



EXTENDED NATURAL GAS ANALYSIS (*DHA)

MAIN PAGE

PRIMARY DB KEY:	05-045-13367	NAME/DESCRIP :	N.PARACHUTE WF09D #M14 596
LEASE #:	110165130		PRODUCTION CASING
FIELD/AREA:	GRAND VALLEY - #31290		
PROJECT NO. :	202405044	ANALYSIS NO. :	01
COMPANY NAME :	CAERUS OIL & GAS LLC	ANALYSIS DATE:	MAY 09, 2024 13:25
OFFICE / BRANCH:	PARACHUTE, CO	SAMPLE DATE :	MAY 2, 2024 15:00
CUSTOMER REF:		TO:	
PRODUCER :	CAERUS PICEANCE LLC	EFFECTIVE DATE:	

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

SAMPLE CYCLE:		SAMPLE TYPE:	SPOT
SAMPLE PRES. :	24 psig	PROBE :	NO
FLOW PRES. :	psig	CYLINDER NO. :	ECA-785
LAB PRES:	psig	SAMPLED BY :	MIKE KELLEY
SAMPLE TEMP. :	63 °f	SAMPLING COMPANY:	CAERUS OIL & GAS LLC
AMBIENT TEMP.:	°f	H2S BY STAIN TUBE:	- ppm mol
H2O BY STAIN TUBE:	- #/mmcf	CO2 BY STAIN TUBE:	- Mol %
FIELD COMMENTS:			
LAB COMMENTS:	Trace Olefins present.		

<u>COMPONENT</u>	<u>MOLE %</u>	<u>MASS %</u>	<u>GPM @ 14.65</u>	<u>GPM @ 14.73</u>
ALCOHOLS	0.0353	0.0647	0.0040	0.0040
HELIUM	0.03	0.01	---	---
HYDROGEN	0.61	0.07	---	---
OXYGEN/ARGON	0.07	0.12	---	---
NITROGEN	4.44	6.78	---	---
CARBON DIOXIDE	0.05	0.12	---	---
METHANE	91.5082	80.0018	---	---
ETHANE	0.7397	1.2121	0.1968	0.1979
PROPANE	0.2191	0.5265	0.0599	0.0603
I-BUTANE	0.0332	0.1052	0.0110	0.0110
N-BUTANE	0.1006	0.3186	0.0320	0.0321
I-PENTANE	0.1990	0.7790	0.0699	0.0703
N-PENTANE	0.2777	1.0919	0.0999	0.1004
HEXANES PLUS	1.6872	8.8002	0.6767	0.6793
TOTALS	100.00000	100.00000	1.1502	1.1553

<u>BTEX COMPONENTS</u>	<u>MOLE%</u>	<u>WT%</u>
BENZENE	0.1429	0.6083
TOLUENE	0.1232	0.6186
ETHYLBENZENE	0.0150	0.0868
XYLENES	0.0480	0.2777
TOTAL BTEX	0.3291	1.5914

	<u>CALCULATED VALUES**</u>	
	<u>14.65</u>	<u>14.73</u>
LHV NET DRY REAL :	950.6 /scf	955.8 /scf
NET WET REAL :	934.0 /scf	939.2 /scf
HHV GROSS DRY REAL :	1051.7 /scf	1057.4 /scf
GROSS WET REAL :	1033.3 /scf	1039.0 /scf
NET HEATING VALUE (60 °F ideal reaction):	19725.7 Btu/lbm	19725.7 Btu/lbm
GROSS HEATING VALUE (60°F ideal reaction):	21826.6 Btu/lbm	21826.6 Btu/lbm
RELATIVE DENSITY (AIR=1):	0.6321	0.6321
DENSITY	0.04835 lbm/scf	0.04835 lbm/scf
COMPRESSIBILITY FACTOR :	0.9979	0.9979
REGULAR WOBBE INDEX	1324.2	1324.2

*(DETAILED HYDROCARBON ANALYSIS/NJ 1993)

Mod ASTM D6730,GPA 2261 & GPA 2286.

** (CALC: GPA 2172, GPA 2145 & TP-17 @14.696 & 60 F)

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.



**EXTENDED NATURAL GAS ANALYSIS (*DHA)
GLYCALC INFORMATION**

PROJECT NO. :	202405044	ANALYSIS NO. :	01
COMPANY NAME :	CAERUS OIL & GAS LLC	ANALYSIS DATE:	MAY 09, 2024 13:25
ACCOUNT NO. :		SAMPLE DATE :	MAY 2, 2024 15:00
PRODUCER :	CAERUS PICEANCE LLC	CYLINDER NO. :	ECA-785
LEASE NO. :	110165130	SAMPLED BY :	MIKE KELLEY
NAME/DESCRIP :	N.PARACHUTE WF09D #M14 596 PRODUCTION CASING		

FIELD DATA

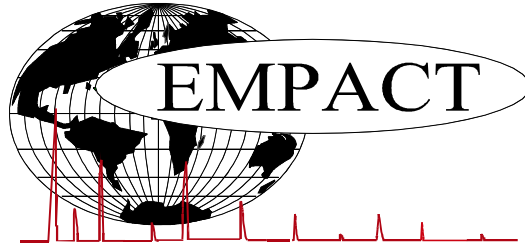
SAMPLE PRES. :	24	SAMPLE TEMP. :	63
H2S BY STAIN TUBE:	—	AMBIENT TEMP.:	
COMMENTS :	<i>SPOT ppm mol NO PROBE Trace Olefins present.</i>		

<u>Componet</u>	<u>Mole %</u>	<u>Wt %</u>
Helium	0.03	0.01
Hydrogen	0.61	0.07
Carbon Dioxide	0.05	0.12
Nitrogen	4.44	6.78
Methane	91.5082	80.0018
Ethane	0.7397	1.2121
Propane	0.2191	0.5265
Isobutane	0.0332	0.1052
n-Butane	0.1006	0.3186
Isopentane	0.1676	0.6590
n-Pentane	0.2777	1.0919
Cyclopentane	0.0314	0.1200
n-Hexane	0.1991	0.9350
Cyclohexane	0.1292	0.5926
Other Hexanes	0.3473	1.6184
Heptanes	0.2472	1.3421
Methylcyclohexane	0.1665	0.8909
2,2,4 Trimethylpentane	0.0001	0.0006
Benzene	0.1429	0.6083
Toluene	0.1232	0.6186
Ethylbenzene	0.0150	0.0868
Xylenes	0.0480	0.2777
C8+ Heavies	0.2687	1.8292
<u>Subtotal</u>	<u>99.89470</u>	<u>99.81530</u>
Oxygen/Argon	0.07	0.12
Alcohols	0.0353	0.0647
<u>Total</u>	<u>100.00000</u>	<u>100.00000</u>

	Total	C6+	C8+	C10+
Calculated Values BTU @ <u>14.65</u>	Sample	Fraction	Fraction	Fraction
LHV Net Dry Real:	950.6	4770.6	6003.6	7417.2 Btu/scf
Net Wet Real:	934.0	4687.2	5898.6	7287.5 Btu/scf
HHV Gross Dry Real:	1051.7	5112.1	6445.7	8013.7 Btu/scf
Gross Wet Real:	1033.3	5022.7	6333.0	7873.6 Btu/scf
Other Calculated Values				
Regualr Wobbe Index*	1324.2	2803.3	3152.4	3561.1 Btu/scf
Net Heating Value (60 °F ideal reaction):	19725.7	19019.7	19101.9	18775.5 Btu/lbm
Gross Heating Value (60°F ideal reaction):	21826.6	20388.2	20509.4	20281.2 Btu/lbm
Molar Mass (MW):	18.34886	95.731	121.437	147.494 g/mol
Relative Density (AIR=1):	0.6321	3.3049	4.1936	5.0928 SG
Density:	0.04835	0.25227	0.32002	0.38866 lbm/scf
Compressibility Factor:	0.9979	0.9938	0.9984	0.9997 Z
Liquid Volume real gas @: <u>14.65</u>	17.1312	0.6749	0.1535	0.0319 gal/1000 scf

* The Wobbe pressure base in the number considered is based upon the given Pb of the HHV above.
 #DIV/0 or 0 (zero) will appear in the Calculated Value Section when there is no C6+, C8+ or C10+ in the sample to calculate these factors.
 BDL - Below Detection Limit. The H2S LOS has a detection limit of 0.25 ppm. A _ (an underscore) indicates there was no tube pulled for H2S.

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DHA COMPONENT LIST

PRIMARY DB KEY: **05-045-13367** NAME/DESCRIP : **N.PARACHUTE WF09D #M14 596**
 LEASE #: **110165130** **PRODUCTION CASING**
 FIELD/AREA: **GRAND VALLEY - #31290**

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 PRODUCER : **CAERUS PICEANCE LLC** EFFECTIVE DATE:
*****FIELD DATA*****
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 FLOW PRES. : psig CYLINDER NO. : **ECA-785**
 LAB PRES: psig SAMPLED BY : **MIKE KELLEY**
 SAMPLE TEMP. : **63** °f SAMPLING COMPANY: **CAERUS OIL & GAS LLC**
 AMBIENT TEMP.: °f H2S BY STAIN TUBE: **-** ppm mol
 H2O BY STAIN TUBE: **-** #/mmcf CO2 BY STAIN TUBE: **-** Mol %
 FIELD COMMENTS:
 LAB COMMENTS: **Trace Olefins present.**

COMPONENT	PIANO #	MOLE %	MASS %	GPM @ 14.65	GPM @ 14.73
Helium	---	0.03	0.01	---	---
Hydrogen	---	0.61	0.07	---	---
Oxygen/Argon	---	0.07	0.12	---	---
Nitrogen	---	4.44	6.78	---	---
Carbon Dioxide	---	0.05	0.12	---	---
Methane	P1	91.5082	80.0018	---	---
Ethane	P2	0.7397	1.2121	0.197	0.198
Propane	P3	0.2184	0.5248	0.060	0.060
i-Butane	I4	0.0332	0.1052	0.011	0.011
Methanol	X1	0.0332	0.0580	0.004	0.004
UnknownC3s	U3	0.0007	0.0017	0.000	0.000
n-Butane	P4	0.1006	0.3186	0.032	0.032
2,2-Dimethylpropane	I5	0.0005	0.0020	0.000	0.000
Ethanol	X2	0.0002	0.0005	0.000	0.000
i-Pentane	I5	0.1671	0.6570	0.061	0.061
Acetone	X3	0.0011	0.0035	0.000	0.000
i-Propanol	X3	0.0003	0.0010	0.000	0.000
n-Pentane	P5	0.2777	1.0919	0.100	0.100
t-Butanol	X4	0.0001	0.0004	0.000	0.000
2,2-Dimethylbutane	I6	0.0035	0.0165	0.001	0.001
n-Propanol	X3	0.0004	0.0013	0.000	0.000
Cyclopentane	N5	0.0314	0.1200	0.009	0.009
2,3-Dimethylbutane	I6	0.0196	0.0920	0.008	0.008
2-Methylpentane	I6	0.1332	0.6256	0.055	0.055
3-Methylpentane	I6	0.0763	0.3583	0.031	0.031
n-Hexane	P6	0.1991	0.9350	0.082	0.082
2,2-Dimethylpentane	I7	0.0018	0.0098	0.001	0.001
Methylcyclopentane	N6	0.1147	0.5260	0.040	0.040
2,4-Dimethylpentane	I7	0.0059	0.0322	0.003	0.003
2,2,3-Trimethylbutane	I7	0.0006	0.0033	0.000	0.000

Benzene	A6	0.1429	0.6083	0.040	0.040
3,3-Dimethylpentane	I7	0.0010	0.0054	0.000	0.000
Cyclohexane	N6	0.1292	0.5926	0.044	0.044
2-Methylhexane	I7	0.0369	0.2015	0.017	0.017
2,3-Dimethylpentane	I7	0.0123	0.0672	0.006	0.006
1,1-Dimethylcyclopentane	N7	0.0068	0.0364	0.003	0.003
3-Methylhexane	I7	0.0363	0.1982	0.017	0.017
1c,3-Dimethylcyclopentane	N7	0.0162	0.0867	0.007	0.007
1t,3-Dimethylcyclopentane	N7	0.0148	0.0792	0.007	0.007
3-Ethylpentane	I7	0.0018	0.0098	0.001	0.001
1t,2-Dimethylcyclopentane	N7	0.0246	0.1316	0.011	0.011
2,2,4-Trimethylpentane	I8	0.0001	0.0006	0.000	0.000
n-Heptane	P7	0.0772	0.4216	0.036	0.036
1c,2-Dimethylcyclopentane	N7	0.0037	0.0198	0.002	0.002
Methylcyclohexane	N7	0.1665	0.8909	0.067	0.067
2,2-Dimethylhexane	I8	0.0047	0.0293	0.002	0.002
1,1,3-Trimethylcyclopentane	N7	0.0005	0.0030	0.000	0.000
Ethylcyclopentane	N7	0.0067	0.0359	0.003	0.003
2,5-Dimethylhexane	I8	0.0023	0.0143	0.001	0.001
2,2,3-Trimethylpentane	I8	0.0024	0.0149	0.001	0.001
2,4-Dimethylhexane	I8	0.0005	0.0031	0.000	0.000
1c,2t,4-Trimethylcyclopentane	N8	0.0046	0.0281	0.002	0.002
3,3-Dimethylhexane	I8	0.0006	0.0038	0.000	0.000
2,3,4-Trimethylpentane	I8	0.0001	0.0006	0.000	0.000
2,3,3-Trimethylpentane	I8	0.0001	0.0006	0.000	0.000
Toluene	A7	0.1232	0.6186	0.041	0.041
2,3-Dimethylhexane	I8	0.0035	0.0218	0.002	0.002
2-Methyl-3-ethylpentane	I8	0.0009	0.0056	0.000	0.000
2-Methylheptane	I8	0.0158	0.0984	0.008	0.008
4-Methylheptane	I8	0.0042	0.0262	0.002	0.002
3-Methyl-3-ethylpentane	I8	0.0005	0.0031	0.000	0.000
3,4-Dimethylhexane	I8	0.0007	0.0044	0.000	0.000
1c,2c,4-Trimethylcyclopentane	N8	0.0003	0.0018	0.000	0.000
1c,3-Dimethylcyclohexane	N8	0.0003	0.0018	0.000	0.000
3-Methylheptane	I8	0.0086	0.0535	0.004	0.004
1c,2t,3-Trimethylcyclopentane	N8	0.0206	0.1260	0.011	0.011
3-Ethylhexane	I8	0.0007	0.0044	0.000	0.000
1t,4-Dimethylcyclohexane	N8	0.0085	0.0520	0.004	0.004
1,1-Dimethylcyclohexane	N8	0.0020	0.0122	0.001	0.001
2,2,5-Trimethylhexane	I9	0.0001	0.0007	0.000	0.000
3c-Ethylmethylcyclopentane	N8	0.0012	0.0074	0.001	0.001
3t-Ethylmethylcyclopentane	N8	0.0011	0.0067	0.001	0.001
2t-Ethylmethylcyclopentane	N8	0.0017	0.0104	0.001	0.001
1,1-Methylethylcyclopentane	N8	0.0004	0.0024	0.000	0.000
2,2,4-Trimethylhexane	I9	0.0003	0.0021	0.000	0.000
1t,2-Dimethylcyclohexane	N8	0.0079	0.0483	0.004	0.004
1c,2c,3-Trimethylcyclopentane	N8	0.0003	0.0018	0.000	0.000
1t,3-Dimethylcyclohexane	N8	0.0007	0.0043	0.000	0.000
UnknownC7s	U7	0.0001	0.0005	0.000	0.000
n-Octane	P8	0.0264	0.1644	0.013	0.013
1c,4-Dimethylcyclohexane	N8	0.0047	0.0287	0.002	0.002
i-Propylcyclopentane	I8	0.0005	0.0030	0.000	0.000
2,3,5-Trimethylhexane	I9	0.0003	0.0021	0.000	0.000
2,2,3,4-Tetramethylpentane	I9	0.0002	0.0014	0.000	0.000
2,3,4-Trimethylhexane	I9	0.0002	0.0014	0.000	0.000
1c,2-Dimethylcyclohexane	N8	0.0002	0.0012	0.000	0.000
2,2-Dimethylheptane	I9	0.0015	0.0105	0.001	0.001
1,1,4-Trimethylcyclohexane	N9	0.0100	0.0688	0.005	0.005
2,2,3-Trimethylhexane	I9	0.0028	0.0196	0.001	0.001
2,4-Dimethylheptane	I9	0.0005	0.0035	0.000	0.000
4,4-Dimethylheptane	I9	0.0001	0.0007	0.000	0.000
Ethylcyclohexane	N8	0.0043	0.0263	0.002	0.002
n-Propylcyclopentane	N8	0.0018	0.0110	0.001	0.001

1c,3c,5-Trimethylcyclohexane	N9	0.0006	0.0041	0.000	0.000
2,5-Dimethylheptane	I9	0.0021	0.0147	0.001	0.001
3,3-Dimethylheptane	I9	0.0004	0.0028	0.000	0.000
3,5-Dimethylheptane	I9	0.0002	0.0014	0.000	0.000
2,6-Dimethylheptane	I9	0.0005	0.0035	0.000	0.000
1,1,3-Trimethylcyclohexane	N9	0.0004	0.0027	0.000	0.000
Ethylbenzene	I8	0.0150	0.0868	0.006	0.006
1c,2t,4t-Trimethylcyclohexane	N9	0.0001	0.0007	0.000	0.000
1,3-Dimethylbenzene (m-Xylene)	A8	0.0280	0.1620	0.011	0.011
1,4-Dimethylbenzene (p-Xylene)	A8	0.0076	0.0440	0.003	0.003
3,4-Dimethylheptane	I9	0.0002	0.0014	0.000	0.000
3,4-Dimethylheptane (2)	I9	0.0014	0.0098	0.001	0.001
4-Ethylheptane	I9	0.0003	0.0021	0.000	0.000
4-Methyloctane	I9	0.0016	0.0112	0.001	0.001
2-Methyloctane	I9	0.0026	0.0181	0.001	0.001
1c,2t,3-Trimethylcyclohexane	N9	0.0004	0.0027	0.000	0.000
3-Ethylheptane	I9	0.0003	0.0021	0.000	0.000
3-Methyloctane	I9	0.0004	0.0028	0.000	0.000
1c,2t,4c-Trimethylcyclohexane	I9	0.0029	0.0199	0.002	0.002
1,1,2-Trimethylcyclohexane	N9	0.0002	0.0014	0.000	0.000
3,3-Diethylpentane	I9	0.0003	0.0021	0.000	0.000
1,2-Dimethylbenzene (o-Xylene)	A8	0.0124	0.0717	0.005	0.005
i-Butylcyclopentane	N9	0.0028	0.0192	0.001	0.001
UnknownC8s	U8	0.0001	0.0006	0.000	0.000
n-Nonane	P9	0.0115	0.0804	0.006	0.006
1,1-Methylethylcyclohexane	N9	0.0015	0.0103	0.001	0.001
i-Propylbenzene	A9	0.0013	0.0085	0.001	0.001
i-Propylcyclohexane	N9	0.0011	0.0076	0.001	0.001
2,2-Dimethyloctane	I10	0.0002	0.0015	0.000	0.000
2,4-Dimethyloctane	I10	0.0004	0.0031	0.000	0.000
2,6-Dimethyloctane	I10	0.0005	0.0039	0.000	0.000
2,5-Dimethyloctane	I10	0.0002	0.0015	0.000	0.000
n-Butylcyclopentane	N9	0.0030	0.0207	0.002	0.002
3,3-Dimethyloctane	I10	0.0005	0.0039	0.000	0.000
n-Propylbenzene	A9	0.0019	0.0124	0.001	0.001
3,6-Dimethyloctane	I10	0.0037	0.0287	0.002	0.002
3-Methyl-5-ethylheptane	I10	0.0010	0.0077	0.001	0.001
1,3-Methylethylbenzene	A9	0.0049	0.0321	0.003	0.003
1,4-Methylethylbenzene	A9	0.0018	0.0118	0.001	0.001
1,3,5-Trimethylbenzene	A9	0.0022	0.0144	0.001	0.001
2,3-Dimethyloctane	I10	0.0003	0.0023	0.000	0.000
5-Methylnonane	I10	0.0010	0.0077	0.001	0.001
1,2-Methylethylbenzene	A9	0.0003	0.0020	0.000	0.000
2-Methylnonane	I10	0.0022	0.0171	0.001	0.001
3-Ethylheptane	I10	0.0006	0.0046	0.000	0.000
3-Methylnonane	I10	0.0010	0.0077	0.001	0.001
t-Butylbenzene	A10	0.0056	0.0410	0.003	0.003
i-Butylcyclohexane	N10	0.0008	0.0061	0.000	0.000
1t-Methyl-2-n-propylcyclohexane	I10	0.0002	0.0015	0.000	0.000
i-Butylbenzene	A10	0.0004	0.0029	0.000	0.000
sec-Butylbenzene	A10	0.0010	0.0073	0.000	0.000
UnknownC9s	U9	0.0044	0.0307	0.002	0.002
n-Decane	P10	0.0060	0.0465	0.004	0.004
1,2,3-Trimethylbenzene	A9	0.0013	0.0085	0.001	0.001
1,3-Methyl-i-propylbenzene	A10	0.0008	0.0058	0.000	0.000
1,4-Methyl-i-propylbenzene	A10	0.0014	0.0102	0.001	0.001
Sec-Butylcyclohexane	A10	0.0001	0.0008	0.000	0.000
1,2-Methyl-i-propylbenzene	A10	0.0007	0.0051	0.000	0.000
3-Ethylnonane	I10	0.0002	0.0017	0.000	0.000
1,3-Diethylbenzene	A10	0.0003	0.0022	0.000	0.000
1,3-Methyl-n-propylbenzene	A10	0.0013	0.0095	0.001	0.001
1,4-Diethylbenzene	A10	0.0005	0.0036	0.000	0.000
1,4-Methyl-n-propylbenzene	A10	0.0001	0.0007	0.000	0.000
n-Butylbenzene	A10	0.0005	0.0036	0.000	0.000

1,3-Dimethyl-5-ethylbenzene	A10	0.0006	0.0044	0.000	0.000
1,2-Diethylbenzene	A10	0.0005	0.0036	0.000	0.000
1,2-Methyl-n-propylbenzene	A10	0.0002	0.0015	0.000	0.000
1,3-Dimethyl-4-ethylbenzene	A10	0.0005	0.0036	0.000	0.000
1,2-Dimethyl-4-ethylbenzene	A10	0.0005	0.0036	0.000	0.000
1,3-Dimethyl-2-ethylbenzene	A10	0.0005	0.0036	0.000	0.000
1,2-Dimethyl-3-ethylbenzene	A10	0.0001	0.0007	0.000	0.000
1,2-Ethyl-i-propylbenzene	A10	0.0003	0.0024	0.000	0.000
1,4-Methyl-t-butylbenzene	A11	0.0004	0.0032	0.000	0.000
UnknownC10s	U10	0.0081	0.0628	0.005	0.005
n-Undecane	P11	0.0035	0.0298	0.002	0.002
1,4-Ethyl-i-propylbenzene	A11	0.0005	0.0040	0.000	0.000
1,2,4,5-Tetramethylbenzene	A11	0.0002	0.0015	0.000	0.000
1,2-Methyl-n-butylbenzene	A11	0.0003	0.0024	0.000	0.000
1,2,3,5-Tetramethylbenzene	A11	0.0003	0.0022	0.000	0.000
1,2-Methyl-t-butylbenzene	A11	0.0002	0.0016	0.000	0.000
5-Methylindan	A11	0.0002	0.0014	0.000	0.000
4-Methylindan	A11	0.0002	0.0014	0.000	0.000
1,2-Ethyl-n-propylbenzene	A11	0.0005	0.0040	0.000	0.000
1,3-Methyl-n-butylbenzene	A11	0.0001	0.0008	0.000	0.000
1,3-Di-i-propylbenzene	A11	0.0002	0.0017	0.000	0.000
sec-Pentylbenzene	A11	0.0002	0.0016	0.000	0.000
n-Pentylbenzene	A11	0.0003	0.0024	0.000	0.000
1,2-Di-n-propylbenzene	A11	0.0001	0.0009	0.000	0.000
1,4-Di-i-propylbenzene	A11	0.0001	0.0009	0.000	0.000
Tetrahydronaphthalene	A10	0.0002	0.0014	0.000	0.000
Naphthalene	A10	0.0002	0.0014	0.000	0.000
1-t-Butyl-3,5-dimethylbenzene	A12	0.0002	0.0017	0.000	0.000
1,4-Ethyl-t-butylbenzene	A11	0.0001	0.0009	0.000	0.000
1,3-Di-n-propylbenzene	A12	0.0002	0.0017	0.000	0.000
UnknownC11s	U11	0.0039	0.0332	0.003	0.003
n-Dodecane	P12	0.0018	0.0167	0.001	0.001
1,3,5-Triethylbenzene	A12	0.0005	0.0044	0.000	0.000
1,2,4-Triethylbenzene	A12	0.0001	0.0009	0.000	0.000
1,4-Methyl-n-pentylbenzene	A12	0.0003	0.0027	0.000	0.000
n-Hexylbenzene	A12	0.0001	0.0009	0.000	0.000
1,2,3,4,5-Pentamethylbenzene	A13	0.0005	0.0040	0.000	0.000
2-Methylnaphthalene	A11	0.0008	0.0062	0.001	0.001
1-Methylnaphthalene	A11	0.0004	0.0031	0.000	0.000
UnknownC12s	U12	0.0029	0.0247	0.002	0.002
n-Tridecane	P13	0.0009	0.0090	0.001	0.001
UnknownC13s	U13	0.0013	0.0131	0.001	0.001
n-Tetradecane	P14	0.0004	0.0043	0.000	0.000
UnknownC14s	U14	0.0005	0.0054	0.000	0.000
n-Pentadecane	P15	0.0001	0.0011	0.000	0.000
UnknownC15s	U15	0.0009	0.0104	0.001	0.001
n-Hexadecane	P16	0.0001	0.0012	0.000	0.000
n-Heptadecane	P17	0.0001	0.0013	0.000	0.000
<u>TOTAL</u>		<u>100.0000</u>	<u>100.0000</u>	<u>1.1502</u>	<u>1.1553</u>

BTEX COMPONENTS	MOLE%	WT%
BENZENE	0.1429	0.6083
TOLUENE	0.1232	0.6186
ETHYLBENZENE	0.0150	0.0868
XYLENES	0.0480	0.2777
TOTAL BTEX	0.3291	1.5914

*(DETAILED HYDROCARBON ANALYSIS/NJ 1993)
Mod ASTM D6730, GPA 2261 & GPA 2286.

** (CALC: GPA 2172, GPA 2145 & TP-17 @14.696 & 60 F)

CALCULATED VALUES**		
BTU @	14.65	14.73
LHV NET DRY REAL :	950.6 /scf	955.8 /scf
NET WET REAL :	934.0 /scf	939.2 /scf
HHV GROSS DRY REAL :	1051.7 /scf	1057.4 /scf
GROSS WET REAL :	1033.3 /scf	1039.0 /scf
NET HEATING VALUE (60 °F ideal reaction):		19725.7 Btu/lbm
GROSS HEATING VALUE (60°F ideal reaction):		21826.6 Btu/lbm
RELATIVE DENSITY (AIR=1):		0.6321
DENSITY		0.04835 lb/scf
COMPRESSIBILITY FACTOR :		0.9979
REGULAR WOBBE INDEX		1324.2

C6+ Fraction of DHA Gas Analysis @60°F, 14.696 psia

Net Dry Ideal BTU	<u>4755.8</u> /scf	Relative Density - SG (Air=1)	<u>3.3049</u>	C6+ factors
Gross Dry Ideal BTU	<u>5096.3</u> /scf	Z Compressibility Factor	<u>0.99378</u>	<u>0.99309</u>
Net Dry Ideal BTU	<u>19019.7</u> /lb	Density Factor	<u>252.267</u> lbm/1000 ft3	
Gross Dry Ideal BTU	<u>20388.2</u> /lb	Molar Mass or MW	<u>95.731</u> g/mol	
		Volume Liquid Ideal gas	<u>0.677</u> scf/gal	<u>24.2</u>

**This hexanes plus fraction may be applied in place of published C6+ factors. The Z & GPM need additional calc for C6+ factors.
#DIV/0 or 0 (zero) will appear in this section when there is no hexanes plus in the sample to calculate C6+ factors.**

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