5.9	5.2
0.870	LIQ GAL/MCF	0.771	0.762	0.749	0.774	0.858	0.870				0.772	0.749

-----										-----	-----	-----
H2O LB/MMCF								0.0	0.0		*	*
* H2S PPMV								0.0	0.0		*	*
* O2 PPMV								0.0	0.0		*	*
-----										-----	-----	-----
0										VOLUME WEIGHTED		
1REPORT R69629S1										DATE RUN:		
09/20/2018												
										TIME RUN:		
10:55:23												
0												
SITE ID: CIGWHP												
SITE NAME: CIG WHISPERING PINES												
TARGET WOBBE: 1207												
AIR BLENDED: Y												
MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC												
MAX										AVG	MIN	
-----										-----	-----	-----
CO2	2.031	2.025	2.012	1.960	1.856	1.951	1.902	1.977		1.993	1.856	
2.031 OXYGEN	1.130	1.066	1.167	1.141	1.159	1.204	1.120	1.064		1.122	1.064	
1.204 NITROGEN	5.396	5.380	5.542	5.721	5.888	6.356	6.163	6.505		5.616	5.380	
6.505 METHANE	77.768	78.013	77.199	77.202	77.295	76.319	77.109	75.954		77.468	75.954	
78.013 ETHANE	10.989	10.846	11.407	11.313	10.844	11.211	11.043	11.585		11.082	10.844	
11.585 PROPANE	2.126	2.113	2.104	2.055	2.249	2.238	2.006	2.193		2.122	2.006	
2.249 I-BUTANE	0.158	0.158	0.160	0.166	0.190	0.190	0.171	0.185		0.165	0.158	
0.190 N-BUTANE	0.307	0.303	0.314	0.334	0.391	0.395	0.358	0.393		0.326	0.303	
0.395 I-PENTANE	0.042	0.041	0.042	0.047	0.057	0.059	0.055	0.061		0.046	0.041	
0.061 N-PENTANE	0.040	0.040	0.041	0.046	0.056	0.059	0.055	0.062		0.045	0.040	
0.062 HEXANES+	0.013	0.015	0.012	0.015	0.015	0.018	0.018	0.021		0.015	0.012	

PUC_Reports_Q4-2018.txt

0.021

TOTAL 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00

100.00

N2/O2 4.775 5.047 4.749 5.014 5.080 5.279 5.503 6.114
 6.114 %INERTS 8.557 8.471 8.721 8.822 8.903 9.511 9.185 9.546
 9.546

5.008 4.749

8.732 8.471

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL(MMCF) 3567.4 3660.6 2065.5 1738.9 983.2 666.6 612.7 593.1
 3660.6 HIGH BTU/CF 1057.7 1057.2 1059.2 1057.6 1058.5 1055.5 1052.4 1057.4
 1059.2 LOW BTU/CF 956.6 956.1 958.0 956.6 957.5 954.8 951.9 956.7
 958.0 SPEC GRAV 0.6859 0.6846 0.6886 0.6883 0.6893 0.6944 0.6885 0.6959
 0.6959 WOBBE INDEX 1277.1 1277.7 1276.4 1274.8 1274.9 1266.6 1268.3 1267.6
 1277.7 %DIF 5.8 5.9 5.7 5.6 5.6 4.9 5.1 5.0
 5.9 LIQ GAL/MCF 0.769 0.765 0.766 0.766 0.852 0.853 0.769 0.842
 0.853

1736.0 593.1

1057.5 1052.4

956.5 951.9

0.6874 0.6846

1275.4 1266.6

5.7 4.9

0.780 0.765

H2O LB/MMCF
 *
 H2S PPMV
 *
 O2 PPMV
 *

*

*

*

0
 1REPORT R69629S1
 09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

2018

VOLUME WEIGHTED
 DATE RUN:

TIME RUN:

10:55:23

0	SITE ID: DERH		PUC_Reports_Q4-2018.txt SITE NAME: HIGH PLAINS DERBY LAKE TARGET WOBBE: 1207 AIR BLENDED: N							DATA TYPE: AVG DATA SOURCE: CIG		ONLINE GAS CHROMATOGRAPH						
0	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		AVG		MIN		
MAX																		
-----														-----		-----		
	CO2	1.948	1.924	1.891	1.971	2.017	2.048	0.000	0.000						1.927		1.891	
2.048																		
	OXYGEN	1.075	1.042	1.071	0.603	0.021	0.020	0.000	0.000						1.061		0.020	
1.075																		
	NITROGEN	4.588	4.466	4.685	3.144	0.602	0.543	0.000	0.000						4.558		0.543	
4.685																		
	METHANE	78.811	79.040	79.050	81.131	83.877	83.780	0.000	0.000						78.951		78.811	
83.877																		
	ETHANE	13.318	13.339	12.902	12.525	12.898	13.067	0.000	0.000						13.243		12.525	
13.339																		
	PROPANE	0.196	0.141	0.281	0.421	0.360	0.354	0.000	0.000						0.192		0.141	
0.421																		
	I-BUTANE	0.012	0.009	0.020	0.034	0.029	0.028	0.000	0.000						0.012		0.009	
0.034																		
	N-BUTANE	0.027	0.018	0.047	0.078	0.068	0.067	0.000	0.000						0.027		0.018	
0.078																		
	I-PENTANE	0.005	0.005	0.010	0.017	0.018	0.017	0.000	0.000						0.006		0.005	
0.018																		
	N-PENTANE	0.006	0.005	0.012	0.020	0.021	0.020	0.000	0.000						0.007		0.005	
0.021																		
	HEXANES+	0.014	0.011	0.031	0.056	0.089	0.056	0.000	0.000						0.016		0.011	
0.089																		
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	0.00	0.00						100.00			
-----														-----		-----		
	N2/O2	4.268	4.286	4.374	5.214	28.667	27.150								4.298		4.268	
28.667																		
	%INERTS	7.611	7.432	7.647	5.718	2.640	2.611	0.000	0.000						7.547		2.611	
7.647																		
-----														-----		-----		
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)														-----		-----		
	VOL(MMCF)	3363.7	3183.4	1613.4	6.6	.5	.0	.0	.0						1633.5		.0	
3363.7																		
	HIGH BTU/CF	1044.0	1044.7	1043.4	1064.7	1098.9	1099.1								1044.2		1043.4	
1099.1																		

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LOW BTU/CF	943.5	944.2	942.9	962.2	993.1	993.3							943.7 942.9
993.3													
SPEC GRAV	0.6664	0.6648	0.6661	0.6591	0.6477	0.6476							0.6657 0.6476
0.6664													
WOBBE INDEX	1278.9	1281.3	1278.4	1311.4	1365.4	1365.8							1279.8 1278.4
1365.8													
%DIF	6.0	6.2	5.9	8.6	13.1	13.2	0.0	0.0					6.1 5.9
13.2													
LIQ GAL/MCF	0.076	0.056	0.120	0.188	0.181	0.164							0.077 0.056
0.188													

H2O LB/MMCF							0.0	0.0					* *
* H2S PPMV							0.0	0.0					* *
* O2 PPMV							0.0	0.0					* *
*													

0														VOLUME WEIGHTED
1	REPORT R69629S1													DATE RUN:
09/20/2018														
10:55:23														TIME RUN:

0	SITE ID: MARE													
		SITE NAME: MARSHALL CS EAST												
		TARGET WOBBE: 1207												
		AIR BLENDED: Y												
0	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG MIN	
MAX														

CO2	0.000	0.000	0.000	0.000	0.000	1.926	0.000	0.000					1.926 1.926
1.926													
OXYGEN	0.000	0.000	0.000	0.000	0.000	1.252	0.000	0.000					1.252 1.252
1.252													
NITROGEN	0.000	0.000	0.000	0.000	0.000	5.029	0.000	0.000					5.029 5.029
5.029													
METHANE	0.000	0.000	0.000	0.000	0.000	78.783	0.000	0.000					78.783 78.783
78.783													
ETHANE	0.000	0.000	0.000	0.000	0.000	10.900	0.000	0.000					10.900 10.900
10.900													
PROPANE	0.000	0.000	0.000	0.000	0.000	1.711	0.000	0.000					1.711 1.711

PUC_Reports_Q4-2018.txt									
1.711									
I-BUTANE	0.000	0.000	0.000	0.000	0.000	0.107	0.000	0.000	0.107 0.107
0.107									
N-BUTANE	0.000	0.000	0.000	0.000	0.000	0.215	0.000	0.000	0.215 0.215
0.215									
I-PENTANE	0.000	0.000	0.000	0.000	0.000	0.031	0.000	0.000	0.031 0.031
0.031									
N-PENTANE	0.000	0.000	0.000	0.000	0.000	0.032	0.000	0.000	0.032 0.032
0.032									
HEXANES+	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.014 0.014
0.014									
TOTAL	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00
----- ----- ----- -----									
N2/O2						4.017			4.017 4.017
4.017									
%INERTS	0.000	0.000	0.000	0.000	0.000	8.207	0.000	0.000	8.207 8.207
8.207									
----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)									
----- ----- ----- -----									
VOL (MMCF)	.0	.0	.0	.0	.0	4.1	.0	.0	4.1 4.1
4.1									
HIGH BTU/CF						1050.5			1050.5 1050.5
1050.5									
LOW BTU/CF						949.8			949.8 949.8
949.8									
SPEC GRAV						0.6772			0.6772 0.6772
0.6772									
WOBBE INDEX						1276.5			1276.5 1276.5
1276.5									
%DIF	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	5.8 5.8
5.8									
LIQ GAL/MCF						0.603			0.603 0.603
0.603									
----- ----- ----- -----									
H2O LB/MMCF	0.0	0.0	0.0	0.0	0.0		0.0	0.0	* *
*									
H2S PPMV	0.0	0.0	0.0	0.0	0.0		0.0	0.0	* *
*									
O2 PPMV	0.0	0.0	0.0	0.0	0.0		0.0	0.0	* *

*

0
1REPORT R69629S1
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

2018

VOLUME WEIGHTED
DATE RUN:

TIME RUN:

10:55:23

0 SITE ID: MARW

SITE NAME: MARSHALL CS WEST

TARGET WOBBE: 1207

AIR BLENDED: Y

DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH
DATA SOURCE: HPG BRIGHTON

0 MAX	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
CO2	1.802	1.786	1.896	1.861	1.897	1.907	1.933	2.088					1.850	1.786
2.088 OXYGEN	1.158	1.116	1.201	1.149	1.131	1.165	1.143	1.152					1.154	1.116
1.201 NITROGEN	4.824	4.681	4.919	4.810	4.696	4.707	4.457	4.500					4.777	4.457
4.919 METHANE	79.487	79.908	78.575	79.322	80.078	79.467	80.340	79.111					79.424	78.575
80.340 ETHANE	11.922	11.743	12.529	11.955	10.698	10.822	11.066	11.487					11.843	10.698
12.529 PROPANE	0.636	0.610	0.708	0.722	1.181	1.594	0.900	1.382					0.762	0.610
1.594 I-BUTANE	0.048	0.044	0.049	0.050	0.087	0.094	0.047	0.078					0.053	0.044
0.094 N-BUTANE	0.093	0.085	0.094	0.099	0.173	0.183	0.086	0.150					0.103	0.085
0.183 I-PENTANE	0.013	0.012	0.013	0.014	0.025	0.025	0.012	0.021					0.015	0.012
0.025 N-PENTANE	0.012	0.011	0.012	0.013	0.025	0.026	0.012	0.022					0.014	0.011
0.026 HEXANES+	0.005	0.004	0.004	0.005	0.009	0.010	0.004	0.009					0.005	0.004
0.010 TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00					100.00	
N2/O2	4.166	4.194	4.096	4.186	4.152	4.040	3.899	3.906					4.142	3.899
4.194														

PUC_Reports_Q4-2018.txt											
%INERTS	7.784	7.583	8.016	7.820	7.724	7.779	7.533	7.740		7.781	7.533
8.016											
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)											
----- ----- ----- -----											
VOL(MMCF)	697.7	631.0	590.7	451.1	233.3	94.9	72.9	77.5		356.1	72.9
697.7											
HIGH BTU/CF	1040.6	1040.5	1044.0	1042.1	1043.7	1050.9	1040.4	1051.8		1042.4	1040.4
1051.8											
LOW BTU/CF	940.5	940.3	943.7	941.8	943.3	950.1	940.1	950.9		942.1	940.1
950.9											
SPEC GRAV	0.6655	0.6631	0.6707	0.6671	0.6674	0.6727	0.6634	0.6738		0.6669	0.6631
0.6738											
WOBBE INDEX	1275.6	1277.8	1274.8	1275.9	1277.6	1281.3	1277.4	1281.3		1276.5	1274.8
1281.3											
%DIF	5.7	5.9	5.6	5.7	5.8	6.2	5.8	6.2		5.8	5.6
6.2											
LIQ GAL/MCF	0.231	0.219	0.251	0.258	0.430	0.550	0.301	0.473		0.272	0.219
0.550											
----- ----- ----- -----											
H2O LB/MMCF										*	*
*											
H2S PPMV										*	*
*											
O2 PPMV										*	*
*											
----- ----- ----- -----											
0										VOLUME WEIGHTED	
1REPORT R69629S1										DATE RUN:	
09/20/2018											
10:55:23										TIME RUN:	
0											
SITE ID: YONO										DATA TYPE: AVG	
SITE NAME: YOSEMITE NORTH OUTLET										CALCULATED GAS COMPOSITION	
TARGET WOBBE: 1207										DATA SOURCE: HPG BRIGHTON	
AIR BLENDED: Y											
MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC										AVG	MIN
0											
MAX											
----- ----- ----- -----											
CO2	1.823	1.789	1.841	1.848	0.000	1.897	1.895	0.000		1.825	1.789

Free Report to Q1 2020 File											
1.897	OXYGEN	1.126	1.083	1.251	1.160	0.000	1.241	1.171	0.000		
1.251	NITROGEN	4.629	4.455	5.125	4.767	0.000	5.173	4.659	0.000	1.143	1.083
5.173	METHANE	79.621	80.187	78.237	79.477	0.000	78.788	79.932	0.000	4.694	4.455
80.187	ETHANE	11.976	11.698	12.676	11.817	0.000	10.811	11.064	0.000	79.543	78.237
12.676	PROPANE	0.652	0.628	0.691	0.739	0.000	1.677	1.050	0.000	11.905	10.811
1.677	I-BUTANE	0.048	0.045	0.049	0.052	0.000	0.108	0.062	0.000	0.707	0.628
0.108	N-BUTANE	0.096	0.088	0.099	0.107	0.000	0.222	0.124	0.000	0.050	0.045
0.222	I-PENTANE	0.013	0.012	0.013	0.014	0.000	0.033	0.017	0.000	0.101	0.088
0.033	N-PENTANE	0.012	0.011	0.013	0.014	0.000	0.034	0.018	0.000	0.014	0.012
0.034	HEXANES+	0.004	0.004	0.005	0.005	0.000	0.016	0.008	0.000	0.013	0.011
0.016										0.005	0.004
	TOTAL	100.00	100.00	100.00	100.00	0.00	100.00	100.00	0.00	100.00	

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PUC_Reports_Q4-2018.txt									
HEXANES+ 0.011	0.004	0.004	0.004	0.002	0.010	0.011	0.005	0.010	
									0.005 0.002
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

N2/O2 4.363	4.241	4.316	4.338	4.363	4.241	4.202	4.156	4.176	4.274 4.156
%INERTS 7.923	7.788	7.595	7.923	7.727	7.652	7.664	7.448	7.630	7.708 7.448

----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL(MMCF) 5041.4	4570.8	5041.4	4849.0	3208.9	3163.3	1870.2	1908.5	1890.4	3312.8 1870.2
HIGH BTU/CF 1052.3	1039.2	1039.8	1043.8	1041.1	1044.5	1052.3	1044.0	1051.8	1043.2 1039.2
LOW BTU/CF 951.3	939.2	939.6	943.4	940.9	944.0	951.3	943.5	950.8	942.8 939.2
SPEC GRAV 0.6724	0.6646	0.6627	0.6694	0.6654	0.6670	0.6722	0.6647	0.6724	0.6666 0.6627
WOBBE INDEX 1283.5	1274.7	1277.3	1275.8	1276.3	1278.9	1283.5	1280.5	1282.7	1277.7 1274.7
%DIF 6.3	5.6	5.8	5.7	5.7	6.0	6.3	6.1	6.3	5.9 5.6
LIQ GAL/MCF 0.546	0.230	0.218	0.259	0.258	0.448	0.546	0.293	0.474	0.307 0.218

H2O LB/MMCF 1.0	0.6	0.8	0.7	0.7	0.9	1.0	0.7	0.9	0.8 0.6
H2S PPMV *									* *
O2 PPMV *									* *

0
1REPORT R699680
09/20/2018

VOLUME WEIGHTED
DATE RUN:
TIME RUN:

PUC_Reports_Q4-2018.txt

10:55:23

FOURTH QUARTER, 2018

BTU ZONE: GRAND JUNCTION		NET FLOW	HV (BTU/CF, 14.73 PSIA, 60 F, DRY)			VOLUME (MCF AT 14.73 PSIA)	
SITE ID	SAMPLING SITE NAME		JUNE	JULY	AUGUST	JUNE	JULY
0 0 AUGUST 0 38,628 ASBS 144,996 ORCO 0	ASBURY MAINLINE NORTH	IN	1046.3	1039.5	1025.2	31,484	32,429
	ASBURY MAINLINE SOUTH	IN	1038.3	1025.9	1016.1	148,552	138,455
	ORCHARD MESA OUTLET	IN	0.0	1023.0	0.0	0	43
0 183,624 0 -	VOLUME WEIGHTED HEATING VALUE:		1039.7	1028.5	1018.0	TOTAL VOL: 180,036	170,927
	QUARTER AVERAGE HEATING VALUE:		1028.7				

DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.

1REPORT R69629Z0
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

DATE RUN:

2018

TIME RUN:

10:55:23

ZONE NAME: GRAND JUNCTION

ZONE NAME: GRAND JUNCTION																		
	MTH:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		AVG		MIN	
MAX																		
	</																	

PUC_Reports_Q4-2018.txt									
HEXANES+ 0.035	0.017	0.018	0.023	0.034	0.035	0.022	0.022	0.026	
									0.022 0.017
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

N2/O2 %INERTS 3.879	2.620	2.984	3.261	3.879	3.553	2.383	2.551	2.403	
									2.968 2.383

----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09) -----

VOL(MMCF) 1016.4	1016.4	780.9	586.4	351.0	223.1	180.0	170.9	183.6	
HIGH BTU/CF 1039.7	1032.2	1027.1	1028.7	1025.2	1031.2	1039.7	1028.5	1018.0	436.5 170.9
LOW BTU/CF 937.7	930.8	926.2	927.7	924.7	930.2	937.7	927.3	917.5	1029.2 1018.0
SPEC GRAV 0.6170	0.6038	0.6057	0.6102	0.6164	0.6170	0.6061	0.6000	0.5903	928.1 917.5
WOBBE INDEX 1335.5	1328.4	1319.7	1316.9	1305.8	1312.8	1335.5	1327.8	1325.0	0.6066 0.5903
LIQ GAL/MCF 0.268	0.163	0.145	0.172	0.234	0.268	0.158	0.140	0.191	1321.4 1305.8
									0.174 0.140

PUBLIC SERVICE COMPANY OF COLORADO									
2018									
VOLUME WEIGHTED DATE RUN:									
TIME RUN:									
DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH									
DATA SOURCE: HPG GRAND JUNCTION									
AIR BLENDED: N									
MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC AVG MIN									

CO2 1.425	1.286	1.425	1.205	0.985	0.979	0.946	0.922	0.655	
OXYGEN 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.239 0.655
									0.000 0.000

PUC_Reports_Q4-2018.txt									
NITROGEN 0.458	0.458	0.433	0.365	0.234	0.169	0.121	0.196	0.193	0.390 0.121
METHANE 96.981	93.737	94.223	93.869	93.820	93.614	93.508	94.231	96.981	93.988 93.508
ETHANE 5.291	4.133	3.753	4.445	4.841	5.017	5.291	4.554	1.901	4.137 1.901
PROPANE 0.281	0.281	0.124	0.096	0.105	0.184	0.121	0.092	0.197	0.185 0.092
I-BUTANE 0.039	0.039	0.016	0.008	0.006	0.014	0.005	0.002	0.026	0.023 0.002
N-BUTANE 0.043	0.043	0.017	0.008	0.006	0.016	0.005	0.002	0.030	0.025 0.002
I-PENTANE 0.011	0.011	0.004	0.002	0.001	0.003	0.001	0.000	0.007	0.006 0.000
N-PENTANE 0.007	0.007	0.003	0.001	0.001	0.002	0.001	0.000	0.005	0.004 0.000
HEXANES+ 0.005	0.005	0.002	0.001	0.001	0.002	0.001	0.001	0.005	0.003 0.001
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
----- ----- ----- -----									
N2/O2 %INERTS 1.858	1.744	1.858	1.570	1.219	1.148	1.067	1.118	0.848	1.629 0.848
----- ----- ----- -----									
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)									
----- ----- ----- -----									
VOL (MMCF) 522.4	522.4	312.0	198.8	105.2	26.0	31.5	32.4	38.6	158.4 26.0
HIGH BTU/CF 1046.3	1035.2	1027.3	1034.5	1041.1	1044.9	1046.3	1039.5	1025.2	1033.9 1025.2
LOW BTU/CF 943.5	933.4	926.0	932.6	938.7	942.2	943.5	937.2	923.7	932.1 923.7
SPEC GRAV 0.5936	0.5936	0.5905	0.5908	0.5901	0.5917	0.5915	0.5876	0.5742	0.5913 0.5742
WOBBE INDEX 1360.4	1343.6	1336.9	1345.9	1355.3	1358.4	1360.4	1356.1	1352.9	1344.6 1336.9
%DIF 6.9	5.6	5.1	5.8	6.5	6.8	6.9	6.6	6.4	5.7 5.1
LIQ GAL/MCF 0.112	0.112	0.048	0.033	0.034	0.063	0.038	0.027	0.079	0.071 0.027
----- ----- ----- -----									

H2O	LB/MMCF		*	*
H2S	PPMV		*	*
O2	PPMV		*	*

VOLUME WEIGHTED
DATE RUN:

TIME RUN:

[illegible]

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|-----|-----|

	251.4	138.5
	1024.4	1016.1
	924.0	915.9
	0.6166	0.5946
	1304.6	1285.5
	2.6	1.1
	0.253	0.167

*	*	
*	*	
*	*	

VOLUME WEIGHTED
DATE RUN:

TIME RUN:

PUC_Reports_Q4-2018.txt

MAX

-----										-----	-----	-----		
CO2	1.591	1.690	1.676	0.000	0.000	0.000	2.379	0.000			1.642		1.591	
2.379														
OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000		0.000	
0.000														
NITROGEN	0.193	0.236	0.271	0.000	0.000	0.000	1.374	0.000			0.222		0.193	
1.374														
METHANE	92.577	91.214	90.500	0.000	0.000	0.000	91.272	0.000			91.714		90.500	
92.577														
ETHANE	5.345	6.786	7.534	0.000	0.000	0.000	4.219	0.000			6.258		4.219	
7.534														
PROPANE	0.232	0.059	0.019	0.000	0.000	0.000	0.496	0.000			0.131		0.019	
0.496														
I-BUTANE	0.022	0.005	0.000	0.000	0.000	0.000	0.078	0.000			0.012		0.000	
0.078														
N-BUTANE	0.021	0.005	0.000	0.000	0.000	0.000	0.101	0.000			0.011		0.000	
0.101														
I-PENTANE	0.007	0.002	0.000	0.000	0.000	0.000	0.031	0.000			0.004		0.000	
0.031														
N-PENTANE	0.004	0.001	0.000	0.000	0.000	0.000	0.022	0.000			0.002		0.000	
0.022														
HEXANES+	0.008	0.002	0.000	0.000	0.000	0.000	0.028	0.000			0.004		0.000	
0.028														
TOTAL	100.00	100.00	100.00	0.00	0.00	0.00	100.00	0.00			100.00			
-----										-----	-----	-----		
-----										-----	-----	-----		
N2/O2														
%INERTS	1.784	1.926	1.947	0.000	0.000	0.000	3.753	0.000			1.865		1.784	
3.753														
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)														
-----										-----	-----	-----		
VOL(MMCF)	98.3	78.5	37.9	.0	.0	.0	.0	.0			71.6		.0	
98.3														
HIGH BTU/CF	1042.5	1048.2	1052.7				1023.0				1046.4		1023.0	
1052.7														
LOW BTU/CF	940.2	945.5	949.8				922.6				943.8		922.6	
949.8														
SPEC GRAV	0.6003	0.6060	0.6090				0.6132				0.6039		0.6003	
0.6132														
WOBBE INDEX	1345.5	1346.5	1349.0				1306.4				1346.5		1306.4	

PUC_Reports_Q4-2018.txt										
1349.0	%DIF	5.8	5.9	6.1	0.0	0.0	0.0	2.7	0.0	5.9 2.7
6.1										
LIQ GAL/MCF		0.085	0.021	0.005				0.225		0.047 0.005
0.225										

-----										----- -----
H2O LB/MMCF		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0
0.0										
H2S PPMV					0.0	0.0	0.0		0.0	* *
*										
O2 PPMV					0.0	0.0	0.0		0.0	* *
*										
-----										----- -----

0								VOLUME WEIGHTED	
1REPORT R699680	PUBLIC SERVICE COMPANY OF COLORADO							DATE RUN:	
09/20/2018	BTU ZONE SUMMARY HEATING VALUES REPORT							TIME RUN:	
10:55:23									
FOURTH QUARTER, 2018									
0	BTU ZONE: GREASEWOOD								
0			NET FLOW	HV (BTU/CF, 14.73 PSIA, 60 F, DRY)			VOLUME (MCF AT 14.73 PSIA)		
	SITE ID	SAMPLING SITE NAME		JUNE	JULY	AUGUST	JUNE	JULY	
AUGUST									
0	STEAMBT	STEAMBOAT TOWN BORDER	IN	1057.7	1040.3	1038.3	5,528	4,654	
5,716									
0	VOLUME WEIGHTED HEATING VALUE:			1057.7	1040.3	1038.3	TOTAL VOL:	5,528	4,654
5,716	QUARTER AVERAGE HEATING VALUE:			1045.4					
0									

DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.													
1REPORT R69629Z0	PUBLIC SERVICE COMPANY OF COLORADO							DATE RUN:					
09/20/2018	2018							TIME RUN:					
10:55:23													
0	ZONE NAME: GREASEWOOD												
-													
	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG MIN
MAX													
-----										----- -----			
CO2	0.607	0.887	0.846	0.846	1.114	1.650	1.112	0.816			0.895 0.607		

0
1REPORT R69629S1
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

VOLUME WEIGHTED
DATE RUN:

2018

TIME RUN:

10:55:23

SITE ID: STEAMBT

SITE NAME: STEAMBOAT TOWN BORDER

DATA TYPE: COMP ONLINE GAS CHROM (MANUAL)

TARGET WOBBE: 1327

DATA SOURCE: HPG MEEKER

AIR BLENDED: N

0	MTH:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
MAX															
CO2	0.607	0.887	0.846	0.846	1.114	1.650	1.112	0.816						0.895	0.607
1.650	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000	0.000
0.000	NITROGEN	0.392	0.491	0.553	0.553	0.960	1.602	1.420	1.077					0.701	0.392
1.602	METHANE	93.605	93.286	93.115	93.115	92.077	88.644	91.840	93.791					92.830	88.644
93.791	ETHANE	5.151	4.986	5.189	5.189	5.071	6.597	4.755	3.358					5.074	3.358
6.597	PROPANE	0.167	0.260	0.219	0.219	0.576	1.191	0.669	0.646					0.368	0.167
1.191	I-BUTANE	0.025	0.033	0.028	0.028	0.074	0.128	0.081	0.111					0.048	0.025
0.128	N-BUTANE	0.028	0.039	0.039	0.039	0.084	0.143	0.092	0.141					0.058	0.028
0.143	I-PENTANE	0.009	0.010	0.007	0.007	0.020	0.025	0.017	0.031					0.013	0.007
0.031	N-PENTANE	0.006	0.006	0.004	0.004	0.013	0.014	0.010	0.021					0.008	0.004
0.021	HEXANES+	0.010	0.002	0.000	0.000	0.011	0.006	0.004	0.008					0.005	0.000
0.011															
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00					100.00	

N2/O2															
%INERTS	0.999	1.378	1.399	1.399	2.074	3.252	2.532	1.893						1.596	0.999
3.252															

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

Production Data - Q1 2016									
Field	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018
VOL (MMCF)	16.9	15.5	15.0	11.2	7.1	5.5	4.7	5.7	10.2
HIGH BTU/CF	1048.3	1044.8	1045.1	1045.1	1046.0	1057.7	1040.3	1038.3	1045.9
LOW BTU/CF	945.3	942.1	942.5	942.5	943.6	954.8	938.3	936.3	943.3
SPEC GRAV	0.5902	0.5936	0.5938	0.5938	0.6030	0.6260	0.6042	0.5946	0.5966
WOBBE INDEX	1364.5	1356.1	1356.2	1356.2	1347.0	1336.8	1338.3	1346.5	1354.1
%DIF	2.8	2.2	2.2	2.2	1.5	0.7	0.9	1.5	2.0
LIQ GAL/MCF	0.073	0.101	0.086	0.086	0.226	0.432	0.251	0.281	0.145

H ₂ O LB/MMCF	*	*	
* H ₂ S PPMV	*	*	
* O ₂ PPMV	*	*	
*			

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PUC_Reports_Q4-2018.txt													TIME RUN:					
09/20/2018	2018																	
10:55:24																		
0	ZONE NAME: MERINO																	
-																		
MAX	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		AVG		MIN		
-----														-----		-----		
-----	CO2	0.220	0.317	0.240	0.184	0.179	0.236	0.011	0.043					0.179		0.011		
0.317	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000		0.000		
0.000	NITROGEN	0.256	0.284	0.276	0.244	0.242	0.255	0.228	0.237					0.253		0.228		
0.284	METHANE	96.181	96.836	97.065	93.797	93.846	92.841	92.960	92.491					94.502		92.491		
97.065	ETHANE	3.202	2.396	2.358	5.609	5.539	6.040	6.482	6.920					4.818		2.358		
6.920	PROPANE	0.119	0.129	0.052	0.148	0.175	0.507	0.299	0.286					0.214		0.052		
0.507	I-BUTANE	0.011	0.017	0.004	0.008	0.010	0.046	0.011	0.011					0.015		0.004		
0.046	N-BUTANE	0.009	0.016	0.004	0.007	0.009	0.048	0.008	0.008					0.014		0.004		
0.048	I-PENTANE	0.001	0.003	0.000	0.001	0.000	0.011	0.000	0.001					0.002		0.000		
0.011	N-PENTANE	0.000	0.001	0.000	0.001	0.000	0.008	0.000	0.001					0.001		0.000		
0.008	HEXANES+	0.001	0.001	0.001	0.001	0.000	0.008	0.001	0.002					0.002		0.000		
0.008	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00					100.00				
-----														-----		-----		
-----	N2/O2																	
0.601	%INERTS	0.476	0.601	0.516	0.428	0.421	0.491	0.239	0.280					0.432		0.239		
	REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)																	
-----														-----		-----		
	VOL(MMCF)																	
	HIGH BTU/CF	1036.4	1029.5	1028.2	1055.7	1055.6	1066.5	1066.7	1069.5					1051.0		1028.2		
1069.5																		

PUC_Reports_Q4-2018.txt												
LOW BTU/CF	934.0	927.6	926.4	952.1	952.0	962.1	962.3	964.9				
964.9												
SPEC GRAV	0.5750	0.5725	0.5703	0.5866	0.5864	0.5944	0.5906	0.5930				
0.5944												
WOBBE INDEX	1366.8	1360.6	1361.5	1378.4	1378.5	1383.3	1388.0	1388.8				
1388.8												
LIQ GAL/MCF	0.040	0.048	0.017	0.047	0.054	0.180	0.089	0.086				
0.180												

-----|-----|-----|-----

0
1REPORT R69629S1
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

2018

STRAIGHT AVERAGED
DATE RUN:

10:55:24

0

TIME RUN:

SITE ID: SSTR2

SITE NAME: SOUTHERN STAR ARITH AVG

TARGET WOBBE: 1327

AIR BLENDED: N

DATA TYPE: AVG ONLINE GAS CHROM (MANUAL)

DATA SOURCE: SOUTHERN STAR

MTH:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

0
MAX

-----|-----|-----|-----

CO2	0.220	0.317	0.240	0.184	0.179	0.236	0.011	0.043						
0.317														
OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000						
0.000														
NITROGEN	0.256	0.284	0.276	0.244	0.242	0.255	0.228	0.237						
0.284														
METHANE	96.181	96.836	97.065	93.797	93.846	92.841	92.960	92.491						
97.065														
ETHANE	3.202	2.396	2.358	5.609	5.539	6.040	6.482	6.920						
6.920														
PROPANE	0.119	0.129	0.052	0.148	0.175	0.507	0.299	0.286						
0.507														
I-BUTANE	0.011	0.017	0.004	0.008	0.010	0.046	0.011	0.011						
0.046														
N-BUTANE	0.009	0.016	0.004	0.007	0.009	0.048	0.008	0.008						
0.048														
I-PENTANE	0.001	0.003	0.000	0.001	0.000	0.011	0.000	0.001						
0.011														
N-PENTANE	0.000	0.001	0.000	0.001	0.000	0.008	0.000	0.001						
0.008														
HEXANES+	0.001	0.001	0.001	0.001	0.000	0.008	0.001	0.002						
0.008														

TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00		
N2/O2													
%INERTS	0.476	0.601	0.516	0.428	0.421	0.491	0.239	0.280			0.432	0.239	
0.601													
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)													
VOL (MMCF)													
HIGH BTU/CF	1036.4	1029.5	1028.2	1055.7	1055.6	1066.5	1066.7	1069.5			1051.0	1028.2	
1069.5													
LOW BTU/CF	934.0	927.6	926.4	952.1	952.0	962.1	962.3	964.9			947.7	926.4	
964.9													
SPEC GRAV	0.5750	0.5725	0.5703	0.5866	0.5864	0.5944	0.5906	0.5930			0.5836	0.5703	
0.5944													
WOBBE INDEX	1366.8	1360.6	1361.5	1378.4	1378.5	1383.3	1388.0	1388.8			1375.7	1360.6	
1388.8													
%DIF	3.0	2.5	2.6	3.9	3.9	4.2	4.6	4.7			3.7	2.5	
4.7													
LIQ GAL/MCF	0.040	0.048	0.017	0.047	0.054	0.180	0.089	0.086			0.070	0.017	
0.180													
H2O LB/MMCF											*	*	
*													
H2S PPMV											*	*	
*													
O2 PPMV											*	*	
*													

0
1REPORT R699680
09/20/2018
10:55:24

PUBLIC SERVICE COMPANY OF COLORADO
BTU ZONE SUMMARY HEATING VALUES REPORT
FOURTH QUARTER, 2018

STRAIGHT AVERAGED
DATE RUN:
TIME RUN:

0	BTU ZONE: MOUNTAIN												
0													
SITE ID	SAMPLING SITE NAME	NET FLOW	HV (BTU/CF, 14.73 PSIA, 60 F, DRY)									VOLUME (MCF AT 14.73 PSIA)	
			JUNE	JULY	AUGUST							JUNE	JULY

PUC_Reports_Q4-2018.txt

AUGUST
0 DLLNSILV DILLON/SILVERTHORNE IN 1005.0 1041.4 1002.9 N/A N/A
N/A
0 STRAIGHT AVERAGED HEATING VALUE: 1005.0 1041.4 1002.9 TOTAL VOL: 0 0
0 0
0 QUARTER AVERAGE HEATING VALUE: 1016.4
-
DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.
1REPORT R69629Z0 PUBLIC SERVICE COMPANY OF COLORADO DATE RUN:
09/20/2018
10:55:24 2018 TIME RUN:
0
- ZONE NAME: MOUNTAIN
MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC | AVG | MIN |
MAX
-----|-----|-----|-----
CO2 1.830 1.830 1.920 1.830 1.830 3.180 2.110 3.230 | 2.220 | 1.830 |
3.230
OXYGEN 1.370 1.260 1.200 1.210 1.440 0.610 1.050 0.540 | 1.085 | 0.540 |
1.440
NITROGEN 5.340 4.890 4.720 4.720 5.610 2.410 4.180 2.120 | 4.249 | 2.120 |
5.610
METHANE 78.770 79.010 78.700 78.900 79.110 87.940 81.200 88.490 | 81.514 | 78.700 |
88.490
ETHANE 12.050 11.760 12.860 12.660 10.900 4.940 9.930 4.990 | 10.011 | 4.940 |
12.860
PROPANE 0.510 0.960 0.500 0.540 0.880 0.740 1.300 0.580 | 0.751 | 0.500 |
1.300
I-BUTANE 0.040 0.080 0.030 0.040 0.060 0.050 0.070 0.020 | 0.049 | 0.020 |
0.080
N-BUTANE 0.070 0.160 0.050 0.080 0.130 0.100 0.120 0.030 | 0.093 | 0.030 |
0.160
I-PENTANE 0.010 0.020 0.010 0.010 0.020 0.020 0.020 0.000 | 0.014 | 0.000 |
0.020
N-PENTANE 0.010 0.020 0.010 0.010 0.020 0.010 0.010 0.000 | 0.011 | 0.000 |
0.020
HEXANES+ 0.000 0.010 0.000 0.000 0.000 0.000 0.010 0.000 | 0.003 | 0.000 |
0.010
TOTAL 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 | 100.00 |
-----|-----|-----|-----
N2/O2 3.898 3.881 3.933 3.901 3.896 3.951 3.981 3.926 | 3.921 | 3.881 |

[illegible]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	52
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[illegible]

10:55:24

	MTH:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN	MAX
--	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

[illegible]

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[illegible]

	N ₂ /O ₂	3.898	3.881	3.933	3.901	3.896	3.951	3.981	3.926		3.921	3.881
	%INERTS	8.540	7.980	7.840	7.760	8.880	6.200	7.340	5.890		7.554	5.890

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VOL(MMCF)											
HIGH BTU/CF	1031.0	1045.2	1043.5	1044.2	1026.8	1005.0	1041.4	1002.9		1030.0	1002.9
LOW BTU/CF	931.7	944.8	943.1	943.8	927.9	906.6	941.0	904.6		930.4	904.6
SPEC GRAV	0.6678	0.6708	0.6686	0.6677	0.6689	0.6329	0.6629	0.6285		0.6585	0.6285
WOBBE INDEX	1261.6	1276.2	1276.2	1277.9	1255.5	1263.3	1279.1	1265.0		1269.4	1255.5
%DIF	4.5	5.7	5.7	5.9	4.0	4.7	6.0	4.8		5.2	4.0
LIQ GAL/MCF	0.183	0.360	0.171	0.194	0.318	0.263	0.434	0.176		0.262	0.171

H2O	LB/MMCF	*			*		*		
H2S	PPMV	*			*		*		
O2	PPMV	*			*		*		

0
1REPORT R699680
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

STRAIGHT AVERAGED
DATE RUN:

BTU ZONE SUMMARY HEATING VALUES REPORT

TIME RUN:

10:55:24

FOURTH QUARTER, 2018

BTU ZONE: NORTHERN		NET	HV (BTU/CF, 14.73 PSIA, 60 F, DRY)			VOLUME (MCF AT 14.73 PSIA)	
SITE ID	SAMPLING SITE NAME	FLOW	JUNE	JULY	AUGUST	JUNE	JULY
0 0 AUGUST 0 638,779 CBTW 1,794 CB24 1,722,749 CIGAUL 318,838 CIGBCR 220,837 CIGGRE 170,793 CIGLUP 640,409 CIGWIG 607,894 CIG1CK 68,600 EATN 175,008 FTSV -2,487,397 HSRS 0 LUPO -1,265 MEWB 102,663 NRCO 1,112,581 RNDI -609,628 RNDT 0 ROGN 0	WGR NORTH (WATTENBERG) CHALK BLUFFS TO PSCO 8-IN CHLK BL TO FRONT RANGE PL CIG AULT PURCHASE POINT CIG BEAVER CREEK EAST CIG GREELEY PURCHASE PT CIG FT LUPTON PURCHASE PT CIG WIGGINS/ROUNDUP DEL CIG FIRST CREEK DCP EATON GAS PLANT FORT ST VRAIN POWER PLANT ANADARKO FT LUPTON RESIDU FT LUPTON DELIVERY TO CIG DCP MEWBOURN GAS PLANT ANADARKO PLATTE VAL RESID ROUNDUP GAS INJECTION ROUNDUP GAS TO TRANSMISSN DCP ROGGEN GP	IN IN IN IN IN IN IN IN IN IN OUT IN OUT IN IN OUT IN IN	1121.6 1078.0 1074.4 1104.3 1141.9 1114.4 1136.9 1150.3 1135.2 1096.5 1075.8 0.0 0.0 1056.4 1105.0 1144.4 0.0 0.0	1117.7 1091.2 1083.5 1110.6 1138.5 1143.3 1131.6 1142.2 1142.2 1097.9 1085.3 0.0 0.0 1095.6 1092.9 1144.9 0.0 0.0	1127.1 1079.9 1085.7 1117.0 1135.9 1120.8 1142.6 1146.3 1140.2 1096.6 1093.6 0.0 1144.8 1062.4 1099.5 1146.3 0.0 0.0	575,683 30,561 3,040,478 118,438 182,558 68,362 731,493 132,094 70,100 185,896 -2,353,281 0 0 803 1,087,509 -39,410 0 0	546,676 230 2,437,076 169,123 351,203 20,464 284,715 612,319 77,749 215,123 -1,997,083 0 0 5 1,038,196 -611,942 0 0

PUC_Reports_Q4-2018.txt													
SPND	DCP SPINDLE GAS PLANT	IN	1106.5	1105.8	1104.9							138,847	175,249
140,846													
TTHR	HIGH PLAINS TRITOWN RECPT	IN	1086.0	1091.7	1096.0							187,942	885,264
1,075,848													
WIND	AKA GAS PLANT	IN	1112.3	1113.2	1112.3							531,085	563,170
660,967													
YONI	YOSEMITE NORTH INLET	OUT	1116.0	1100.8	0.0							-265,420	-213,392
0													
YOSI	YOSEMITE SOUTH INLET	OUT	1112.1	1100.0	1109.4							-1,767,693	-1,809,389
-1,791,070													
0													
2,769,246	VOLUME WEIGHTED HEATING VALUE:		1106.9	1106.8	1113.7	TOTAL VOL:						2,656,045	2,744,756
0													
-	QUARTER AVERAGE HEATING VALUE:		1109.1										
	DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.												
1REPORT R69629Z0	PUBLIC SERVICE COMPANY OF COLORADO												DATE RUN:
09/20/2018													
	2018												TIME RUN:
10:55:24													
0	ZONE NAME: NORTHERN												
-													
MAX	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG MIN
-----	----- ----- ----- -----												
CO2	1.794	1.794	1.973	1.974	2.114	2.122	2.229	2.198					1.968 1.794
2.229													
OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000 0.000
0.000													
NITROGEN	0.557	0.568	0.464	0.456	0.410	0.452	0.423	0.392					0.486 0.392
0.568													
METHANE	86.351	86.560	85.103	85.652	84.968	84.609	84.421	83.740					85.476 83.740
86.560													
ETHANE	9.703	9.476	10.677	10.056	10.491	10.557	10.746	11.323					10.209 9.476
11.323													
PROPANE	1.328	1.342	1.498	1.570	1.707	1.906	1.852	2.016					1.568 1.328
2.016													
I-BUTANE	0.065	0.062	0.071	0.082	0.087	0.093	0.088	0.103					0.077 0.062
0.103													
N-BUTANE	0.152	0.152	0.165	0.159	0.170	0.199	0.191	0.183					0.166 0.152
0.199													
I-PENTANE	0.021	0.019	0.021	0.020	0.022	0.023	0.022	0.020					0.021 0.019
0.023													
N-PENTANE	0.019	0.018	0.019	0.019	0.021	0.025	0.017	0.014					0.019 0.014
0.025													
HEXANES+	0.010	0.009	0.009	0.012	0.010	0.014	0.011	0.011					0.010 0.009
0.014													

100.00	
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100.00	
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	2.454		2.351	

4110.5	2656.0
1098.9	1089.9
993.0	984.7
0.6455	0.6378
1367.8	1364.7
0.528	0.454

VOLUME WEIGHTED
DATE RUN:

TIME RUN:

0												MAX	
MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC												AVG	MIN
TARGET WOBBE: 1327												DATA SOURCE: HPG BRIGHTON	
AIR BLENDED: N													

	2.256	2.210
	0.000	0.000
	0.479	0.465

83.933	METHANE	83.700	83.933	83.784	83.516	83.372	82.814	83.217	82.511		83.393		82.511	
11.707	ETHANE	10.889	10.725	10.791	11.019	11.257	11.670	11.451	11.707		11.153		10.725	
2.710	PROPANE	2.238	2.166	2.261	2.360	2.290	2.497	2.350	2.710		2.350		2.166	
0.132	I-BUTANE	0.117	0.117	0.120	0.116	0.108	0.112	0.106	0.132		0.116		0.106	
0.231	N-BUTANE	0.227	0.228	0.231	0.209	0.187	0.177	0.169	0.218		0.208		0.169	
0.025	I-PENTANE	0.025	0.025	0.024	0.018	0.013	0.003	0.004	0.011		0.016		0.003	
0.023	N-PENTANE	0.023	0.023	0.022	0.016	0.010	0.001	0.002	0.006		0.014		0.001	
0.018	HEXANES+	0.017	0.018	0.017	0.016	0.014	0.012	0.011	0.012		0.015		0.011	
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00			
----- ----- ----- -----														
2.765	N2/O2 %INERTS	2.764	2.765	2.750	2.730	2.749	2.714	2.690	2.693		2.734		2.690	
----- ----- ----- -----														
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)														
940.9	VOL(MMCF)	678.5	650.1	940.9	625.0	648.3	575.7	546.7	638.8		663.0		546.7	
1127.1	HIGH BTU/CF	1114.0	1111.7	1113.8	1116.3	1115.8	1121.6	1117.7	1127.1		1117.0		1111.7	
1019.5	LOW BTU/CF	1007.2	1005.1	1007.1	1009.4	1008.9	1014.3	1010.7	1019.5		1010.0		1005.1	
0.6674	SPEC GRAV	0.6602	0.6588	0.6599	0.6611	0.6610	0.6643	0.6614	0.6674		0.6616		0.6588	
1379.7	WOBBE INDEX	1371.0	1369.7	1371.1	1372.9	1372.4	1376.1	1374.3	1379.7		1373.2		1369.7	
4.0	%DIF	3.3	3.2	3.3	3.5	3.4	3.7	3.6	4.0		3.5		3.2	
0.869	LIQ GAL/MCF	0.751	0.732	0.759	0.773	0.739	0.787	0.742	0.869		0.768		0.732	
----- ----- ----- -----														
	H2O LB/MMCF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	

PUC_Reports_Q4-2018.txt

0.0	H2S PPMV															*		*	
*	O2 PPMV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							0.0		0.0	
0.0																			
-----															-----		-----		
0															VOLUME WEIGHTED				
1	REPORT R69629S1	PUBLIC SERVICE COMPANY OF COLORADO												DATE RUN:					
09/20/2018															2018		TIME RUN:		
10:55:25																			
0	SITE ID: CBTW		SITE NAME: CHALK BLUFFS TO PSCO 8-IN						DATA TYPE: AVG		ONLINE GAS CHROMATOGRAPH								
			TARGET WOBBE: 1327						DATA SOURCE: HPG		CAMPION								
			AIR BLENDED: N																
0	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		AVG		MIN			
MAX															-----			-----	
1.546	CO2	0.000	1.509	1.546	0.000	0.000	1.326	1.412	1.295					1.408		1.295			
0.000	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000		0.000			
0.794	NITROGEN	0.000	0.696	0.753	0.000	0.000	0.794	0.509	0.732					0.774		0.509			
88.650	METHANE	0.000	86.350	86.663	0.000	0.000	88.650	87.249	88.131					87.867		86.350			
10.639	ETHANE	0.000	10.639	10.117	0.000	0.000	7.780	9.573	8.777					8.717		7.780			
1.092	PROPANE	0.000	0.638	0.695	0.000	0.000	1.092	0.885	0.805					0.930		0.638			
0.089	I-BUTANE	0.000	0.046	0.057	0.000	0.000	0.089	0.084	0.063					0.076		0.046			
0.199	N-BUTANE	0.000	0.093	0.125	0.000	0.000	0.193	0.199	0.136					0.165		0.093			
0.034	I-PENTANE	0.000	0.013	0.019	0.000	0.000	0.030	0.034	0.022					0.025		0.013			
0.037	N-PENTANE	0.000	0.012	0.018	0.000	0.000	0.031	0.037	0.024					0.026		0.012			
0.018	HEXANES+	0.000	0.004	0.007	0.000	0.000	0.015	0.018	0.015					0.012		0.004			
	TOTAL	0.00	100.00	100.00	0.00	0.00	100.00	100.00	100.00					100.00					

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N2/O2	0.000	2.205	2.299	0.000	0.000	2.120	1.921	2.027		2.183	1.921	
%INERTS												
2.299												
-----										-----	-----	-----
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)												
-----										-----	-----	-----
VOL(MMCF)	.0	.8	19.2	.0	.0	30.6	.2	1.8		10.5	.2	
30.6												
HIGH BTU/CF		1087.4	1084.8			1078.0	1091.2	1079.9		1080.7	1078.0	
1091.2												
LOW BTU/CF		982.2	979.8			973.5	985.6	975.2		976.0	973.5	
985.6												
SPEC GRAV		0.6329	0.6325			0.6251	0.6318	0.6251		0.6279	0.6251	
0.6329												
WOBBE INDEX		1366.9	1364.0			1363.5	1372.8	1365.9		1363.9	1363.5	
1372.8												
%DIF	0.0	3.0	2.8	0.0	0.0	2.8	3.5	2.9		2.8	2.8	
3.5												
LIQ GAL/MCF		0.231	0.266			0.419	0.367	0.308		0.356	0.231	
0.419												
-----										-----	-----	-----
H2O LB/MMCF	0.0			0.0	0.0					*	*	
*												
H2S PPMV	0.0			0.0	0.0					*	*	
*												
O2 PPMV	0.0			0.0	0.0					*	*	
*												
-----										-----	-----	-----
0										VOLUME WEIGHTED		
1REPORT R69629S1										DATE RUN:		
09/20/2018												
10:55:25										TIME RUN:		
0												
SITE ID: CB24												
SITE NAME: CHLK BL TO FRONT RANGE PL												
TARGET WOBBE: 1327												
AIR BLENDED: N												
MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC										AVG	MIN	
0												
MAX												

PUC_Reports_Q4-2018.txt

											-----		-----
											-----		-----
CO2	1.294	1.273	1.390	1.311	1.231	1.330	1.404	1.338			1.313		1.231
1.404													
OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000		0.000
0.000													
NITROGEN	0.812	0.841	0.704	0.742	0.619	0.734	0.671	0.608			0.746		0.608
0.841													
METHANE	88.687	88.768	87.170	88.892	89.785	88.917	87.864	87.818			88.544		87.170
89.785													
ETHANE	8.202	8.143	9.704	8.109	7.408	7.820	8.764	8.899			8.342		7.408
9.704													
PROPANE	0.803	0.782	0.803	0.733	0.725	0.918	0.977	1.082			0.826		0.725
1.082													
I-BUTANE	0.037	0.034	0.038	0.042	0.048	0.054	0.054	0.053			0.042		0.034
0.054													
N-BUTANE	0.122	0.119	0.140	0.125	0.128	0.160	0.185	0.144			0.135		0.119
0.185													
I-PENTANE	0.018	0.017	0.021	0.019	0.021	0.025	0.030	0.022			0.021		0.017
0.030													
N-PENTANE	0.017	0.016	0.021	0.019	0.022	0.027	0.033	0.023			0.021		0.016
0.033													
HEXANES+	0.008	0.007	0.009	0.008	0.013	0.015	0.018	0.013			0.010		0.007
0.018													
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			100.00		
											-----		-----
											-----		-----
N2/O2													
%INERTS	2.106	2.114	2.094	2.053	1.850	2.064	2.075	1.946			2.058		1.850
2.114													
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)													
											-----		-----
VOL(MMCF)	6276.1	6224.9	3830.2	2946.0	3018.6	3040.5	2437.1	1722.7			3687.0		1722.7
6276.1													
HIGH BTU/CF	1073.1	1072.0	1085.5	1072.1	1069.3	1074.4	1083.5	1085.7			1075.7		1069.3
1085.7													
LOW BTU/CF	968.9	967.8	980.4	967.9	965.2	970.0	978.5	980.6			971.3		965.2
980.6													
SPEC GRAV	0.6216	0.6209	0.6299	0.6205	0.6161	0.6222	0.6285	0.6282			0.6229		0.6161
0.6299													
WOBBE INDEX	1361.1	1360.5	1367.7	1361.0	1362.3	1362.1	1366.7	1369.8			1363.0		1360.5
1369.8													
%DIF	2.6	2.5	3.1	2.6	2.7	2.6	3.0	3.2			2.7		2.5

LIQ	GAL/MCF	0.288	0.279	0.297	0.272	0.277	0.346	0.375	0.382	0.303	0.272
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[illegible]

0		VOLUME WEIGHTED
1REPORT R69629S1	PUBLIC SERVICE COMPANY OF COLORADO	DATE RUN:
09/20/2018	2018	TIME RUN:

[illegible]

2.391	CO2	1.335	0.823	1.294	1.833	2.073	1.942	2.339	2.391		1.917	0.823
0.000	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000
0.479	NITROGEN	0.468	0.401	0.479	0.364	0.291	0.294	0.311	0.336		0.352	0.291
93.011	METHANE	88.502	93.011	87.818	86.290	85.976	85.275	83.286	82.254		85.691	82.254
13.192	ETHANE	9.075	5.274	9.909	10.310	10.415	10.746	12.390	13.192		10.741	5.274
1.692	PROPANE	0.534	0.377	0.474	0.969	1.008	1.366	1.404	1.692		1.107	0.377
0.099	I-BUTANE	0.026	0.036	0.010	0.065	0.067	0.099	0.078	0.051		0.057	0.010
0.197	N-BUTANE	0.045	0.048	0.014	0.123	0.123	0.197	0.137	0.069		0.099	0.014
0.035	I-PENTANE	0.007	0.012	0.001	0.021	0.021	0.035	0.023	0.007		0.016	0.001

PUC_Reports_Q4-2018.txt									
N-PENTANE 0.035	0.006	0.009	0.001	0.020	0.020	0.035	0.023	0.006	
HEXANES+ 0.011	0.002	0.009	0.000	0.005	0.006	0.011	0.009	0.002	
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

N2/O2 %INERTS 2.727	1.803	1.224	1.773	2.197	2.364	2.236	2.650	2.727	
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----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL(MMCF) 318.8	165.0	101.4	70.5	196.8	269.3	118.4	169.1	318.8	
HIGH BTU/CF 1117.0	1076.0	1051.1	1080.3	1091.7	1091.5	1104.3	1110.6	1117.0	
LOW BTU/CF 1010.0	971.5	948.0	975.5	986.3	986.1	998.0	1004.0	1010.0	
SPEC GRAV 0.6622	0.6204	0.5956	0.6226	0.6374	0.6404	0.6465	0.6570	0.6622	
WOBBE INDEX 1373.4	1366.1	1362.0	1369.1	1367.4	1363.9	1373.4	1370.2	1372.6	
%DIF 3.5	2.9	2.6	3.2	3.0	2.8	3.5	3.3	3.4	
LIQ GAL/MCF 0.510	0.175	0.142	0.139	0.344	0.356	0.501	0.476	0.510	

H2O LB/MMCF *									
H2S PPMV *									
O2 PPMV *									

10:55:25
0

SITE ID: CIGBCR

SITE NAME: CIG BEAVER CREEK EAST

DATA TYPE: AVG

ONLINE GAS CHROMATOGRAPH

TARGET WOBBE: 1327

DATA SOURCE: CIG

AIR BLENDED: N

0
MAX

MTH: JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

AVG

MIN

	CO2	2.308	2.232	2.157	2.341	2.353	2.454	2.382	2.351					2.363	2.157
2.454	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000	0.000
0.000	NITROGEN	0.389	0.414	0.417	0.388	0.388	0.356	0.382	0.382					0.382	0.356
0.417	METHANE	82.009	82.494	82.563	81.681	81.756	81.321	81.609	81.795					81.730	81.321
82.563	ETHANE	12.890	12.581	13.232	12.571	12.622	12.386	12.298	12.379					12.438	12.298
13.232	PROPANE	1.869	1.747	1.266	2.292	2.209	2.657	2.578	2.358					2.372	1.266
2.657	I-BUTANE	0.146	0.136	0.093	0.186	0.176	0.216	0.198	0.191					0.187	0.093
0.216	N-BUTANE	0.278	0.271	0.188	0.377	0.359	0.438	0.400	0.384					0.377	0.188
0.438	I-PENTANE	0.042	0.042	0.029	0.061	0.055	0.068	0.060	0.062					0.058	0.029
0.068	N-PENTANE	0.042	0.045	0.030	0.064	0.056	0.069	0.060	0.061					0.059	0.030
0.069	HEXANES+	0.027	0.038	0.025	0.039	0.026	0.035	0.033	0.037					0.034	0.025
0.039															
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00					100.00	

	N2/O2														
2.810	%INERTS	2.697	2.646	2.574	2.729	2.741	2.810	2.764	2.733					2.745	2.574

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

	VOL(MMCF)	52.0	82.1	29.3	9.9	62.7	182.6	351.2	220.8					123.8	9.9
351.2	HIGH BTU/CF	1127.8	1124.1	1118.3	1136.2	1133.7	1141.9	1138.5	1135.9					1135.9	1118.3

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1141.9	LOW BTU/CF	1020.1	1016.6	1011.2	1028.0	1025.6	1033.3	1030.1	1027.6		1027.6	1011.2
1033.3	SPEC GRAV	0.6684	0.6651	0.6601	0.6743	0.6729	0.6795	0.6764	0.6742		0.6744	0.6601
0.6795	WOBBE INDEX	1379.5	1378.4	1376.4	1383.7	1382.0	1385.3	1384.3	1383.4		1383.2	1376.4
1385.3	%DIF	4.0	3.9	3.7	4.3	4.1	4.4	4.3	4.3		4.2	3.7
4.4	LIQ GAL/MCF	0.692	0.658	0.470	0.873	0.830	1.005	0.958	0.893		0.890	0.470
1.005												

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H2O LB/MMCF											*	*	
* H2S PPMV											*	*	
* O2 PPMV											*	*	
*													

-----											-----	-----	-----
0											VOLUME WEIGHTED		
1REPORT R69629S1											DATE RUN:		
09/20/2018													
PUBLIC SERVICE COMPANY OF COLORADO													
2018											TIME RUN:		

10:55:25															
0	SITE ID: CIGGRE	SITE NAME: CIG GREELEY PURCHASE PT								DATA TYPE: AVG		ONLINE GAS CHROMATOGRAPH			
		TARGET WOBBE: 1327								DATA SOURCE: CIG					
		AIR BLENDED: N													
0	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN	
MAX															

-----											-----	-----	-----
2.526	CO2	1.585	1.387	1.967	1.908	2.124	1.696	2.526	2.176		1.840	1.387	
0.000	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	
0.392	NITROGEN	0.392	0.375	0.330	0.273	0.258	0.277	0.229	0.330		0.318	0.229	
88.411	METHANE	86.582	88.411	84.478	84.798	83.943	85.249	80.430	82.621		85.274	80.430	
13.883	ETHANE	9.980	8.903	11.625	11.084	11.527	10.547	13.883	12.770		10.843	8.903	

PUC_Reports_Q4-2018.txt									
PROPANE	1.149	0.754	1.299	1.502	1.654	1.707	2.365	1.911	1.377 0.754
I-BUTANE	0.085	0.050	0.087	0.117	0.131	0.135	0.157	0.065	0.096 0.050
N-BUTANE	0.156	0.080	0.147	0.217	0.247	0.265	0.280	0.096	0.173 0.080
I-PENTANE	0.029	0.016	0.027	0.040	0.045	0.047	0.049	0.012	0.031 0.012
N-PENTANE	0.027	0.014	0.025	0.039	0.045	0.048	0.049	0.012	0.030 0.012
HEXANES+	0.015	0.010	0.015	0.022	0.026	0.029	0.032	0.007	0.018 0.007
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

N2/O2									
%INERTS	1.977	1.762	2.297	2.181	2.382	1.973	2.755	2.506	2.158 1.762

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL(MMCF)	325.5	327.1	223.0	394.1	403.2	68.4	20.5	170.8	241.6 20.5
HIGH BTU/CF	1096.2	1080.6	1107.6	1111.1	1116.3	1114.4	1143.3	1120.8	1105.4 1080.6
LOW BTU/CF	990.3	975.7	1001.1	1004.3	1009.2	1007.3	1034.6	1013.5	999.0 975.7
SPEC GRAV	0.6366	0.6232	0.6493	0.6500	0.6567	0.6488	0.6801	0.6611	0.6458 0.6232
WOBBE INDEX	1373.9	1368.8	1374.5	1378.1	1377.5	1383.5	1386.4	1378.5	1375.6 1368.8
%DIF	3.5	3.1	3.6	3.9	3.8	4.3	4.5	3.9	3.7 3.1
LIQ GAL/MCF	0.420	0.264	0.458	0.558	0.620	0.644	0.840	0.589	0.495 0.264

H2O LB/MMCF									* *
H2S PPMV									* *
O2 PPMV									* *

*

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0													VOLUME WEIGHTED		
1REPORT R69629S1													DATE RUN:		
09/20/2018															
10:55:25													TIME RUN:		
0															
SITE ID: CIGLUP															
SITE NAME: CIG FT LUPTON PURCHASE PT															
TARGET WOBBE: 1327															
AIR BLENDED: N															
DATA TYPE: AVG															
DATA SOURCE: CIG															
0															
MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC													AVG	MIN	
MAX															
-----													-----	-----	-----
CO2													1.896	1.770	
2.102															
OXYGEN													0.000	0.000	
0.000															
NITROGEN													0.391	0.381	
0.417															
METHANE													83.661	81.659	
84.873															
ETHANE													11.648	11.036	
12.651															
PROPANE													1.805	1.483	
2.301															
I-BUTANE													0.160	0.125	
0.218															
N-BUTANE													0.330	0.247	
0.477															
I-PENTANE													0.047	0.034	
0.076															
N-PENTANE													0.046	0.031	
0.079															
HEXANES+													0.016	0.010	
0.035															
TOTAL													100.00		
-----													-----	-----	-----
N2/O2													2.287	2.161	
%INERTS															

2.519

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)													
VOL(MMCF)	2479.5	2172.5	1648.8	1253.0	1136.1	731.5	284.7	640.4		1293.3	284.7		
HIGH BTU/CF	1112.5	1110.6	1126.4	1127.6	1134.9	1136.9	1131.6	1142.6		1122.7	1110.6		
LOW BTU/CF	1005.6	1003.9	1018.7	1019.8	1026.5	1028.5	1023.5	1033.8		1015.2	1003.9		
SPEC GRAV	0.6509	0.6487	0.6625	0.6626	0.6660	0.6692	0.6655	0.6749		0.6585	0.6487		
WOBBE INDEX	1378.9	1378.9	1383.9	1385.3	1390.7	1389.8	1387.1	1390.8		1383.5	1378.9		
%DIF	3.9	3.9	4.3	4.4	4.8	4.7	4.5	4.8		4.3	3.9		
LIQ GAL/MCF	0.559	0.555	0.688	0.747	0.912	0.907	0.810	0.922		0.694	0.555		
H2O LB/MMCF	1.6	1.7	1.9	2.0	1.9	1.3	1.1	1.3		1.7	1.1		
H2S PPMV										*	*		
O2 PPMV										*	*		
PUBLIC SERVICE COMPANY OF COLORADO										VOLUME WEIGHTED			
2018										DATE RUN:			
										TIME RUN:			
SITE ID: CIGWIG										ONLINE GAS CHROMATOGRAPH			
SITE NAME: CIG WIGGINS/ROUNDUP DEL													
TARGET WOBBE: 1327													
AIR BLENDED: N													
MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
CO2	2.331	2.324	2.306	2.322	2.499	2.560	2.541	2.561				2.510	2.306

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0.000	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000
0.407	NITROGEN	0.388	0.407	0.373	0.365	0.311	0.339	0.368	0.339		0.358	0.311
82.038	METHANE	81.988	82.038	81.759	81.635	80.235	80.750	81.101	80.924		81.135	80.235
12.822	ETHANE	12.653	12.262	12.822	12.409	12.452	12.403	12.405	12.458		12.440	12.262
3.547	PROPANE	2.045	2.321	2.124	2.564	3.547	2.964	2.788	2.789		2.723	2.045
0.253	I-BUTANE	0.165	0.180	0.172	0.193	0.253	0.237	0.213	0.240		0.219	0.165
0.510	N-BUTANE	0.306	0.339	0.324	0.370	0.510	0.483	0.430	0.479		0.436	0.306
0.081	I-PENTANE	0.046	0.048	0.047	0.054	0.079	0.070	0.064	0.081		0.068	0.046
0.120	N-PENTANE	0.046	0.048	0.047	0.056	0.081	0.120	0.054	0.071		0.065	0.046
0.074	HEXANES+	0.032	0.033	0.026	0.032	0.033	0.074	0.036	0.058		0.046	0.026
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00	
-----											-----	-----
2.909	N2/O2 %INERTS	2.719	2.731	2.679	2.687	2.810	2.899	2.909	2.900		2.867	2.679
----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)												
612.3	VOL (MMCF)	66.8	117.2	62.0	54.8	32.5	132.1	612.3	607.9		210.7	32.5
1159.1	HIGH BTU/CF	1129.9	1132.2	1133.2	1138.8	1159.1	1150.3	1142.2	1146.3		1143.0	1129.9
1049.3	LOW BTU/CF	1022.0	1024.2	1025.1	1030.4	1049.3	1041.2	1033.6	1037.4		1034.3	1022.0
0.6908	SPEC GRAV	0.6701	0.6717	0.6716	0.6755	0.6908	0.6864	0.6812	0.6839		0.6811	0.6701
1394.6	WOBBE INDEX	1380.3	1381.5	1382.8	1385.6	1394.6	1388.4	1383.9	1386.1		1385.0	1380.3
5.1	%DIF	4.0	4.1	4.2	4.4	5.1	4.6	4.3	4.5		4.4	4.0
1.292	LIQ GAL/MCF	0.760	0.854	0.788	0.939	1.292	1.146	1.031	1.077		1.027	0.760

PUC_Reports_Q4-2018.txt

-----													-----		-----				
H2O LB/MMCF													*		*				
* H2S PPMV													*		*				
* O2 PPMV													*		*				
*																			
-----													-----		-----				
0																			
1REPORT R69629S1													PUBLIC SERVICE COMPANY OF COLORADO					VOLUME WEIGHTED	
09/20/2018													2018					DATE RUN:	
10:55:25																		TIME RUN:	
0													DATA TYPE: AVG					ONLINE GAS CHROMATOGRAPH	
SITE ID: CIG1CK													TARGET WOBBE: 1327						
													AIR BLENDED: N						
MTH: JAN													MAY					JUN	
FEB													JUL					AUG	
MAR													SEP					OCT	
APR													NOV					DEC	
MAX													AVG			MIN			
-----													-----		-----				
CO2													2.171			2.105			
2.255													0.000			0.000			
OXYGEN													0.834			0.421			
0.000													81.893			81.477			
NITROGEN													11.734			11.280			
1.672													2.647			2.245			
METHANE													0.197			0.162			
82.660													0.394			0.323			
ETHANE													0.053			0.043			
12.256													0.051			0.039			
PROPANE													0.026			0.017			
2.802																			
I-BUTANE																			
0.212																			
N-BUTANE																			
0.425																			
I-PENTANE																			
0.062																			
N-PENTANE																			
0.062																			
HEXANES+																			
0.034																			

PUC_Reports_Q4-2018.txt

TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00		
-----											-----	-----	-----
N2/O2 %INERTS 3.777	3.777	2.739	2.722	2.824	3.684	3.097	2.597	2.590			3.005	2.590	
-----											-----	-----	-----
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)													
-----											-----	-----	-----
VOL (MMCF) 77.7	45.9	60.1	.0	33.8	59.7	70.1	77.7	68.6			59.4	.0	
HIGH BTU/CF 1142.2	1111.7	1129.5	1134.8	1134.4	1121.8	1135.2	1142.2	1140.2			1131.9	1111.7	
LOW BTU/CF 1033.5	1005.4	1021.7	1026.6	1026.3	1014.8	1027.1	1033.5	1031.6			1024.0	1005.4	
SPEC GRAV 0.6767	0.6685	0.6697	0.6728	0.6736	0.6740	0.6767	0.6758	0.6745			0.6736	0.6685	
WOBBE INDEX 1389.4	1359.7	1380.2	1383.5	1382.2	1366.4	1380.0	1389.4	1388.3			1379.1	1359.7	
%DIF 4.7	2.5	4.0	4.3	4.2	3.0	4.0	4.7	4.6			3.9	2.5	
LIQ GAL/MCF 1.028	0.814	0.948	0.979	0.998	0.957	1.015	1.028	0.959			0.967	0.814	
-----											-----	-----	-----
H2O LB/MMCF *											*	*	
H2S PPMV *											*	*	
O2 PPMV *											*	*	
-----											-----	-----	-----
0											VOLUME WEIGHTED		
1REPORT R69629S1											DATE RUN:		
09/20/2018													
10:55:26											TIME RUN:		
0													
SITE ID: EATN													
SITE NAME: DCP EATON GAS PLANT													
TARGET WOBBE: 1327													
											DATA TYPE: AVG		
											ONLINE GAS CHROMATOGRAPH		
											DATA SOURCE: HPG CAMPION		

PUC_Reports_Q4-2018.txt

0	MTH: JAN	FEB	AIR MAR	BLENDED: APR	N MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		AVG		MIN		
MAX																		
-----														-----		-----		
	CO2	2.090	2.084	2.091	2.118	2.122	2.194	2.178	2.169						2.129		2.084	
2.194																		
	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000						0.000		0.000	
0.000																		
	NITROGEN	0.625	0.616	0.616	0.583	0.609	0.626	0.633	0.634						0.618		0.583	
0.634																		
	METHANE	85.688	85.318	85.271	85.123	84.764	84.645	84.543	84.701						85.018		84.543	
85.688																		
	ETHANE	10.041	10.313	10.334	10.460	10.719	10.764	10.822	10.705						10.513		10.041	
10.822																		
	PROPANE	1.449	1.552	1.567	1.586	1.649	1.633	1.680	1.650						1.594		1.449	
1.680																		
	I-BUTANE	0.040	0.044	0.045	0.048	0.049	0.049	0.051	0.050						0.047		0.040	
0.051																		
	N-BUTANE	0.063	0.068	0.071	0.077	0.081	0.082	0.086	0.084						0.076		0.063	
0.086																		
	I-PENTANE	0.002	0.003	0.003	0.003	0.004	0.004	0.004	0.004						0.003		0.002	
0.004																		
	N-PENTANE	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003						0.002		0.002	
0.003																		
	HEXANES+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000						0.000		0.000	
0.000																		
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00						100.00			
-----														-----		-----		
	N2/O2																	
	%INERTS	2.715	2.700	2.707	2.701	2.731	2.820	2.811	2.803						2.747		2.700	
2.820																		
-----														-----		-----		
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)																		
-----														-----		-----		
	VOL(MMCF)	214.3	213.6	200.0	199.6	211.9	185.9	215.1	175.0						201.9		175.0	
215.1																		
	HIGH BTU/CF	1088.5	1092.5	1092.9	1094.4	1097.3	1096.5	1097.9	1096.6						1094.5		1088.5	
1097.9																		
	LOW BTU/CF	983.4	987.1	987.5	988.9	991.6	990.9	992.2	991.0						989.0		983.4	
992.2																		
	SPEC GRAV	0.6422	0.6446	0.6450	0.6460	0.6482	0.6491	0.6498	0.6488						0.6466		0.6422	

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0.6498	WOBBE INDEX	1358.3	1360.7	1360.8	1361.6	1362.9	1361.0	1362.0	1361.4		1361.1	1358.3
1362.9	%DIF	2.4	2.5	2.5	2.6	2.7	2.6	2.6	2.6		2.6	2.4
2.7	LIQ GAL/MCF	0.434	0.465	0.471	0.479	0.498	0.494	0.509	0.500		0.481	0.434
0.509												

----- ----- ----- -----												
0	H2O LB/MMCF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
0.0	H2S PPMV										*	*
*	O2 PPMV										*	*
*												

0	1REPORT R69629S1	PUBLIC SERVICE COMPANY OF COLORADO										VOLUME WEIGHTED	
09/20/2018												DATE RUN:	
		2018										TIME RUN:	

10:55:26	SITE ID: FTSV	SITE NAME: FORT ST VRAIN POWER PLANT								DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH				
0		TARGET WOBBE: 1327								DATA SOURCE: HPG CAMPION				
		AIR BLENDED: N												
0	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
MAX														

----- ----- ----- -----												
1.652	CO2	1.332	1.279	1.486	1.387	1.281	1.364	1.469	1.652		1.406	1.279
0.000	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000
0.828	NITROGEN	0.789	0.828	0.660	0.667	0.569	0.714	0.638	0.516		0.673	0.516
89.480	METHANE	88.466	88.785	86.460	88.106	89.480	88.768	87.511	86.016		87.965	86.016
10.704	ETHANE	8.437	8.126	10.499	8.990	7.754	7.914	9.126	10.704		8.919	7.754
0.940	PROPANE	0.762	0.766	0.683	0.645	0.683	0.940	0.926	0.886		0.794	0.645
0.078	I-BUTANE	0.057	0.057	0.053	0.051	0.059	0.075	0.078	0.058		0.061	0.051

PUC_Reports_Q4-2018.txt									
N-BUTANE 0.175	0.116	0.117	0.116	0.113	0.121	0.160	0.175	0.120	0.130 0.113
I-PENTANE 0.028	0.017	0.017	0.017	0.016	0.019	0.024	0.028	0.018	0.020 0.016
N-PENTANE 0.031	0.016	0.016	0.017	0.017	0.020	0.026	0.031	0.019	0.020 0.016
HEXANES+ 0.018	0.008	0.009	0.009	0.008	0.014	0.015	0.018	0.011	0.012 0.008
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

N2/O2 %INERTS 2.168	2.121	2.107	2.146	2.054	1.850	2.078	2.107	2.168	2.079 1.850
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----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL(MMCF) 2504.7	2504.7	2276.8	2052.7	1264.9	2409.9	2353.3	1997.1	2487.4	2168.4 1264.9
HIGH BTU/CF 1093.6	1074.5	1072.3	1088.9	1077.4	1071.3	1075.8	1085.3	1093.6	1079.8 1071.3
LOW BTU/CF 988.0	970.1	968.1	983.6	972.9	967.1	971.4	980.3	988.0	975.1 967.1
SPEC GRAV 0.6373	0.6228	0.6210	0.6331	0.6243	0.6177	0.6234	0.6304	0.6373	0.6262 0.6177
WOBBE INDEX 1369.9	1361.5	1360.7	1368.5	1363.6	1363.1	1362.5	1366.9	1369.9	1364.6 1360.7
%DIF 3.2	2.6	2.5	3.1	2.8	2.7	2.7	3.0	3.2	2.8 2.5
LIQ GAL/MCF 0.365	0.280	0.282	0.258	0.245	0.266	0.358	0.365	0.319	0.299 0.245

H2O LB/MMCF *									* *
H2S PPMV *									* *
O2 PPMV *									* *

0
1REPORT R69629S1
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

VOLUME WEIGHTED
DATE RUN:

2018

TIME RUN:

10:55:26

SITE ID: HSRS

SITE NAME: ANADARKO FT LUPTON RESIDU

DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH
DATA SOURCE: HPG CAMPION

TARGET WOBBE: 1327

AIR BLENDED: N

0 MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC | AVG | MIN |
MAX

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
CO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
NITROGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
METHANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
ETHANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
PROPANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
I-BUTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
N-BUTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
I-PENTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
N-PENTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
HEXANES+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0	*
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				100.00	

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
N2/O2 %INERTS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				*	*

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

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VOL (MMCF) .0 .0 .0 .0 .0 .0 .0 .0
 HIGH BTU/CF
 *
 LOW BTU/CF
 *
 SPEC GRAV
 *
 WOBBE INDEX
 *
 %DIF 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 *
 LIQ GAL/MCF
 *

*	.0	*
*		*
*		*
*		*
*		*
*		*
*		*
*		*
*		*

H2O LB/MMCF 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 *
 H2S PPMV 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 *
 O2 PPMV 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 *

*		*
*		*
*		*
*		*
*		*

0
 1REPORT R69629S1
 09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

STRAIGHT AVERAGED
 DATE RUN:

2018

TIME RUN:

10:55:26

0

SITE ID: LUPO

SITE NAME: FT LUPTON DELIVERY TO CIG

DATA TYPE: AVG

ONLINE GAS CHROMATOGRAPH

TARGET WOBBE: 1327

DATA SOURCE: CIG

AIR BLENDED: N

0

MTH: JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

AVG

MIN

MAX

CO2 0.000 1.999 0.000 0.000 0.000 0.000 0.000 0.000 2.086
 2.086
 OXYGEN 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
 0.000
 NITROGEN 0.000 0.435 0.000 0.000 0.000 0.000 0.000 0.401
 0.435
 METHANE 0.000 85.416 0.000 0.000 0.000 0.000 0.000 81.526

	2.004	1.999
	0.000	0.000
	0.433	0.401
	85.193	81.526

Fuel Report 06-Q1 2020 FUEL											
Item	Unit	Price	Quantity	Value	Tax	Net	Gross	Net	Gross	Net	Gross
ETHANE	0.000	10.839	0.000	0.000	0.000	0.000	0.000	0.000	12.777		
PROPANE	0.000	1.119	0.000	0.000	0.000	0.000	0.000	0.000	2.304		
I-BUTANE	0.000	0.059	0.000	0.000	0.000	0.000	0.000	0.000	0.218		
N-BUTANE	0.000	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.488		
I-PENTANE	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.077		
N-PENTANE	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.083		
HEXANES+	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.040		
TOTAL	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00		

----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)
-----|-----|-----|-----

H2O LB/MMCF	0.0	0.0	0.0	0.0	0.0	0.0			*		*	
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* H2S PPMV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		*	*	
* O2 PPMV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		*	*	

0
1REPORT R69629S1
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

VOLUME WEIGHTED
DATE RUN:

2018

TIME RUN:

10:55:26

0	SITE ID: MEWB	SITE NAME: DCP MEWBOURN GAS PLANT	DATA TYPE: AVG	ONLINE GAS CHROMATOGRAPH													
		TARGET WOBBE: 1327	DATA SOURCE: HPG	CAMPION													
0	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		AVG		MIN	
MAX																	

0.029	CO2	0.000	0.001	0.000	0.000	0.000	0.008	0.029	0.002					0.001		0.000	
0.000	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000		0.000	
0.339	NITROGEN	0.339	0.336	0.000	0.000	0.316	0.318	0.324	0.321					0.327		0.316	
95.014	METHANE	95.014	92.041	0.000	0.000	94.504	93.894	89.222	93.111					93.706		89.222	
9.865	ETHANE	4.597	7.524	0.000	0.000	5.117	5.662	9.865	6.455					5.873		4.597	
0.501	PROPANE	0.050	0.097	0.000	0.000	0.063	0.105	0.501	0.109					0.091		0.050	
0.016	I-BUTANE	0.000	0.001	0.000	0.000	0.000	0.003	0.016	0.001					0.001		0.000	
0.031	N-BUTANE	0.000	0.000	0.000	0.000	0.000	0.007	0.031	0.001					0.001		0.000	
0.005	I-PENTANE	0.000	0.000	0.000	0.000	0.000	0.001	0.005	0.000					0.000		0.000	
0.005	N-PENTANE	0.000	0.000	0.000	0.000	0.000	0.001	0.005	0.000					0.000		0.000	
0.002	HEXANES+	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.000					0.000		0.000	
	TOTAL	100.00	100.00	0.00	0.00	100.00	100.00	100.00	100.00					100.00			

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N2/O2 %INERTS 0.353	0.339	0.337	0.000	0.000	0.316	0.326	0.353	0.323		0.328	0.316
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)											
VOL(MMCF) 102.7	46.7	.0	.0	.0	.0	.8	.0	102.7		50.1	.0
HIGH BTU/CF 1095.6	1047.0	1070.2			1051.4	1056.4	1095.6	1062.4		1057.6	1047.0
LOW BTU/CF 989.3	943.9	965.5			948.0	952.6	989.3	958.2		953.7	943.9
SPEC GRAV 0.6103	0.5790	0.5938			0.5816	0.5849	0.6103	0.5886		0.5856	0.5790
WOBBE INDEX 1402.4	1376.0	1388.8			1378.7	1381.3	1402.4	1384.8		1382.0	1376.0
%DIF 5.7	3.7	4.7	0.0	0.0	3.9	4.1	5.7	4.4		4.2	3.7
LIQ GAL/MCF 0.157	0.014	0.027			0.017	0.033	0.157	0.031		0.026	0.014
H2O LB/MMCF 1.0	0.1	0.2	0.0	0.0	0.2	0.1	1.0	0.2		0.2	0.1
H2S PPMV 0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.2		0.1	0.0
O2 PPMV *			0.0	0.0						*	*
PUBLIC SERVICE COMPANY OF COLORADO										VOLUME WEIGHTED DATE RUN:	
2018										TIME RUN:	
DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH											
DATA SOURCE: HPG CAMPION											
AIR BLENDED: N											
</											

[illegible]

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LIQ GAL/MCF	0.352	0.374	0.392	0.419	0.388	0.489	0.416	0.446			0.408		0.352	
0.489														

H2O LB/MMCF	0.8	0.6	0.8	0.7	0.7	0.6	0.7	0.7			0.7		0.6	
0.8														
H2S PPMV	3.2	2.9	3.2	3.2	0.9	2.3	3.1	3.2			2.8		0.9	
3.2														
O2 PPMV											*		*	
*														

0

1REPORT R69629S1

09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

2018

VOLUME WEIGHTED DATE RUN:

TIME RUN:

10:55:26

0

SITE ID: RNDI

SITE NAME: ROUNDUP GAS INJECTION

TARGET WOBBE: 1327

AIR BLENDED: N

DATA TYPE: AVG

ONLINE GAS CHROMATOGRAPH

DATA SOURCE: HPG ROUNDUP

MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		AVG		MIN	
MAX																

CO2	0.000	0.000	0.000	0.000	0.000	2.573	2.491	2.472			2.484		2.472	
2.573														
OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000		0.000	
0.000														
NITROGEN	0.000	0.000	0.000	0.000	0.000	0.280	0.297	0.281			0.289		0.280	
0.297														
METHANE	0.000	0.000	0.000	0.000	0.000	81.096	81.129	81.136			81.133		81.096	
81.136														
ETHANE	0.000	0.000	0.000	0.000	0.000	12.401	12.459	12.505			12.479		12.401	
12.505														
PROPANE	0.000	0.000	0.000	0.000	0.000	2.801	2.792	2.695			2.745		2.695	
2.801														
I-BUTANE	0.000	0.000	0.000	0.000	0.000	0.222	0.217	0.232			0.224		0.217	
0.232														
N-BUTANE	0.000	0.000	0.000	0.000	0.000	0.443	0.439	0.465			0.452		0.439	
0.465														
I-PENTANE	0.000	0.000	0.000	0.000	0.000	0.069	0.067	0.078			0.072		0.067	
0.078														
N-PENTANE	0.000	0.000	0.000	0.000	0.000	0.075	0.073	0.085			0.079		0.073	

PUC_Reports_Q4-2018.txt									
0.085 HEXANES+ 0.051	0.000	0.000	0.000	0.000	0.000	0.040	0.036	0.051	0.043 0.036
TOTAL	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00

N2/O2 %INERTS 2.853	0.000	0.000	0.000	0.000	0.000	2.853	2.788	2.753	2.773 2.753
---------------------------	-------	-------	-------	-------	-------	-------	-------	-------	--------------

----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL (MMCF) 611.9	.0	.0	.0	.0	.0	39.4	611.9	609.6	420.3 39.4
HIGH BTU/CF 1146.3						1144.4	1144.9	1146.3	1145.6 1144.4
LOW BTU/CF 1037.4						1035.6	1036.1	1037.4	1036.7 1035.6
SPEC GRAV 0.6822						0.6822	0.6814	0.6818	0.6816 0.6814
WOBBE INDEX 1388.3						1385.5	1387.0	1388.3	1387.6 1385.5
%DIF 4.6	0.0	0.0	0.0	0.0	0.0	4.4	4.5	4.6	4.5 4.4
LIQ GAL/MCF 1.053						1.053	1.044	1.045	1.045 1.044

H2O LB/MMCF 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0
H2S PPMV 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0
O2 PPMV *	0.0	0.0	0.0	0.0	0.0				* *

PUC_Reports_Q4-2018.txt

10:55:26

0

SITE ID: RNDT

SITE NAME: ROUNDUP GAS TO TRANSMISSN

DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH

TARGET WOBBE: 1327

DATA SOURCE: HPG ROUNDUP

AIR BLENDED: N

0

MTH: JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

| AVG

| MIN

MAX

-----													-----	-----	-----
-----	CO2	2.403	2.332	2.273	2.222	0.000	0.000	0.000	0.000					2.329	2.222
2.403	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000	0.000
0.000	NITROGEN	0.292	0.316	0.337	0.365	0.000	0.000	0.000	0.000					0.319	0.292
0.365	METHANE	81.473	81.931	82.313	82.711	0.000	0.000	0.000	0.000					81.957	81.473
82.711	ETHANE	12.557	12.352	12.162	11.850	0.000	0.000	0.000	0.000					12.316	11.850
12.557	PROPANE	2.537	2.405	2.301	2.259	0.000	0.000	0.000	0.000					2.409	2.259
2.537	I-BUTANE	0.207	0.190	0.179	0.173	0.000	0.000	0.000	0.000					0.191	0.173
0.207	N-BUTANE	0.381	0.347	0.323	0.312	0.000	0.000	0.000	0.000					0.349	0.312
0.381	I-PENTANE	0.056	0.049	0.045	0.043	0.000	0.000	0.000	0.000					0.050	0.043
0.056	N-PENTANE	0.057	0.049	0.044	0.042	0.000	0.000	0.000	0.000					0.050	0.042
0.057	HEXANES+	0.037	0.029	0.023	0.023	0.000	0.000	0.000	0.000					0.030	0.023
0.037															
	TOTAL	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00					100.00	

-----													-----	-----	-----
-----	N2/O2														
2.695	%INERTS	2.695	2.648	2.610	2.587	0.000	0.000	0.000	0.000					2.648	2.587

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

-----													-----	-----	-----
-----	VOL (MMCF)	658.3	540.0	413.2	247.4	.0	.0	.0	.0					464.7	247.4
658.3	HIGH BTU/CF	1140.3	1135.3	1131.4	1128.0									1135.2	1128.0
1140.3															

LOW BTU/CF	1031.8	1027.1	1023.4	1020.2						1027.0	1020.2
SPEC GRAV	0.6769	0.6729	0.6696	0.6669						0.6728	0.6669
WOBBE INDEX	1386.0	1384.0	1382.6	1381.3						1384.0	1381.3
%DIF	4.4	4.3	4.2	4.1	0.0	0.0	0.0	0.0		4.3	4.1
LIQ GAL/MCF	0.943	0.882	0.836	0.818						0.885	0.818

H2O	LB/MMCF	1.3	0.8	0.6	0.6	0.0	0.0	0.0	0.0		0.9	0.6
1.3												
*	H2S	PPMV				0.0	0.0	0.0	0.0		*	*
*	O2	PPMV				0.0	0.0	0.0	0.0		*	*

0		VOLUME WEIGHTED
1REPORT R69629S1	PUBLIC SERVICE COMPANY OF COLORADO	DATE RUN:
09/20/2018	2018	TIME RUN:

0	SITE ID: ROGN	SITE NAME: DCP ROGGEN GP	DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH
		TARGET WOBBE: 1327	DATA SOURCE: HPG ROUNDUP
	AIR BLENDED: N		
0	MTH: JAN FEB	MAR APR MAY JUN JUL AUG SEP OCT NOV DEC AVG MIN	
MAX			

*	CO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0		*	
*	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0		*	
*	NITROGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0		*	
*	METHANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0		*	
*	ETHANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0		*	
*	PROPANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0		*	

PUC_Reports_Q4-2018.txt													
*	I-BUTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0		*
*	N-BUTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0		*
*	I-PENTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0		*
*	N-PENTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0		*
*	HEXANES+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0		*
*													
	TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		100.00		
-----											-----		-----
	N2/O2												
*	%INERTS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		*		*
----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)													
	VOL (MMCF)	.0	.0	.0	.0	.0	.0	.0	.0				
*	HIGH BTU/CF										*		*
*	LOW BTU/CF										*		*
*	SPEC GRAV										*		*
*	WOBBE INDEX										*		*
*	%DIF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		*		*
*	LIQ GAL/MCF										*		*
-----											-----		-----
	H2O LB/MMCF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		*		*
*													
*	H2S PPMV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		*		*
*													
*	O2 PPMV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		*		*
*													

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PUC_Reports_Q4-2018.txt									
NITROGEN 0.449	0.435	0.430	0.424	0.419	0.427	0.449	0.436	0.436	0.429 0.419
METHANE 85.893	82.838	82.954	82.625	83.259	84.530	85.893	84.496	84.178	83.182 82.625
ETHANE 14.907	14.664	14.536	14.907	14.237	12.969	10.941	13.047	13.133	14.303 10.941
PROPANE 0.464	0.066	0.049	0.072	0.065	0.046	0.464	0.079	0.235	0.079 0.046
I-BUTANE 0.046	0.000	0.000	0.000	0.000	0.000	0.046	0.001	0.016	0.002 0.000
N-BUTANE 0.117	0.001	0.000	0.001	0.000	0.000	0.117	0.002	0.033	0.004 0.000
I-PENTANE 0.021	0.000	0.000	0.000	0.000	0.000	0.021	0.000	0.005	0.001 0.000
N-PENTANE 0.024	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.005	0.001 0.000
HEXANES+ 0.015	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.003	0.000 0.000
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

N2/O2 %INERTS 2.479	2.431	2.461	2.395	2.439	2.455	2.479	2.375	2.392	2.428 2.375
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REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)									
VOL(MMCF) 3819.3	3819.3	3591.2	3357.6	2595.9	802.6	187.9	885.3	1075.8	2039.5 187.9
HIGH BTU/CF 1105.7	1103.4	1101.8	1105.7	1100.0	1089.8	1086.0	1091.7	1096.0	1101.0 1086.0
LOW BTU/CF 999.4	997.2	995.8	999.4	994.1	984.5	981.0	986.3	990.4	995.0 981.0
SPEC GRAV 0.6490	0.6481	0.6476	0.6490	0.6461	0.6398	0.6378	0.6398	0.6428	0.6465 0.6378
WOBBE INDEX 1372.5	1370.6	1369.1	1372.5	1368.5	1362.5	1359.8	1364.8	1367.0	1369.3 1359.8
%DIF 3.4	3.3	3.2	3.4	3.1	2.7	2.5	2.8	3.0	3.2 2.5
LIQ GAL/MCF 0.202	0.018	0.013	0.020	0.018	0.013	0.202	0.023	0.085	0.024 0.013

PUC_Reports_Q4-2018.txt

 * H2O LB/MMCF
 *
 * H2S PPMV
 *
 * O2 PPMV
 *

*	*
*	*
*	*

0
 1REPORT R69629S1
 09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

VOLUME WEIGHTED
 DATE RUN:

2018

TIME RUN:

10:55:26

SITE ID: WIND		SITE NAME: AKA GAS PLANT		DATA TYPE: AVG		ONLINE GAS CHROMATOGRAPH								
		TARGET WOBBE: 1327		DATA SOURCE: HPG CAMPION										
		AIR BLENDED: N												
0	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
MAX														

CO2	2.886	2.862	2.800	2.844	2.783	2.838	2.845	2.788					2.829	2.783
2.886														
OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000	0.000
0.000														
NITROGEN	0.175	0.177	0.174	0.174	0.175	0.178	0.170	0.183					0.176	0.170
0.183														
METHANE	82.931	82.961	82.938	82.957	83.237	83.050	83.112	83.194					83.059	82.931
83.237														
ETHANE	11.460	11.491	11.542	11.505	11.373	11.434	11.291	11.381					11.428	11.291
11.542														
PROPANE	2.204	2.179	2.219	2.199	2.127	2.180	2.184	2.068					2.165	2.068
2.219														
I-BUTANE	0.146	0.141	0.142	0.140	0.133	0.138	0.160	0.149					0.144	0.133
0.160														
N-BUTANE	0.175	0.167	0.166	0.163	0.155	0.161	0.200	0.195					0.174	0.155
0.200														
I-PENTANE	0.013	0.012	0.011	0.011	0.010	0.012	0.020	0.021					0.014	0.010
0.021														
N-PENTANE	0.008	0.008	0.007	0.006	0.006	0.007	0.014	0.016					0.009	0.006
0.016														
HEXANES+	0.002	0.002	0.001	0.001	0.001	0.002	0.004	0.005					0.002	0.001
0.005														
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00					100.00	

Emissions from the use of fossil fuels in the manufacturing industries and construction										Total	
Fossil fuel	CO2	2019				2020				2019	2020
		kg	kg	kg	kg	kg	kg	kg	kg		
2.025	CO2	1.923	1.883	1.957	1.954	0.000	2.025	2.002	0.000	1.928	1.883
0.000	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.455	NITROGEN	0.445	0.455	0.411	0.447	0.000	0.402	0.414	0.000	0.442	0.402
84.695	METHANE	84.112	84.507	83.223	84.105	0.000	83.845	84.695	0.000	84.106	83.223
13.489	ETHANE	12.652	12.328	13.489	12.510	0.000	11.512	11.582	0.000	12.587	11.512
1.781	PROPANE	0.686	0.660	0.733	0.781	0.000	1.781	1.084	0.000	0.745	0.660
0.114	I-BUTANE	0.050	0.047	0.052	0.055	0.000	0.114	0.061	0.000	0.053	0.047
0.234	N-BUTANE	0.101	0.092	0.104	0.113	0.000	0.234	0.120	0.000	0.106	0.092
0.034	I-PENTANE	0.013	0.012	0.013	0.015	0.000	0.034	0.017	0.000	0.014	0.012
0.036	N-PENTANE	0.013	0.012	0.013	0.015	0.000	0.036	0.017	0.000	0.014	0.012
0.017	HEXANES+	0.005	0.004	0.005	0.005	0.000	0.017	0.008	0.000	0.005	0.004
	TOTAL	100.00	100.00	100.00	100.00	0.00	100.00	100.00	0.00	100.00	

[illegible]

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL(MMCF)	3090.9	2626.0	1271.2	2139.0	.0	265.4	213.4	.0	1601.0	213.4
HIGH BTU/CF	1102.4	1099.4	1109.6	1102.9		1116.0	1100.8		1103.0	1099.4
LOW BTU/CF	996.3	993.4	1003.0	996.8		1009.0	994.8		996.8	993.4
SPEC GRAV	0.6465	0.6440	0.6512	0.6473		0.6564	0.6464		0.6469	0.6440
WOBBE INDEX	1371.1	1370.0	1375.0	1370.8		1377.5	1369.2		1371.4	1369.2

PUC_Reports_Q4-2018.txt															
1377.5	%DIF	3.3	3.2	3.6	3.3	0.0	3.8	3.2	0.0				3.3	3.2	
3.8	LIQ GAL/MCF	0.249	0.237	0.263	0.282		0.634	0.372					0.268	0.237	
0.634															
----- ----- ----- -----															
H2O	LB/MMCF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	
0.0	H2S PPMV					0.0			0.0				*	*	
*	O2 PPMV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	
0.0															
----- ----- ----- -----															
0	PUBLIC SERVICE COMPANY OF COLORADO											VOLUME WEIGHTED			
1	REPORT R69629S1												DATE RUN:		
09/20/2018															
10:55:26	2018											TIME RUN:			
0	SITE ID: YOSI	SITE NAME: YOSEMITE SOUTH INLET				DATA TYPE: AVG				ONLINE GAS CHROMATOGRAPH					
		TARGET WOBBE: 1327				DATA SOURCE: HPG BRIGHTON									
		AIR BLENDED: N													
0	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN	
MAX	----- ----- ----- -----														
	CO2	1.908	1.891	2.008	1.965	1.998	2.006	2.043	2.195				1.978	1.891	
2.195	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	0.000	
0.000	NITROGEN	0.501	0.508	0.461	0.478	0.433	0.457	0.445	0.411				0.471	0.411	
0.508	METHANE	84.246	84.426	83.475	84.156	84.682	83.968	84.340	83.654				84.125	83.475	
84.682	ETHANE	12.492	12.367	13.088	12.440	11.222	11.541	12.075	11.982				12.285	11.222	
13.088	PROPANE	0.678	0.647	0.780	0.778	1.318	1.674	0.941	1.466				0.925	0.647	
1.674	I-BUTANE	0.048	0.045	0.053	0.051	0.094	0.098	0.045	0.080				0.060	0.045	
0.098	N-BUTANE	0.097	0.089	0.104	0.103	0.190	0.192	0.083	0.157				0.119	0.083	
0.192															

PUC_Reports_Q4-2018.txt											
I-PENTANE 0.027	0.013	0.012	0.013	0.014	0.027	0.026	0.011	0.022		0.016	0.011
N-PENTANE 0.026	0.012	0.011	0.013	0.013	0.026	0.026	0.011	0.022		0.015	0.011
HEXANES+ 0.012	0.005	0.004	0.005	0.002	0.010	0.012	0.006	0.011		0.006	0.002
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00	

N2/O2 %INERTS 2.606	2.409	2.399	2.469	2.443	2.431	2.463	2.488	2.606		2.448	2.399
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----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL (MMCF) 4762.8	4308.5	4762.8	4565.6	3027.3	2985.2	1767.7	1809.4	1791.1		3127.2	1767.7
HIGH BTU/CF 1112.1	1100.5	1098.7	1106.3	1101.4	1104.4	1112.1	1100.0	1109.4		1103.2	1098.7
LOW BTU/CF 1005.4	994.5	992.8	999.9	995.4	998.2	1005.4	994.1	1002.9		997.1	992.8
SPEC GRAV 0.6550	0.6456	0.6442	0.6505	0.6469	0.6489	0.6542	0.6469	0.6550		0.6482	0.6442
WOBBE INDEX 1375.0	1369.6	1368.9	1371.7	1369.4	1371.0	1375.0	1367.6	1370.8		1370.3	1367.6
%DIF 3.6	3.2	3.2	3.4	3.2	3.3	3.6	3.1	3.3		3.3	3.1
LIQ GAL/MCF 0.578	0.244	0.231	0.276	0.274	0.477	0.578	0.311	0.500		0.326	0.231

H2O LB/MMCF 1.3	1.0	1.0	1.1	1.0	1.2	1.3	1.0	1.2		1.1	1.0
H2S PPMV *										*	*
O2 PPMV 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0

1REPORT R699680
09/20/2018

PUC_Reports_Q4-2018.txt
PUBLIC SERVICE COMPANY OF COLORADO

DATE RUN:

BTU ZONE SUMMARY HEATING VALUES REPORT

TIME RUN:

10:55:26

FOURTH QUARTER, 2018

BTU ZONE: PUEBLO		NET FLOW	HV (BTU/CF, 14.73 PSIA, 60 F, DRY)			VOLUME (MCF AT 14.73 PSIA)	
SITE ID	SAMPLING SITE NAME		JUNE	JULY	AUGUST	JUNE	JULY
AUGUST							
0 CIGPUN	CIG PUEBLO NORTH TB	IN	1054.9	1051.9	1053.7	43,573	30,070
26,932							
CIGPUS	CIG PUEBLO SOUTH TB	IN	1056.0	1053.8	1059.2	93,339	99,894
99,469							
0	VOLUME WEIGHTED HEATING VALUE:		1055.6	1053.4	1058.0	TOTAL VOL:	136,912
126,401							129,964
0	QUARTER AVERAGE HEATING VALUE:		1055.7				
-							

DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.
PUBLIC SERVICE COMPANY OF COLORADO

1REPORT R69629Z0
09/20/2018

DATE RUN:

2018

TIME RUN:

10:55:26

ZONE NAME: PUEBLO

MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC AVG MIN													
MAX													
----- ----- ----- -----													
CO2	0.608	0.680	1.115	1.315	1.659	1.920	1.900	1.993				1.026	0.608
1.993													
OXYGEN	0.747	0.754	0.971	1.110	1.306	1.521	1.471	1.523				0.959	0.747
1.523													
NITROGEN	3.502	3.647	4.227	4.581	5.390	5.995	5.790	6.034				4.211	3.502
6.034													
METHANE	94.642	93.742	88.053	85.184	79.539	76.471	77.084	75.896				88.990	75.896
94.642													
ETHANE	0.398	0.945	4.572	6.323	9.531	11.143	11.063	11.637				3.858	0.398
11.637													
PROPANE	0.078	0.179	0.828	1.142	1.939	2.225	2.024	2.188				0.728	0.078
2.225													
I-BUTANE	0.008	0.016	0.065	0.093	0.166	0.187	0.170	0.182				0.061	0.008
0.187													
N-BUTANE	0.013	0.028	0.130	0.191	0.351	0.398	0.365	0.396				0.125	0.013
0.398													
I-PENTANE	0.002	0.004	0.017	0.026	0.050	0.058	0.054	0.060				0.018	0.002
0.060													
N-PENTANE	0.001	0.003	0.016	0.025	0.049	0.058	0.055	0.061				0.017	0.001

PUC_Reports_Q4-2018.txt									
0.061 HEXANES+ 0.030	0.001	0.002	0.006	0.010	0.020	0.024	0.024	0.030	
									0.007 0.001
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

N2/O2	4.688	4.837	4.353	4.127	4.127	3.941	3.936	3.962					4.476	3.936
4.837 %INERTS 9.550	4.857	5.081	6.313	7.006	8.355	9.436	9.161	9.550					6.196	4.857

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)														
VOL(MMCF)	847.4	758.3	470.0	365.5	173.8	136.9	130.0	126.4					376.0	126.4
847.4 HIGH BTU/CF	969.8	974.0	1003.6	1017.4	1047.6	1055.7	1053.4	1057.9					997.6	969.8
1057.9 LOW BTU/CF	873.4	877.4	905.3	918.5	947.1	955.0	952.8	957.2					899.8	873.4
957.2 SPEC GRAV	0.5822	0.5877	0.6223	0.6398	0.6756	0.6940	0.6894	0.6970					0.6168	0.5822
0.6970 WOBBE INDEX	1271.0	1270.5	1272.2	1271.9	1274.5	1267.2	1268.7	1267.2					1270.9	1267.2
1274.5 LIQ GAL/MCF	0.030	0.067	0.305	0.428	0.743	0.852	0.778	0.843					0.276	0.030
0.852														

01REPORT R69629S1 09/20/2018										PUBLIC SERVICE COMPANY OF COLORADO										VOLUME WEIGHTED DATE RUN:											
10:55:27 0										2018										TIME RUN:											
		SITE ID: CIGPUN		SITE NAME: CIG PUEBLO NORTH TB						DATA TYPE: AVG		ONLINE GAS		CHROMATOGRAPH																	
				TARGET WOBBE: 1207						DATA SOURCE: CIG																					
				AIR BLENDED: Y																											
0		MTH: JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		AVG		MIN			
MAX																															

2.065		CO2		0.636		0.713		1.228		1.387		1.686		1.930		1.914		2.065										1.040		0.636	

PUC_Reports_Q4-2018.txt												
1.518	OXYGEN	0.772	0.825	1.024	1.165	1.364	1.518	1.452	1.481		0.983	0.772
6.222	NITROGEN	3.551	3.643	4.394	4.676	5.411	6.013	5.834	6.222		4.208	3.551
94.249	METHANE	94.249	93.321	86.641	84.243	79.251	76.496	77.142	75.689		88.861	75.689
11.858	ETHANE	0.631	1.207	5.458	6.934	9.688	11.112	11.008	11.858		3.949	0.631
2.210	PROPANE	0.122	0.224	0.975	1.219	1.950	2.210	1.983	1.996		0.729	0.122
0.188	I-BUTANE	0.012	0.020	0.078	0.101	0.171	0.188	0.171	0.172		0.062	0.012
0.393	N-BUTANE	0.020	0.035	0.154	0.206	0.356	0.393	0.361	0.365		0.125	0.020
0.058	I-PENTANE	0.003	0.005	0.021	0.029	0.051	0.057	0.054	0.058		0.018	0.003
0.059	N-PENTANE	0.002	0.004	0.019	0.028	0.051	0.058	0.055	0.059		0.017	0.002
0.035	HEXANES+	0.002	0.003	0.008	0.012	0.021	0.025	0.026	0.035		0.008	0.002
	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00	
-----										-----	-----	-----
4.600	N2/O2	4.600	4.416	4.291	4.014	3.967	3.961	4.018	4.201		4.335	3.961
9.768	%INERTS	4.959	5.181	6.646	7.228	8.461	9.461	9.200	9.768		6.230	4.959
----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)												
-----										-----	-----	-----
308.8	VOL(MMCF)	308.8	266.4	160.6	131.9	66.5	43.6	30.1	26.9		129.4	26.9
1054.9	HIGH BTU/CF	971.6	976.0	1010.3	1021.8	1048.3	1054.9	1051.9	1053.7		998.0	971.6
954.3	LOW BTU/CF	875.0	879.3	911.7	922.7	947.9	954.3	951.5	953.3		900.2	875.0
0.6969	SPEC GRAV	0.5846	0.5903	0.6308	0.6454	0.6774	0.6938	0.6889	0.6969		0.6175	0.5846
1273.7	WOBBE INDEX	1270.7	1270.3	1272.1	1271.9	1273.7	1266.5	1267.3	1262.2		1270.7	1262.2
5.5	%DIF	5.3	5.2	5.4	5.4	5.5	4.9	5.0	4.6		5.3	4.6
0.846	LIQ GAL/MCF	0.046	0.084	0.360	0.459	0.751	0.846	0.766	0.778		0.276	0.046

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H2O LB/MMCF														*		*		*	
* H2S PPMV														*		*		*	
* O2 PPMV														*		*		*	
*																			
-----														-----		-----		-----	
-----														-----		-----		-----	
0														VOLUME WEIGHTED					
1REPORT R69629S1														DATE RUN:					
09/20/2018																			
10:55:27														TIME RUN:					
0																			
SITE ID: CIGPUS																			
SITE NAME: CIG PUEBLO SOUTH TB																			
TARGET WOBBE: 1207																			
AIR BLENDED: Y																			
0																			
MTH: JAN																			
MAX																			
-----														-----		-----		-----	
-----														-----		-----		-----	
CO2														1.018		0.592		1.018	
1.974														0.947		0.716		0.947	
OXYGEN														4.212		3.474		4.212	
1.534														89.059		75.950		89.059	
NITROGEN														3.810		0.264		3.810	
5.986														0.727		0.053		0.727	
METHANE														0.060		0.006		0.060	
94.867														0.125		0.009		0.125	
ETHANE														0.018		0.001		0.018	
11.577														0.017		0.001		0.017	
PROPANE														0.007		0.000		0.007	
2.240																			
I-BUTANE																			
0.186																			
N-BUTANE																			
0.405																			
I-PENTANE																			
0.061																			
N-PENTANE																			
0.062																			
HEXANES+																			

0.029

TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	100.00								

100.00

N2/O2	4.739	5.096	4.386	4.196	4.234	3.933	3.911	3.900	
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4.559 3.900

%INERTS	4.799	5.027	6.140	6.881	8.289	9.423	9.150	9.491	
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6.178 4.799

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REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

VOL(MMCF)	538.6	491.9	309.4	233.6	107.3	93.3	99.9	99.5	
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246.7 93.3

HIGH BTU/CF	968.8	972.8	1000.0	1015.0	1047.2	1056.0	1053.8	1059.2	
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997.4 968.8

LOW BTU/CF	872.4	876.2	902.0	916.2	946.7	955.4	953.2	958.3	
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899.6 872.4

SPEC GRAV	0.5809	0.5862	0.6179	0.6367	0.6745	0.6940	0.6895	0.6971	
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0.6164 0.5809

WOBBE INDEX	1271.1	1270.6	1272.2	1272.0	1275.1	1267.6	1269.1	1268.6	
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1271.1 1267.6

%DIF	5.3	5.3	5.4	5.4	5.6	5.0	5.1	5.1	
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5.3 5.0

LIQ GAL/MCF	0.020	0.057	0.275	0.410	0.738	0.854	0.781	0.862	
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0.275 0.020

VOLUME WEIGHTED
DATE RUN:

TIME RUN:

PUBLIC SERVICE COMPANY OF COLORADO
BTU ZONE SUMMARY HEATING VALUES REPORT

PUC_Reports_Q4-2018.txt
FOURTH QUARTER, 2018

0 BTU ZONE: RIFLE-VAIL
0
0 SITE ID SAMPLING SITE NAME NET HV (BTU/CF, 14.73 PSIA, 60 F, DRY) VOLUME (MCF AT 14.73 PSIA)
AUGUST JUNE JULY AUGUST JUNE JULY
0 RV12 AVON 12-INCH INLET IN 1039.4 1038.7 1035.6 691,591 606,381
566,450
0 VOLUME WEIGHTED HEATING VALUE: 1039.4 1038.7 1035.6 TOTAL VOL: 691,591 606,381
566,450
0 QUARTER AVERAGE HEATING VALUE: 1037.9
-

1REPORT R69629Z0 DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.
09/20/2018 PUBLIC SERVICE COMPANY OF COLORADO DATE RUN:

2018

TIME RUN:

10:55:27

0 ZONE NAME: RIFLE-VAIL
-

MAX	MTH:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
-----	CO2	1.305	1.480	1.852	0.150	0.663	0.497	0.407	0.587					0.981	0.150
1.852	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000	0.000
0.000	NITROGEN	0.075	0.078	0.092	0.071	0.102	0.097	0.089	0.113					0.087	0.071
0.113	METHANE	92.633	93.145	91.679	96.270	95.695	95.707	96.138	96.135					94.268	91.679
96.270	ETHANE	5.103	4.337	5.142	3.280	3.174	3.432	3.007	2.757					4.001	2.757
5.142	PROPANE	0.633	0.688	0.882	0.168	0.268	0.202	0.260	0.297					0.477	0.168
0.882	I-BUTANE	0.114	0.123	0.160	0.028	0.044	0.030	0.044	0.047					0.084	0.028
0.160	N-BUTANE	0.094	0.103	0.134	0.022	0.035	0.023	0.036	0.044					0.070	0.022
0.134	I-PENTANE	0.029	0.031	0.041	0.008	0.012	0.008	0.012	0.013					0.022	0.008
0.041	N-PENTANE	0.002	0.002	0.002	0.000	0.001	0.000	0.001	0.001					0.001	0.000
0.002	HEXANES+	0.012	0.013	0.016	0.003	0.006	0.004	0.006	0.006					0.009	0.003
0.016	TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00					100.00	

PUC_Reports_Q4-2018.txt

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N2/O2 %INERTS 1.944	1.380	1.558	1.944	0.221	0.765	0.594	0.496	0.700			1.067	0.221	
----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)													
-----										-----	-----	-----	-----
VOL (MMCF) 1314.1	1314.1	1244.9	824.7	786.8	655.2	691.6	606.4	566.5			836.3	566.5	
HIGH BTU/CF 1056.2	1055.3	1049.0	1056.2	1041.3	1037.5	1039.4	1038.7	1035.6			1046.0	1035.6	
LOW BTU/CF 953.0	952.0	946.1	953.0	938.5	935.1	936.9	936.2	933.4			943.2	933.4	
SPEC GRAV 0.6123	0.6026	0.6015	0.6123	0.5750	0.5812	0.5797	0.5778	0.5789			0.5916	0.5750	
WOBBE INDEX 1373.2	1359.4	1352.6	1349.8	1373.2	1360.9	1365.2	1366.5	1361.1			1360.1	1349.8	
LIQ GAL/MCF 0.360	0.258	0.280	0.360	0.067	0.106	0.077	0.105	0.119			0.193	0.067	
-----										-----	-----	-----	-----
0 1REPORT R69629S1 09/20/2018										PUBLIC SERVICE COMPANY OF COLORADO			
10:55:27										2018			
0										VOLUME WEIGHTED DATE RUN:			
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5.142									
PROPANE	0.633	0.688	0.882	0.168	0.268	0.202	0.260	0.297	0.477 0.168
0.882									
I-BUTANE	0.114	0.123	0.160	0.028	0.044	0.030	0.044	0.047	0.084 0.028
0.160									
N-BUTANE	0.094	0.103	0.134	0.022	0.035	0.023	0.036	0.044	0.070 0.022
0.134									
I-PENTANE	0.029	0.031	0.041	0.008	0.012	0.008	0.012	0.013	0.022 0.008
0.041									
N-PENTANE	0.002	0.002	0.002	0.000	0.001	0.000	0.001	0.001	0.001 0.000
0.002									
HEXANES+	0.012	0.013	0.016	0.003	0.006	0.004	0.006	0.006	0.009 0.003
0.016									
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
----- ----- ----- -----									
N2/O2									
%INERTS	1.380	1.558	1.944	0.221	0.765	0.594	0.496	0.700	1.067 0.221
1.944									
----- REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)									
----- ----- ----- -----									
VOL(MMCF)	1314.1	1244.9	824.7	786.8	655.2	691.6	606.4	566.5	836.3 566.5
1314.1									
HIGH BTU/CF	1055.3	1049.0	1056.2	1041.3	1037.5	1039.4	1038.7	1035.6	1046.0 1035.6
1056.2									
LOW BTU/CF	952.0	946.1	953.0	938.5	935.1	936.9	936.2	933.4	943.2 933.4
953.0									
SPEC GRAV	0.6026	0.6015	0.6123	0.5750	0.5812	0.5797	0.5778	0.5789	0.5916 0.5750
0.6123									
WOBBE INDEX	1359.4	1352.6	1349.8	1373.2	1360.9	1365.2	1366.5	1361.1	1360.1 1349.8
1373.2									
%DIF	2.4	1.9	1.7	3.5	2.6	2.9	3.0	2.6	2.5 1.7
3.5									
LIQ GAL/MCF	0.258	0.280	0.360	0.067	0.106	0.077	0.105	0.119	0.193 0.067
0.360									
----- ----- ----- -----									
H2O LB/MMCF									* *
*									
H2S PPMV									* *
*									

O2 PPMV

*	*

*

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1REPORT R699680
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

VOLUME WEIGHTED
DATE RUN:

BTU ZONE SUMMARY HEATING VALUES REPORT

TIME RUN:

10:55:27

FOURTH QUARTER, 2018

BTU ZONE: SOUTHERN		NET FLOW	HV (BTU/CF, 14.73 PSIA, 60 F, DRY)			VOLUME (MCF AT 14.73 PSIA)	
SITE ID	SAMPLING SITE NAME		JUNE	JULY	AUGUST	JUNE	JULY
0	TIFF	IN	970.3	970.2	970.0	239,160	237,959
0	240,419						
0	240,419						
0							
VOLUME WEIGHTED HEATING VALUE:			970.3	970.2	970.0	TOTAL VOL:	239,160
QUARTER AVERAGE HEATING VALUE:			970.2				

DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.
PUBLIC SERVICE COMPANY OF COLORADO

1REPORT R69629Z0
09/20/2018

2018

TIME RUN:

10:55:27

ZONE NAME: SOUTHERN

MAX	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
4.535	CO2	4.491	4.406	4.323	4.370	4.318	4.503	4.513	4.535				4.428	4.318
0.000	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	0.000
0.038	NITROGEN	0.031	0.030	0.033	0.035	0.038	0.034	0.035	0.035				0.033	0.030
95.406	METHANE	95.238	95.327	95.406	95.357	95.406	95.224	95.212	95.190				95.300	95.190
0.232	ETHANE	0.232	0.229	0.230	0.230	0.230	0.231	0.232	0.232				0.231	0.229
0.007	PROPANE	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007				0.007	0.007
0.001	I-BUTANE	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001				0.001	0.001

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N-BUTANE 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000
I-PENTANE 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000
N-PENTANE 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000
HEXANES+ 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 0.000
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

N2/O2 %INERTS 4.570	4.522	4.436	4.356	4.405	4.356	4.537	4.548	4.570	4.461 4.356
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)									
VOL(MMCF) 655.3	655.3	522.8	444.0	314.5	250.9	239.2	238.0	240.4	363.1 238.0
HIGH BTU/CF 972.2	970.5	971.3	972.2	971.7	972.2	970.3	970.2	970.0	971.1 970.0
LOW BTU/CF 875.4	873.9	874.6	875.4	874.9	875.4	873.7	873.6	873.4	874.4 873.4
SPEC GRAV 0.6000	0.5995	0.5987	0.5979	0.5984	0.5979	0.5997	0.5998	0.6000	0.5989 0.5979
WOBBE INDEX 1257.3	1253.4	1255.3	1257.3	1256.1	1257.3	1253.0	1252.7	1252.3	1254.8 1252.3
LIQ GAL/MCF 0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002 0.002

0	1REPORT R69629S1	PUBLIC SERVICE COMPANY OF COLORADO	VOLUME WEIGHTED
09/20/2018			DATE RUN:
10:55:27		2018	TIME RUN:
0	SITE ID: TIFF	SITE NAME: TIFFANY COMPRESSOR STA	DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH
		TARGET WOBBE: 1285	DATA SOURCE: HPG TIFFANY
		AIR BLENDED: N	
0	MTH: JAN	FEB	MAR
MAX		APR	MAY
		JUN	JUL
		AUG	SEP
		OCT	NOV
		DEC	AVG MIN

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CO2	4.491	4.406	4.323	4.370	4.318	4.503	4.513	4.535			4.428	4.318
OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000
NITROGEN	0.031	0.030	0.033	0.035	0.038	0.034	0.035	0.035			0.033	0.030
METHANE	95.238	95.327	95.406	95.357	95.406	95.224	95.212	95.190			95.300	95.190
ETHANE	0.232	0.229	0.230	0.230	0.230	0.231	0.232	0.232			0.231	0.229
PROPANE	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007			0.007	0.007
I-BUTANE	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001			0.001	0.001
N-BUTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000
I-PENTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000
N-PENTANE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000
HEXANES+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			100.00	
N2/O2												
%INERTS	4.522	4.436	4.356	4.405	4.356	4.537	4.548	4.570			4.461	4.356
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)												
VOL(MMCF)	655.3	522.8	444.0	314.5	250.9	239.2	238.0	240.4			363.1	238.0
HIGH BTU/CF	970.5	971.3	972.2	971.7	972.2	970.3	970.2	970.0			971.1	970.0
LOW BTU/CF	873.9	874.6	875.4	874.9	875.4	873.7	873.6	873.4			874.4	873.4
SPEC GRAV	0.5995	0.5987	0.5979	0.5984	0.5979	0.5997	0.5998	0.6000			0.5989	0.5979
WOBBE INDEX	1253.4	1255.3	1257.3	1256.1	1257.3	1253.0	1252.7	1252.3			1254.8	1252.3
%DIF	-2.5	-2.3	-2.2	-2.2	-2.2	-2.5	-2.5	-2.5			-2.4	-2.5

[illegible]

H2O	LB/MMCF	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.9			0.9		0.8		
1.9																
*	H2S	PPMV											*		*	
*	O2	PPMV											*		*	

01REPORT R699680 09/20/2018		PUBLIC SERVICE COMPANY OF COLORADO					VOLUME WEIGHTED DATE RUN:		
10:55:27		BTU ZONE SUMMARY HEATING VALUES REPORT					TIME RUN:		
FOURTH QUARTER, 2018									
0 BTU ZONE: STERLING									
0		NET HV (BTU/CF, 14.73 PSIA, 60 F, DRY)					VOLUME (MCF AT 14.73 PSIA)		
0 SITE ID		SAMPLING SITE NAME		FLOW	JUNE	JULY	AUGUST	JUNE	JULY
AUGUST									
0 STERLING		TALLGRASS STERLING TB		IN	996.2	998.0	999.6	1,826	2,602
2,932									
0		VOLUME WEIGHTED HEATING VALUE:			996.2	998.0	999.6	TOTAL VOL:	1,826
2,932									2,602
0		QUARTER AVERAGE HEATING VALUE:			997.9				

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DUE TO ROUNDING, THE QUARTERLY ENERGY FACTOR MAY DIFFER SLIGHTLY FROM THE QUARTER AVERAGE HEATING VALUE.
PUBLIC SERVICE COMPANY OF COLORADO
DATE RUN:

2018 TIME RUN:

10:55:27														2018		TIME RUN			
0	ZONE NAME: STERLING																		
-																			
	MTH: JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		AVG		MIN			
MAX																			
-----														-----		-----		-----	
0.530	CO2	0.482	0.478	0.511	0.530	0.526	0.525	0.529	0.527						0.496		0.478		
	OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000						0.000		0.000		

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0.000													
NITROGEN	3.589	3.617	3.726	3.644	3.738	3.737	3.678	3.646				3.637	3.589
3.738													
METHANE	93.492	93.591	93.841	93.840	93.823	93.826	93.716	93.599				93.650	93.492
93.841													
ETHANE	1.530	1.426	1.102	1.155	1.077	1.075	1.232	1.365				1.346	1.075
1.530													
PROPANE	0.571	0.551	0.476	0.485	0.474	0.475	0.491	0.516				0.531	0.474
0.571													
I-BUTANE	0.101	0.101	0.103	0.103	0.105	0.105	0.101	0.101				0.102	0.101
0.105													
N-BUTANE	0.123	0.119	0.118	0.119	0.122	0.122	0.120	0.119				0.120	0.118
0.123													
I-PENTANE	0.039	0.039	0.042	0.042	0.044	0.044	0.041	0.041				0.040	0.039
0.044													
N-PENTANE	0.024	0.025	0.026	0.026	0.028	0.027	0.026	0.026				0.025	0.024
0.028													
HEXANES+	0.049	0.053	0.055	0.056	0.063	0.064	0.066	0.060				0.053	0.049
0.066													
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00				100.00	

N2/O2													
%INERTS	4.071	4.095	4.237	4.174	4.264	4.262	4.207	4.173				4.133	4.071
4.264													
REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)													
VOL (MMCF)	87.1	79.2	48.8	38.3	8.7	1.8	2.6	2.9				33.7	1.8
87.1													
HIGH BTU/CF	1002.3	1001.0	996.1	997.3	996.2	996.2	998.0	999.5				999.8	996.1
1002.3													
LOW BTU/CF	903.4	902.2	897.7	898.8	897.7	897.8	899.4	900.8				901.1	897.7
903.4													
SPEC GRAV	0.5929	0.5924	0.5909	0.5911	0.5913	0.5913	0.5919	0.5925				0.5921	0.5909
0.5929													
WOBBE INDEX	1301.7	1300.5	1295.8	1297.2	1295.5	1295.5	1297.2	1298.5				1299.3	1295.5
1301.7													
LIQ GAL/MCF	0.272	0.267	0.249	0.253	0.255	0.256	0.258	0.262				0.263	0.249
0.272													

0
1REPORT R69629S1
09/20/2018

PUBLIC SERVICE COMPANY OF COLORADO

VOLUME WEIGHTED
DATE RUN:

2018

TIME RUN:

10:55:27

0

SITE ID: STERLING SITE NAME: TALLGRASS STERLING TB
TARGET WOBBE: 1275
AIR BLENDED: N

DATA TYPE: AVG ONLINE GAS CHROMATOGRAPH
DATA SOURCE: KINDER MORGAN

0

MAX

MTH: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC | AVG | MIN |

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
CO2	0.482	0.478	0.511	0.530	0.526	0.525	0.529	0.527					0.496	0.478
OXYGEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					0.000	0.000
NITROGEN	3.589	3.617	3.726	3.644	3.738	3.737	3.678	3.646					3.637	3.589
METHANE	93.492	93.591	93.841	93.840	93.823	93.826	93.716	93.599					93.650	93.492
ETHANE	1.530	1.426	1.102	1.155	1.077	1.075	1.232	1.365					1.346	1.075
PROPANE	0.571	0.551	0.476	0.485	0.474	0.475	0.491	0.516					0.531	0.474
I-BUTANE	0.101	0.101	0.103	0.103	0.105	0.105	0.101	0.101					0.102	0.101
N-BUTANE	0.123	0.119	0.118	0.119	0.122	0.122	0.120	0.119					0.120	0.118
I-PENTANE	0.039	0.039	0.042	0.042	0.044	0.044	0.041	0.041					0.040	0.039
N-PENTANE	0.024	0.025	0.026	0.026	0.028	0.027	0.026	0.026					0.025	0.024
HEXANES+	0.049	0.053	0.055	0.056	0.063	0.064	0.066	0.060					0.053	0.049
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00					100.00	

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG	MIN
N2/O2														
%INERTS	4.071	4.095	4.237	4.174	4.264	4.262	4.207	4.173					4.133	4.071

REFERENCE CONDITIONS: 14.73 PSIA, 60F, DRY (GPA 2145-09)

PUC_Reports_Q4-2018.txt												
VOL (MMCF)	87.1	79.2	48.8	38.3	8.7	1.8	2.6	2.9		33.7	1.8	
HIGH BTU/CF	1002.3	1001.0	996.1	997.3	996.2	996.2	998.0	999.6		999.8	996.1	
LOW BTU/CF	903.4	902.2	897.7	898.8	897.7	897.8	899.4	900.9		901.1	897.7	
SPEC GRAV	0.5929	0.5924	0.5909	0.5911	0.5913	0.5913	0.5919	0.5926		0.5921	0.5909	
WOBBE INDEX	1301.7	1300.5	1295.8	1297.2	1295.5	1295.5	1297.2	1298.5		1299.3	1295.5	
%DIF	2.1	2.0	1.6	1.7	1.6	1.6	1.7	1.8		1.9	1.6	
LIQ GAL/MCF	0.272	0.267	0.249	0.253	0.255	0.256	0.258	0.262		0.263	0.249	
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H2O LB/MMCF										*	*	
H2S PPMV										*	*	
O2 PPMV										*	*	
-----										-----	-----	

0									VOLUME WEIGHTED			