

NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

**BIG SKY 4-11, 12-11
SALES GAS
(COMINGLE)**

PROJECT NO. : **202005036**
COMPANY NAME : **D90 ENERGY LLC**
OFFICE / BRANCH: **HOUSTON, TX**
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **01**
ANALYSIS DATE: **MAY 12, 2020 13:53**
SAMPLE DATE : **MAY 5, 2020**
TO:
EFFECTIVE DATE:

*****FIELD DATA*****

SAMPLE CYCLE:
SAMPLE PRES. : 20 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 87 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 0686
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: 7 ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.71	-	-
HYDROGEN	0.03	-	-
OXYGEN/ARGON	0.39	-	-
NITROGEN	48.91	-	-
CO2	3.41	-	-
METHANE	24.61	-	-
ETHANE	3.67	0.9842	0.9789
PROPANE	6.12	1.6910	1.6818
ISOBUTANE	1.44	0.4725	0.4699
N-BUTANE	4.87	1.5392	1.5308
ISOPENTANE	1.28	0.4695	0.4669
N-PENTANE	1.85	0.6726	0.6689
HEXANES+	2.71	1.1793	1.1728
TOTAL	100.00	7.0083	6.9700

BTU @ 60 DEG F

	14.73		14.65
GROSS DRY REAL =	942.7	/scf	937.6 /scf
GROSS SATURATED REAL =	926.3	/scf	921.2 /scf

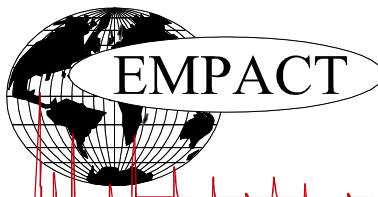
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.0896
DENSITY (lbm/scf) 0.08315
COMPRESSIBILITY FACTOR : 0.9970

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

The C6+ is derived from the following ratios of C6, C7 & C8+ respectively: 60% 30% 10%

The data presented herein has been acquired by means of current analytical techniques and represents the judicious conclusion EMPACT Analytical Systems, Inc. Results of the analysis can be affected by the sampling conditions, therefore, are only warranted through proper lab protocol. EMPACT assumes no responsibility for interpretation or any consequences from application of the reported information and is the sole liability of the user. The reproduction in any media of this reported information may not be made, in portion or as a whole, without the written permission of EMPACT Analytical Systems, Inc.



NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

TAOS 1-10, SILVERTON 16-10
SALES GAS
(COMINGLE)

PROJECT NO. : 202005036
COMPANY NAME : D90 ENERGY LLC
OFFICE / BRANCH: HOUSTON, TX
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : 02
ANALYSIS DATE: MAY 12, 2020 14:16
SAMPLE DATE : MAY 5, 2020
TO:
EFFECTIVE DATE:

FIELD DATA

SAMPLE CYCLE:
SAMPLE PRES. : 23 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 80 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 1844
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: 0.5 ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.59	-	-
HYDROGEN	0.02	-	-
OXYGEN/ARGON	0.39	-	-
NITROGEN	49.57	-	-
CO2	3.31	-	-
METHANE	25.74	-	-
ETHANE	3.06	0.8202	0.8157
PROPANE	5.63	1.5549	1.5465
ISOBUTANE	1.48	0.4855	0.4828
N-BUTANE	4.73	1.4946	1.4865
ISOPENTANE	1.27	0.4654	0.4628
N-PENTANE	1.73	0.6282	0.6248
HEXANES+	2.48	1.0785	1.0726
TOTAL	100.00	6.5273	6.4917

BTU @ 60 DEG F

	14.73	14.65
GROSS DRY REAL =	910.4 /scf	905.5 /scf
GROSS SATURATED REAL =	894.6 /scf	889.7 /scf

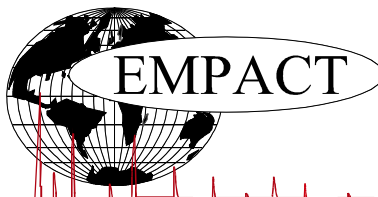
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F)	1.0740
DENSITY (lbm/scf)	0.08197
COMPRESSIBILITY FACTOR :	0.9972

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

The C6+ is derived from the following ratios of C6, C7 & C8+ respectively: 60% 30% 10%

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

**BLACKCOMB 3-14
SALES GAS**

PROJECT NO. : **202005036**
COMPANY NAME : **D90 ENERGY LLC**
OFFICE / BRANCH: **HOUSTON, TX**
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **03**
ANALYSIS DATE: **MAY 12, 2020 14:38**
SAMPLE DATE : **MAY 5, 2020**
TO:
EFFECTIVE DATE:

*****FIELD DATA*****

SAMPLE CYCLE:
SAMPLE PRES. : 22 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 75 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 0544
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: **1.5** ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.54	-	-
HYDROGEN	0.05	-	-
OXYGEN/ARGON	0.40	-	-
NITROGEN	47.69	-	-
CO2	2.43	-	-
METHANE	27.46	-	-
ETHANE	6.66	1.7858	1.7761
PROPANE	6.99	1.9305	1.9200
ISOBUTANE	1.12	0.3678	0.3658
N-BUTANE	3.56	1.1245	1.1184
ISOPENTANE	0.75	0.2753	0.2739
N-PENTANE	1.06	0.3849	0.3828
HEXANES+	1.29	0.5607	0.5577
TOTAL	100.00	6.4295	6.3947

BTU @ 60 DEG F

	14.73		14.65
GROSS DRY REAL =	866.8	/scf	862.1 /scf
GROSS SATURATED REAL =	851.7	/scf	847.0 /scf

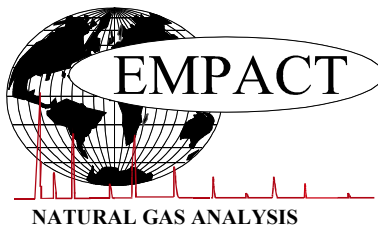
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.0115
DENSITY (lbm/scf) 0.07720
COMPRESSIBILITY FACTOR : 0.9974

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

The C6+ is derived from the following ratios of C6, C7 & C8+ respectively: 60% 30% 10%

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

**SNOWKING 13-33
SALES GAS**

PROJECT NO. : **202005036**
COMPANY NAME : **D90 ENERGY LLC**
OFFICE / BRANCH: **HOUSTON, TX**
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **04**
ANALYSIS DATE: **MAY 13, 2020 08:39**
SAMPLE DATE : **MAY 5, 2020**
TO:
EFFECTIVE DATE:

FIELD DATA

SAMPLE CYCLE:
SAMPLE PRES. : 26 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 90 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 0944
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: 7 ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.00	-	-
HYDROGEN	0.00	-	-
OXYGEN/ARGON	0.01	-	-
NITROGEN	0.17	-	-
CO2	0.01	-	-
METHANE	0.08	-	-
ETHANE	3.94	1.0718	1.0659
PROPANE	94.49	26.4778	26.3340
ISOBUTANE	1.07	0.3559	0.3540
N-BUTANE	0.21	0.0673	0.0669
ISOPENTANE	0.01	0.0041	0.0041
N-PENTANE	0.01	0.0041	0.0041
HEXANES+	0.00	0.0000	0.0000
TOTAL	100.00	27.9810	27.8290

BTU @ 60 DEG F

	14.73		14.65
GROSS DRY REAL =	2539.7	/scf	2525.9 /scf
GROSS SATURATED REAL =	2495.5	/scf	2481.7 /scf

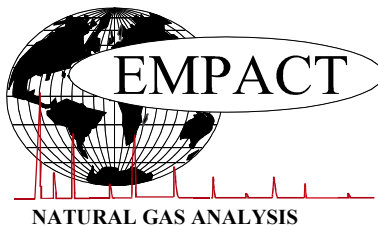
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.5079
DENSITY (lbm/scf) 0.11510
COMPRESSIBILITY FACTOR : 0.9829

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

The C6+ is derived from the following ratios of C6, C7 & C8+ respectively: 60% 30% 10%

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

MARY JANE 13-5
SALES GAS

PROJECT NO. : 202005036
COMPANY NAME : D90 ENERGY LLC
OFFICE / BRANCH: HOUSTON, TX
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : 05
ANALYSIS DATE: MAY 12, 2020 15:35
SAMPLE DATE : MAY 6, 2020
TO:
EFFECTIVE DATE:

FIELD DATA

SAMPLE CYCLE:
SAMPLE PRES. : 18 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 69 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 1066
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: 1 ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.68	-	-
HYDROGEN	0.02	-	-
OXYGEN/ARGON	0.36	-	-
NITROGEN	50.76	-	-
CO2	1.98	-	-
METHANE	23.42	-	-
ETHANE	3.40	0.9117	0.9068
PROPANE	8.73	2.4115	2.3984
ISOBUTANE	1.78	0.5840	0.5809
N-BUTANE	4.79	1.5139	1.5057
ISOPENTANE	1.05	0.3850	0.3829
N-PENTANE	1.31	0.4765	0.4739
HEXANES+	1.73	0.7529	0.7488
TOTAL	100.00	7.0355	6.9974

BTU @ 60 DEG F

	14.73	14.65
GROSS DRY REAL =	918.7 /scf	913.7 /scf
GROSS SATURATED REAL =	902.7 /scf	897.7 /scf

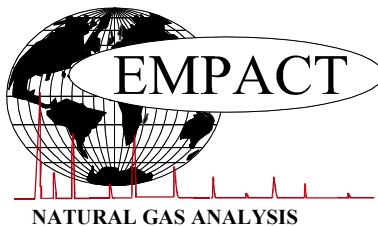
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.0701
DENSITY (lbm/scf) 0.08167
COMPRESSIBILITY FACTOR : 0.9971

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

The C6+ is derived from the following ratios of C6, C7 & C8+ respectively: 60% 30% 10%

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

**BLACKCOMB 5-14
SALES GAS**

PROJECT NO. : **202005036**
COMPANY NAME : **D90 ENERGY LLC**
OFFICE / BRANCH: **HOUSTON, TX**
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **06**
ANALYSIS DATE: **MAY 12, 2020 16:02**
SAMPLE DATE : **MAY 5, 2020**
TO:
EFFECTIVE DATE:

FIELD DATA

SAMPLE CYCLE:
SAMPLE PRES. : 21 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 99 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 1839
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: **2** ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.42	-	-
HYDROGEN	0.02	-	-
OXYGEN/ARGON	0.29	-	-
NITROGEN	33.92	-	-
CO2	2.02	-	-
METHANE	19.31	-	-
ETHANE	4.83	1.2984	1.2913
PROPANE	30.44	8.4324	8.3866
ISOBUTANE	1.33	0.4375	0.4351
N-BUTANE	3.58	1.1351	1.1289
ISOPENTANE	0.82	0.3014	0.2998
N-PENTANE	1.20	0.4375	0.4351
HEXANES+	1.82	0.7944	0.7900
TOTAL	100.00	12.8367	12.7668
BTU @ 60 DEG F		14.73	14.65
GROSS DRY REAL =		1392.0 /scf	1384.5 /scf
GROSS SATURATED REAL =		1367.8 /scf	1360.3 /scf

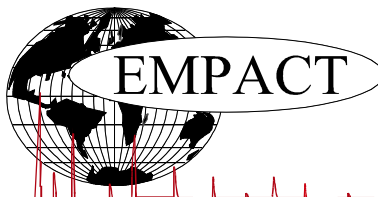
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.1905
DENSITY (lbm/scf) 0.09086
COMPRESSIBILITY FACTOR : 0.9943

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

The C6+ is derived from the following ratios of C6, C7 & C8+ respectively: **60% 30% 10%**

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

MARY JANE 8-5
SALES GAS

PROJECT NO. : 202005036
COMPANY NAME : D90 ENERGY LLC
OFFICE / BRANCH: HOUSTON, TX
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : 07
ANALYSIS DATE: MAY 13, 2020 09:02
SAMPLE DATE : MAY 6, 2020
TO:
EFFECTIVE DATE:

FIELD DATA

SAMPLE CYCLE:
SAMPLE PRES. : 19 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 73 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 0380
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: 0.50 ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	1.37	-	-
HYDROGEN	0.01	-	-
OXYGEN/ARGON	0.35	-	-
NITROGEN	62.17	-	-
CO2	1.35	-	-
METHANE	16.64	-	-
ETHANE	2.68	0.7182	0.7143
PROPANE	6.38	1.7608	1.7512
ISOBUTANE	1.48	0.4851	0.4825
N-BUTANE	4.29	1.3550	1.3476
ISOPENTANE	0.92	0.3375	0.3357
N-PENTANE	1.10	0.3998	0.3976
HEXANES+	1.26	0.5474	0.5444
TOTAL	100.00	5.6038	5.5733

BTU @ 60 DEG F

	14.73		14.65
GROSS DRY REAL =	712.7	/scf	708.9 /scf
GROSS SATURATED REAL =	700.3	/scf	696.5 /scf

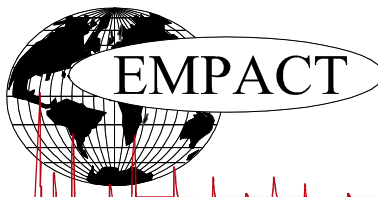
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.0512
DENSITY (lbm/scf) 0.08024
COMPRESSIBILITY FACTOR : 0.9979

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

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PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

**BIG SKY 5-11
SALES GAS**

PROJECT NO. : **202005036**
COMPANY NAME : **D90 ENERGY LLC**
OFFICE / BRANCH: **HOUSTON, TX**
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **08**
ANALYSIS DATE: **MAY 13, 2020 09:39**
SAMPLE DATE : **MAY 5, 2020**
TO:
EFFECTIVE DATE:

FIELD DATA

SAMPLE CYCLE:
SAMPLE PRES. : 21 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 81 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 1943
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: **6.5** ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	1.01	-	-
HYDROGEN	0.04	-	-
OXYGEN/ARGON	0.39	-	-
NITROGEN	53.33	-	-
CO2	3.69	-	-
METHANE	22.09	-	-
ETHANE	2.40	0.6430	0.6395
PROPANE	9.77	2.6977	2.6830
ISOBUTANE	1.08	0.3547	0.3527
N-BUTANE	2.96	0.9354	0.9303
ISOPENTANE	0.77	0.2823	0.2808
N-PENTANE	1.07	0.3888	0.3867
HEXANES+	1.40	0.6089	0.6056
TOTAL	100.00	5.9108	5.8786

BTU @ 60 DEG F

	14.73		14.65
GROSS DRY REAL =	792.4	/scf	788.1 /scf
GROSS SATURATED REAL =	778.6	/scf	774.3 /scf

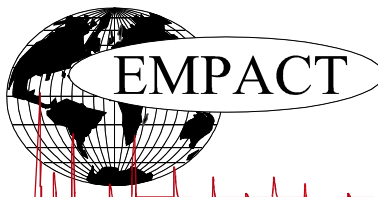
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.0457
DENSITY (lbm/scf) 0.07980
COMPRESSIBILITY FACTOR : 0.9976

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

MARY JANE 11-5
SALES GAS

PROJECT NO. : 202005036
COMPANY NAME : D90 ENERGY LLC
OFFICE / BRANCH: HOUSTON, TX
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : 09
ANALYSIS DATE: MAY 13, 2020 10:04
SAMPLE DATE : MAY 6, 2020
TO:
EFFECTIVE DATE:

FIELD DATA

SAMPLE CYCLE:
SAMPLE PRES. : 18 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 70 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 1021
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: 0.25 ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.93	-	-
HYDROGEN	0.13	-	-
OXYGEN/ARGON	0.38	-	-
NITROGEN	55.66	-	-
CO2	1.75	-	-
METHANE	22.47	-	-
ETHANE	3.74	1.0026	0.9972
PROPANE	7.08	1.9550	1.9444
ISOBUTANE	1.29	0.4229	0.4206
N-BUTANE	3.75	1.1845	1.1780
ISOPENTANE	0.74	0.2712	0.2698
N-PENTANE	0.91	0.3305	0.3287
HEXANES+	1.17	0.5083	0.5056
TOTAL	100.00	5.6750	5.6443

BTU @ 60 DEG F

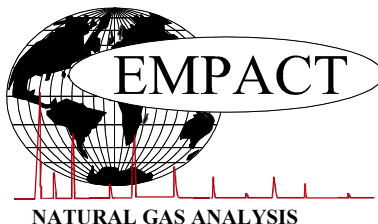
	14.73	14.65
GROSS DRY REAL =	765.4 /scf	761.3 /scf
GROSS SATURATED REAL =	752.1 /scf	748.0 /scf
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F)	1.0215	
DENSITY (lbm/scf)	0.07796	
COMPRESSIBILITY FACTOR :	0.9977	

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

The C6+ is derived from the following ratios of C6, C7 & C8+ respectively: 60% 30% 10%

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

**SNOWBIRD 9-15
SALES GAS**

PROJECT NO. : **202005036**
COMPANY NAME : **D90 ENERGY LLC**
OFFICE / BRANCH: **HOUSTON, TX**
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **10**
ANALYSIS DATE: **MAY 13, 2020 10:31**
SAMPLE DATE : **MAY 5, 2020**
TO:
EFFECTIVE DATE:

FIELD DATA

SAMPLE CYCLE:
SAMPLE PRES. : 23 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 89 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 0875
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: 3.25 ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.98	-	-
HYDROGEN	0.04	-	-
OXYGEN/ARGON	0.40	-	-
NITROGEN	48.60	-	-
CO2	4.47	-	-
METHANE	22.92	-	-
ETHANE	3.67	0.9842	0.9789
PROPANE	6.20	1.7131	1.7038
ISOBUTANE	1.33	0.4363	0.4339
N-BUTANE	4.84	1.5301	1.5218
ISOPENTANE	1.36	0.4986	0.4959
N-PENTANE	2.09	0.7600	0.7559
HEXANES+	3.10	1.3492	1.3418
TOTAL	100.00	7.2715	7.2320

BTU @ 60 DEG F

	14.73		14.65
GROSS DRY REAL =	956.0	/scf	950.8 /scf
GROSS SATURATED REAL =	939.4	/scf	934.2 /scf

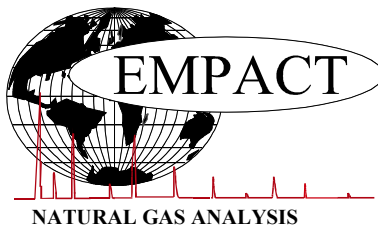
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.1128
DENSITY (lbm/scf) 0.08492
COMPRESSIBILITY FACTOR : 0.9970

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

**BIG SKY 13-11
SALES GAS**

PROJECT NO. : **202005036**
COMPANY NAME : **D90 ENERGY LLC**
OFFICE / BRANCH: **HOUSTON, TX**
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **11**
ANALYSIS DATE: **MAY 13, 2020 10:54**
SAMPLE DATE : **MAY 5, 2020**
TO:
EFFECTIVE DATE:

*****FIELD DATA*****

SAMPLE CYCLE:
SAMPLE PRES. : 20 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 69 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 0697
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: **5** ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.00	-	-
HYDROGEN	0.00	-	-
OXYGEN/ARGON	0.01	-	-
NITROGEN	0.27	-	-
CO2	0.05	-	-
METHANE	0.30	-	-
ETHANE	1.52	0.4131	0.4108
PROPANE	96.25	26.9769	26.8304
ISOBUTANE	1.20	0.3998	0.3977
N-BUTANE	0.23	0.0734	0.0730
ISOPENTANE	0.02	0.0071	0.0071
N-PENTANE	0.03	0.0112	0.0112
HEXANES+	0.12	0.0530	0.0527
TOTAL	100.00	27.9345	27.7829

BTU @ 60 DEG F

	14.73		14.65
GROSS DRY REAL =	2556.3	/scf	2542.4 /scf
GROSS SATURATED REAL =	2511.9	/scf	2498.0 /scf

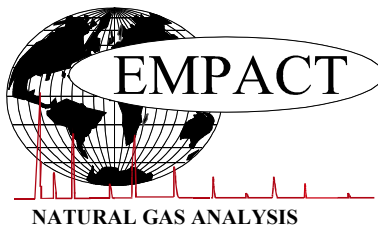
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.5202
DENSITY (lbm/scf) 0.11602
COMPRESSIBILITY FACTOR : 0.9827

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

The C6+ is derived from the following ratios of C6, C7 & C8+ respectively: 60% 30% 10%

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

**BIG SKY 14-11
SALES GAS**

PROJECT NO. : **202005036**
COMPANY NAME : **D90 ENERGY LLC**
OFFICE / BRANCH: **HOUSTON, TX**
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **12**
ANALYSIS DATE: **MAY 13, 2020 11:22**
SAMPLE DATE : **MAY 5, 2020**
TO:
EFFECTIVE DATE:

*****FIELD DATA*****

SAMPLE CYCLE:
SAMPLE PRES. : 20 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 65 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 0955
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: **2** ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.57	-	-
HYDROGEN	0.15	-	-
OXYGEN/ARGON	0.34	-	-
NITROGEN	40.99	-	-
CO2	2.99	-	-
METHANE	19.36	-	-
ETHANE	3.11	0.8358	0.8313
PROPANE	21.47	5.9416	5.9093
ISOBUTANE	1.42	0.4663	0.4637
N-BUTANE	4.48	1.4189	1.4112
ISOPENTANE	1.25	0.4592	0.4567
N-PENTANE	1.79	0.6516	0.6480
HEXANES+	2.08	0.9063	0.9014
TOTAL	100.00	10.6797	10.6216

BTU @ 60 DEG F

	14.73		14.65
GROSS DRY REAL =	1220.6	/scf	1214.0 /scf
GROSS SATURATED REAL =	1199.4	/scf	1192.8 /scf

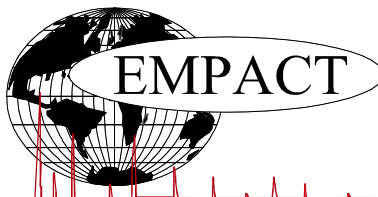
RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.1739
DENSITY (lbm/scf) 0.08960
COMPRESSIBILITY FACTOR : 0.9953

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

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NATURAL GAS ANALYSIS

PRIMARY DB KEY:
LEASE #:
FIELD/ AREA:

NAME/DESCRIP :

**STEAMBOAT HANSON 8-10
SALES GAS**

PROJECT NO. : **202005036**
COMPANY NAME : **D90 ENERGY LLC**
OFFICE / BRANCH: HOUSTON, TX
CUSTOMER REF:
PRODUCER :

ANALYSIS NO. : **13**
ANALYSIS DATE: MAY 13, 2020 13:13
SAMPLE DATE : MAY 5, 2020
TO:
EFFECTIVE DATE:

*****FIELD DATA*****

SAMPLE CYCLE:
SAMPLE PRES. : 20 psig
FLOW PRES. : psig
LAB PRES: psig
SAMPLE TEMP. : 91 °f
AMBIENT TEMP.: °f
H2O BY STAIN TUBE: - #/mmcf
FIELD COMMENTS:
LAB COMMENTS:

SAMPLE TYPE: SPOT
PROBE : NO
CYLINDER NO. : 0456
SAMPLED BY : GALE MCENDREE
SAMPLING COMPANY: EMPACT
H2S BY STAIN TUBE: 2.5 ppm
CO2 BY STAIN TUBE: - Mol %

COMPONENTS	NORM. MOLE%	GPM @ 14.73	GPM @ 14.65
HELIUM	0.61	-	-
HYDROGEN	0.00	-	-
OXYGEN/ARGON	0.38	-	-
NITROGEN	50.61	-	-
CO2	3.02	-	-
METHANE	25.82	-	-
ETHANE	3.11	0.8342	0.8296
PROPANE	5.43	1.4995	1.4914
ISOBUTANE	1.38	0.4523	0.4498
N-BUTANE	4.46	1.4090	1.4014
ISOPENTANE	1.18	0.4322	0.4298
N-PENTANE	1.63	0.5920	0.5887
HEXANES+	2.37	1.0312	1.0256
TOTAL	100.00	6.2504	6.2163

BTU @ 60 DEG F

	14.73		14.65
GROSS DRY REAL =	881.2	/scf	876.4 /scf
GROSS SATURATED REAL =	865.9	/scf	861.1 /scf

RELATIVE DENSITY (AIR=1 @ 14.696 PSIA 60F) 1.0619
DENSITY (lbm/scf) 0.08104
COMPRESSIBILITY FACTOR : 0.9973

NOTE: REFERENCE GPA 2261(ASTM D1945 & ASME-PTC), 2145, & 2172 CURRENT PUBLICATIONS

Reference: Per GPA 2172-14 sec 9

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