EMPACT ANALYTICAL SYSTEMS INC.
365 S. MAIN ST.
BRIGHTON, CO
80601

303-637-0150

EXTENDED NATURAL GAS ANALYSIS (*DHA)

MAIN PAGE

PROJECT NO. :	201003041	ANALYSIS NO. :	01
COMPANY NAME :	VECTA OIL & GAS	ANALYSIS DATE:	MARCH 11, 2010
ACCOUNT NO. :		SAMPLE DATE :	
PRODUCER :		CYLINDER NO. :	V-1243
LEASE NO. :		SAMPLED BY :	
NAME/DESCRIP :	GRAYS 23-27		
FIELD DATA		SAMPLE TEMP. :	
SAMPLE PRES. :		AMBIENT TEMP.:	
VAPOR PRES. :		GRAVITY :	
COMMENTS :	ASSET AREA: SE COLORADO		

COMPONENT	MOLE %	MASS %	GPM @ 14.696	GPM @ 14.730
ALCOHOLS	0.0005	0.0007		
HELIUM	1.62	0.25	---	---
HYDROGEN	0.00	0.00	---	---
OXYGEN/ARGON	0.18	0.22	---	---
NITROGEN	29.12	31.55	---	---
CARBON DIOXIDE	1.08	1.83	---	---
METHANE	44.7324	27.7584	---	---
ETHANE	9.8254	11.4290	2.6218	2.6279
PROPANE	8.1991	13.9862	2.2540	2.2592
I-BUTANE	0.9760	2.1943	0.3185	0.3192
N-BUTANE	2.7190	6.1135	0.8553	0.8573
I-PENTANE	0.4928	1.3757	0.1799	0.1803
N-PENTANE	0.5704	1.5920	0.2061	0.2066
HEXANES PLUS	0.4844	1.7002	0.1985	0.1987
TOTALS	100.0000	100.0000	6.6341	6.6492

BTEX COMPONENTS	MOLE%	WT%
BENZENE	0.0079	0.0238
TOLUENE	0.0054	0.0191
ETHYLBENZENE	0.0001	0.0002
XYLENES	0.0001	0.0005
TOTAL BTEX	0.0135	0.0436

	BTU @	14.696	14.730
LOW	NET DRY REAL :	931.23 /scf	933.39 /scf
	NET WET REAL :	915.00 /scf	917.16 /scf
HIGH	GROSS DRY REAL :	1022.04 /scf	1024.4 /scf
	GROSS WET REAL :	1004.23 /scf	1006.59 /scf
	NET DRY REAL :	13629 /lb	13660 /lb
	GROSS DRY REAL :	14958 /lb	14993 /lb
	RELATIVE DENSITY (AIR=1):		0.8951
	COMPRESSIBILITY FACTOR :		0.9969

(CALC: GPA STD 2145 & TP-17 @14.696 & 60 F)

**(DETAILED HYDROCARBON ANALYSIS/NJ 1993) ; ASTM D6730*

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GLYCALC INFORMATION

PROJECT NO. :	201003041	ANALYSIS NO. :	01
COMPANY NAME :	VECTA OIL & GAS	ANALYSIS DATE:	MARCH 11, 2010
ACCOUNT NO. :		SAMPLE DATE :	
PRODUCER :		CYLINDER NO. :	V-1243
LEASE NO. :		SAMPLED BY :	
NAME/DESCRIP :	GRAYS 23-27		
FIELD DATA		SAMPLE TEMP. :	
SAMPLE PRES. :		AMBIENT TEMP.:	
VAPOR PRES. :		GRAVITY :	
COMMENTS :	ASSET AREA: SE COLORADO		

Componenet	Mole %	Wt %
Helium	1.62	0.25
Hydrogen	0.00	0.00
Carbon Dioxide	1.08	1.83
Nitrogen	29.12	31.55
Methane	44.7324	27.7584
Ethane	9.8254	11.4290
Propane	8.1991	13.9862
Isobutane	0.9760	2.1943
n-Butane	2.7190	6.1135
Isopentane	0.4928	1.3757
n-Pentane	0.5704	1.5920
Cyclopentane	0.0245	0.0665
n-Hexane	0.0945	0.3150
Cyclohexane	0.0393	0.1279
Other Hexanes	0.1745	0.6031
Heptanes	0.0836	0.3205
Methycyclohexane	0.0266	0.1010
2,2,4 Trimethylpentane	0.0001	0.0003
Benzene	0.0079	0.0238
Toluene	0.0054	0.0191
Ethylbenzene	0.0001	0.0002
Xylenes	0.0001	0.0005
C8+ Heavies	0.0278	0.1223
Subtotal	99.8195	99.7793
Oxygen/Argon	0.18	0.22
Alcohols	0.0005	0.0007
Total	100.0000	100.0000

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EXTENDED NATURAL GAS ANALYSIS (*DHA)

DHA COMPONENT LIST

PROJECT NO. :	201003041	ANALYSIS NO. :	01
COMPANY NAME :	VECTA OIL & GAS	ANALYSIS DATE:	MARCH 11, 2010
ACCOUNT NO. :		SAMPLE DATE :	
PRODUCER :		CYLINDER NO. :	V-1243
LEASE NO. :		SAMPLED BY :	
NAME/DESCRIP :	GRAYS 23-27		
FIELD DATA		SAMPLE TEMP. :	
SAMPLE PRES. :		AMBIENT TEMP.:	
VAPOR PRES. :		GRAVITY :	
COMMENTS :	ASSET AREA: SE COLORADO		

COMPONENT	PIANO #	MOLE %	MASS %	GPM @ 14.696	GPM @ 14.730
Helium	---------	1.62	0.25	---	---
Hydrogen	---------	0.00	0.00	---	---
Oxygen/Argon	---------	0.18	0.22	---	---
Nitrogen	---------	29.12	31.55	---	---
Carbon Dioxide	---------	1.08	1.83	---	---
Methane	P1	44.7324	27.7584	---	---
Ethane	P2	9.8254	11.4290	2.6218	2.6279
Propane	P3	8.1991	13.9862	2.2540	2.2592
i-Butane	I4	0.9760	2.1943	0.3185	0.3192
n-Butane	P4	2.7190	6.1135	0.8553	0.8573
2,2-Dimethylpropane	I5	0.0044	0.0124	0.0015	0.0015
Ethanol	X2	0.0002	0.0003	0.0000	0.0000
i-Pentane	I5	0.4884	1.3633	0.1784	0.1788
n-Pentane	P5	0.5704	1.5920	0.2061	0.2066
t-Butanol	X4	0.0003	0.0004	0.0000	0.0000
2,2-Dimethylbutane	I6	0.0028	0.0095	0.0012	0.0012
Cyclopentane	N5	0.0245	0.0665	0.0072	0.0072
2,3-Dimethylbutane	I6	0.0097	0.0325	0.0040	0.0040
2-Methylpentane	I6	0.0814	0.2715	0.0337	0.0338
3-Methylpentane	I6	0.0422	0.1407	0.0172	0.0172
UnknownC5s	U6	0.0000	0.0001	0.0000	0.0000
n-Hexane	P6	0.0945	0.3150	0.0388	0.0389
2,2-Dimethylpentane	I7	0.0003	0.0009	0.0001	0.0001
Methylcyclopentane	N6	0.0383	0.1485	0.0179	0.0179
2,4-Dimethylpentane	I7	0.0020	0.0076	0.0009	0.0009
2,2,3-Trimethylbutane	I7	0.0002	0.0006	0.0001	0.0001
Benzene	A6	0.0079	0.0238	0.0022	0.0022
3,3-Dimethylpentane	I7	0.0003	0.0010	0.0001	0.0001
Cyclohexane	N6	0.0393	0.1279	0.0133	0.0133
2-Methylhexane	I7	0.0085	0.0331	0.0039	0.0039
2,3-Dimethylpentane	I7	0.0037	0.0144	0.0017	0.0017
1,1-Dimethylcyclopentane	N7	0.0050	0.0190	0.0020	0.0020
3-Methylhexane	I7	0.0115	0.0447	0.0053	0.0053
1c,3-Dimethylcyclopentane	N7	0.0077	0.0291	0.0032	0.0032
1t,3-Dimethylcyclopentane	N7	0.0069	0.0261	0.0029	0.0029
3-Ethylpentane	I7	0.0002	0.0008	0.0001	0.0001

1t,2-Dimethylcyclopentane	N7	0.0112	0.0426	0.0046	0.0046
2,2,4-Trimethylpentane	I8	0.0001	0.0003	0.0000	0.0000
UnknownC6s	U6	0.0001	0.0003	0.0000	0.0000
n-Heptane	P7	0.0239	0.0926	0.0110	0.0110
1c,2-Dimethylcyclopentane	N7	0.0005	0.0020	0.0002	0.0002
Methylcyclohexane	N7	0.0266	0.1010	0.0107	0.0107
2,2-Dimethylhexane	I8	0.0031	0.0135	0.0016	0.0016
1,1,3-Trimethylcyclopentane	N7	0.0006	0.0022	0.0003	0.0003
Ethylcyclopentane	N7	0.0010	0.0036	0.0004	0.0004
2,5-Dimethylhexane	I8	0.0005	0.0021	0.0003	0.0003
2,4-Dimethylhexane	I8	0.0007	0.0030	0.0004	0.0004
1c,2t,4-Trimethylcyclopentane	N8	0.0023	0.0099	0.0011	0.0011
3,3-Dimethylhexane	I8	0.0002	0.0010	0.0001	0.0001
1t,2c,4-Trimethylcyclopentane	N8	0.0023	0.0100	0.0010	0.0010
2,3,4-Trimethylpentane	I8	0.0001	0.0002	0.0000	0.0000
Toluene	A7	0.0054	0.0191	0.0018	0.0018
2,3-Dimethylhexane	I8	0.0008	0.0034	0.0004	0.0004
2-Methyl-3-ethylpentane	I8	0.0003	0.0013	0.0002	0.0002
1,1,2-Trimethylcyclopentane	N8	0.0002	0.0007	0.0001	0.0001
2-Methylheptane	I8	0.0041	0.0183	0.0021	0.0021
4-Methylheptane	I8	0.0012	0.0051	0.0006	0.0006
3-Methyl-3-ethylpentane	I8	0.0001	0.0004	0.0001	0.0001
3,4-Dimethylhexane	I8	0.0001	0.0006	0.0000	0.0000
1c,2c,4-Trimethylcyclopentane	N8	0.0001	0.0005	0.0000	0.0000
1c,3-Dimethylcyclohexane	N8	0.0001	0.0006	0.0000	0.0000
3-Methylheptane	I8	0.0008	0.0036	0.0004	0.0004
1c,2t,3-Trimethylcyclopentane	N8	0.0042	0.0183	0.0019	0.0019
3-Ethylhexane	I8	0.0007	0.0030	0.0004	0.0004
1t,4-Dimethylcyclohexane	N8	0.0015	0.0065	0.0007	0.0007
1,1-Dimethylcyclohexane	N8	0.0005	0.0020	0.0002	0.0002
3c-Ethylmethylcyclopentane	N8	0.0000	0.0001	0.0000	0.0000
3t-Ethylmethylcyclopentane	N8	0.0002	0.0010	0.0001	0.0001
2t-Ethylmethylcyclopentane	N8	0.0002	0.0008	0.0001	0.0001
1,1-Methylethylcyclopentane	N8	0.0004	0.0019	0.0002	0.0002
2,2,4-Trimethylhexane	I9	0.0001	0.0004	0.0001	0.0001
1t,2-Dimethylcyclohexane	N8	0.0013	0.0058	0.0006	0.0006
1c,2c,3-Trimethylcyclopentane	N8	0.0000	0.0001	0.0000	0.0000
1t,3-Dimethylcyclohexane	N8	0.0000	0.0001	0.0000	0.0000
UnknownC7s	U7	0.0001	0.0002	0.0000	0.0000
n-Octane	P8	0.0012	0.0051	0.0006	0.0006
1c,4-Dimethylcyclohexane	N8	0.0000	0.0001	0.0000	0.0000
i-Propylcyclopentane	I8	0.0000	0.0001	0.0000	0.0000
1c,2-Dimethylcyclohexane	N8	0.0001	0.0002	0.0000	0.0000
1,1,4-Trimethylcyclohexane	N9	0.0001	0.0005	0.0001	0.0001
2,2,3-Trimethylhexane	I9	0.0000	0.0001	0.0000	0.0000
Ethylcyclohexane	N8	0.0000	0.0001	0.0000	0.0000
Ethylbenzene	I8	0.0001	0.0002	0.0000	0.0000
1,3-Dimethylbenzene (m-Xylene)	A8	0.0001	0.0003	0.0000	0.0000
1,4-Dimethylbenzene (p-Xylene)	A8	0.0000	0.0001	0.0000	0.0000
3-Methyloctane	I9	0.0000	0.0001	0.0000	0.0000
1,2-Dimethylbenzene (o-Xylene)	A8	0.0000	0.0001	0.0000	0.0000
i-Butylcyclopentane	N9	0.0000	0.0001	0.0000	0.0000
UnknownC8s	U8	0.0001	0.0003	0.0001	0.0001
n-Nonane	P9	0.0001	0.0003	0.0001	0.0001
n-Butylcyclopentane	N9	0.0000	0.0001	0.0000	0.0000
n-Propylbenzene	A9	0.0000	0.0001	0.0000	0.0000
1,3,5-Trimethylbenzene	A9	0.0000	0.0001	0.0000	0.0000
2-Methylnonane	I10	0.0000	0.0001	0.0000	0.0000
t-Butylbenzene	A10	0.0000	0.0001	0.0000	0.0000
n-Decane	P10	0.0001	0.0003	0.0001	0.0001
1,2,3-Trimethylbenzene	A9	0.0000	0.0001	0.0000	0.0000
Sec-Butylcyclohexane	N10	0.0000	0.0001	0.0000	0.0000
n-Undecane	P11	0.0000	0.0001	0.0000	0.0000
TOTAL		100.0000	100.0000	6.6341	6.6492