



Certificate of Analysis

SINCE 1985

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CLIENT:	Crosstex Energy Services, Ltd.	REQUESTED BY:	Mr. Joseph Baty
SAMPLE:	Comparison of Four Gas Samples	REPORT DATE:	June 25, 2012
LABORATORY NO:	67547	PURCHASE ORDER NO:	Prepaid

TEST

RESULTS

Composition Breakdown, Gas Chromatography/Mass Spectrometry, ASTM D5739

Texas OilTech Laboratories received four samples of gas for comparison of the heavier hydrocarbon composition. The four gas samples were identified as follows:

1. Belle Rose 6-22-2012, 10 Tedlar bags, (Texas OilTech Laboratories No., 67547-01)
2. Belle Rose 6-22-2012, 1 300 ml cylinder at 700 psig, (Texas OilTech Laboratories No., 67547-02)
3. Bayou Corne 6-22-2012, 10 Tedlar bags, (Texas OilTech Laboratories No., 67547-03)
4. Grand Bayou 6-22-2012, 10 Tedlar bags, (Texas OilTech Laboratories No., 67547-04)

The gas samples were passed through SKC Anasorb CSC, activated carbon tubes, Cat. No. 226-09. The volume of gas was recorded in liters. A blank tube sample was also prepared and it was purged with Ultra High purity nitrogen. The tubes were then desorbed with 10 milliliters of methylene chloride. The extraction solvent was concentrated to 0.5 ml before analysis.

The samples were analyzed on a gas chromatograph/ mass spectrometer. A library search was performed on the collected data using the Wiley 138 Library and the NIST 98 Library. Together the libraries contain approximately 200,000 compounds.

These data are based on the chromatographable components found. If heavier compounds or polymers are present these were not seen on the gas chromatograph/mass spectrometer. No corrections for the inorganic content or water have been performed. The identities and approximate concentrations that follow are based on the best spectral comparisons from our libraries and the total ion relative areas of the peaks observed.

Results:

Belle Rose, 67547-01, 8.6 liters, contained benzene, toluene, hydrocarbons and low level heavier hydrocarbons in the diesel range. This sample had a plasticizer identified as bis (2-ethylhexyl) phthalate. This has sometimes been seen in pipeline gas, but it is not common. This sample is most like Belle Rose, 67547-02. It does not compare with the other samples.

Belle Rose, 67547-02, 100 liters, contained benzene, toluene, hydrocarbons and low level heavier hydrocarbons in the diesel range. We also found C18 fatty acid, 2-octyl benzoate and a trace of diethyl phthalate. This sample had a plasticizer identified as bis (2-ethylhexyl) phthalate. The concentration is very large, but this is also from a sample containing 10+ times more gas sample. This chemical has sometimes been seen in pipeline gas, but it is not common. This sample is most like Belle Rose, 67547-01. It does not compare with the other samples.

Bayou Corne, 67547-03, 7.8 liters, contained toluene, but not any significant benzene. The distribution of the hydrocarbons were mostly in the kerosene range, but there were some heavier hydrocarbons present out into the diesel range. This sample had a very tiny trace of plasticizer identified as bis (2-ethylhexyl) phthalate. This chemical has sometimes been seen in pipeline gas, but it is not common. This sample does not exactly match any of the other samples, but is closest to the Grand Bayou sample (67547-04) in appearance.

Grand Bayou, 67547-04, 3.2 liters. This was the least amount of gas provided. The sample contained toluene, but not any significant benzene. The other heavier hydrocarbons were not very pronounced in this sample. This sample has a small amount of the plasticizer identified as bis (2-ethylhexyl) phthalate. This chemical has sometimes been seen in pipeline gas, but it is not common. This sample does not exactly match any of the other samples, but is closest to the Bayou Corne sample (67547-03) in appearance.

Please refer to the accompanying chromatograms.

Respectfully submitted

For Texas OilTech Laboratories, L.P.

A. Phil Sorurbakhsh

Director of Laboratory Operations



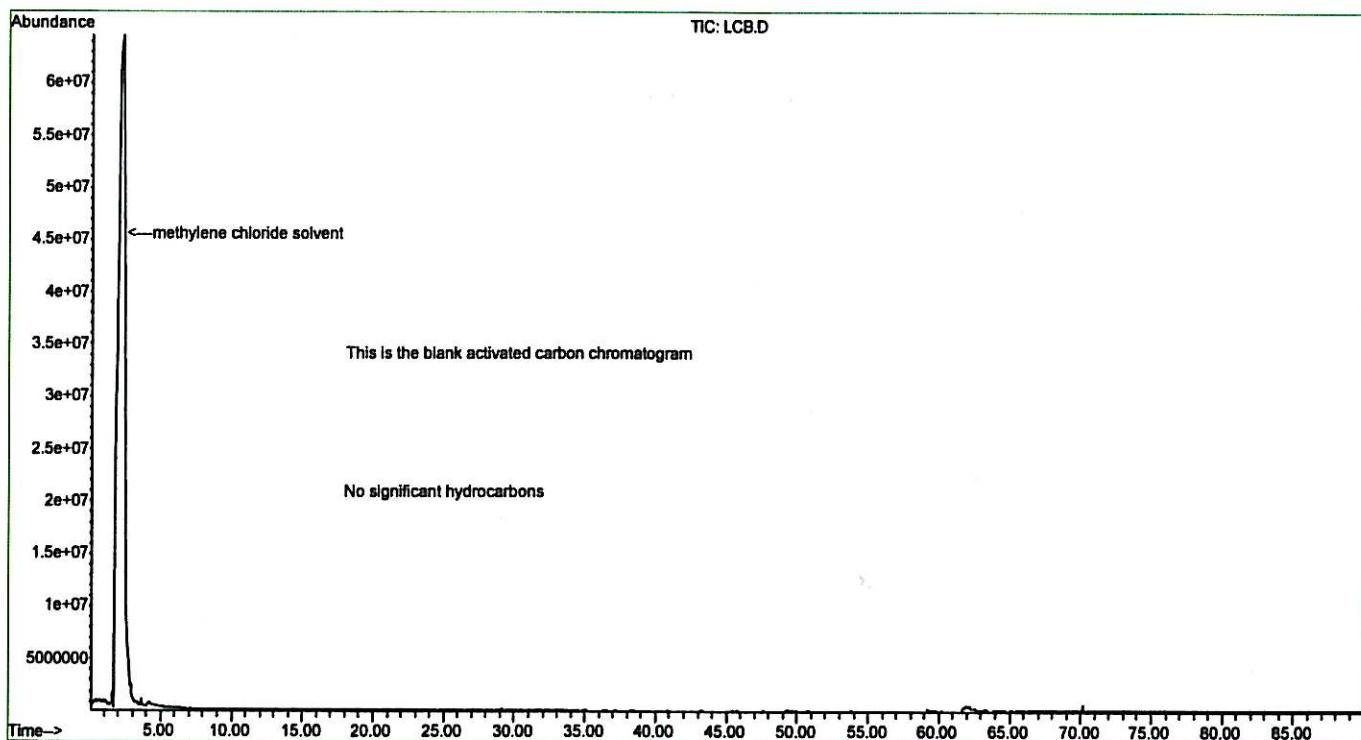
Cert. No. 0005085

Quality Management System Certified to ISO 9001:2008

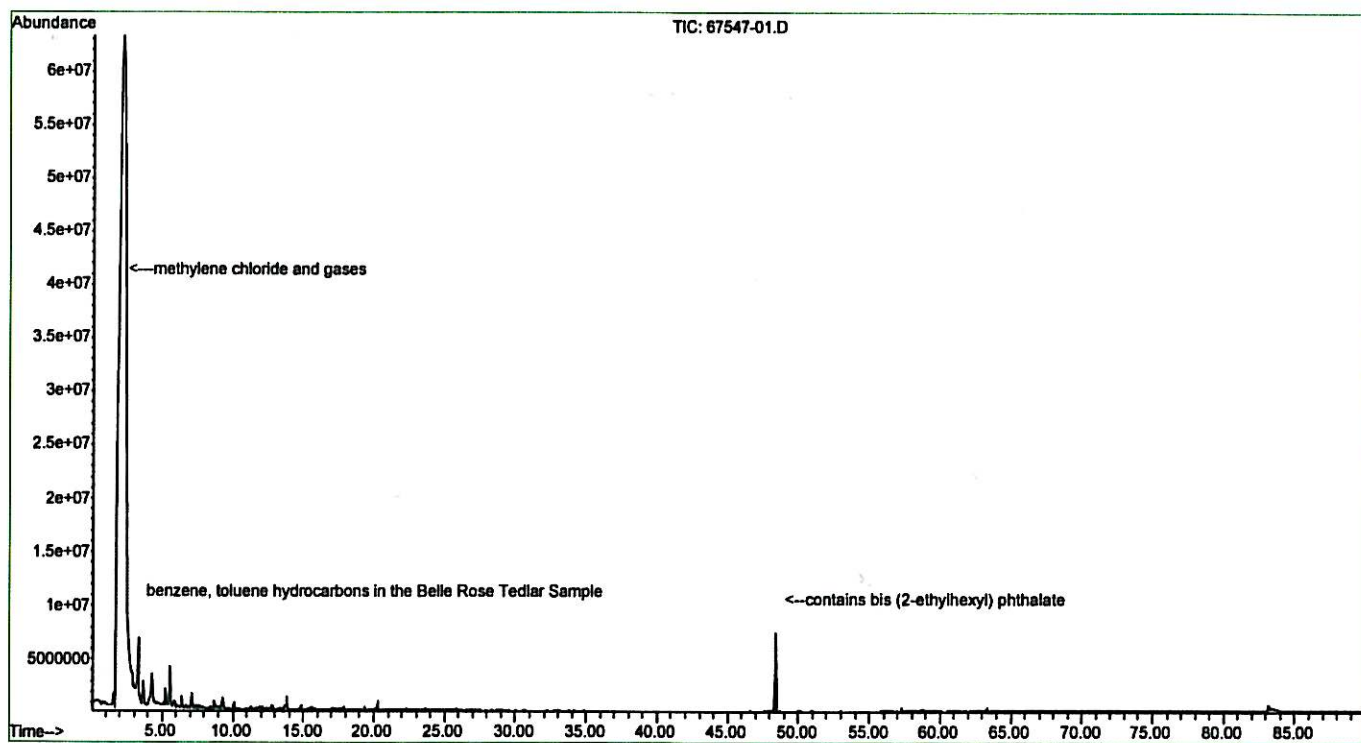
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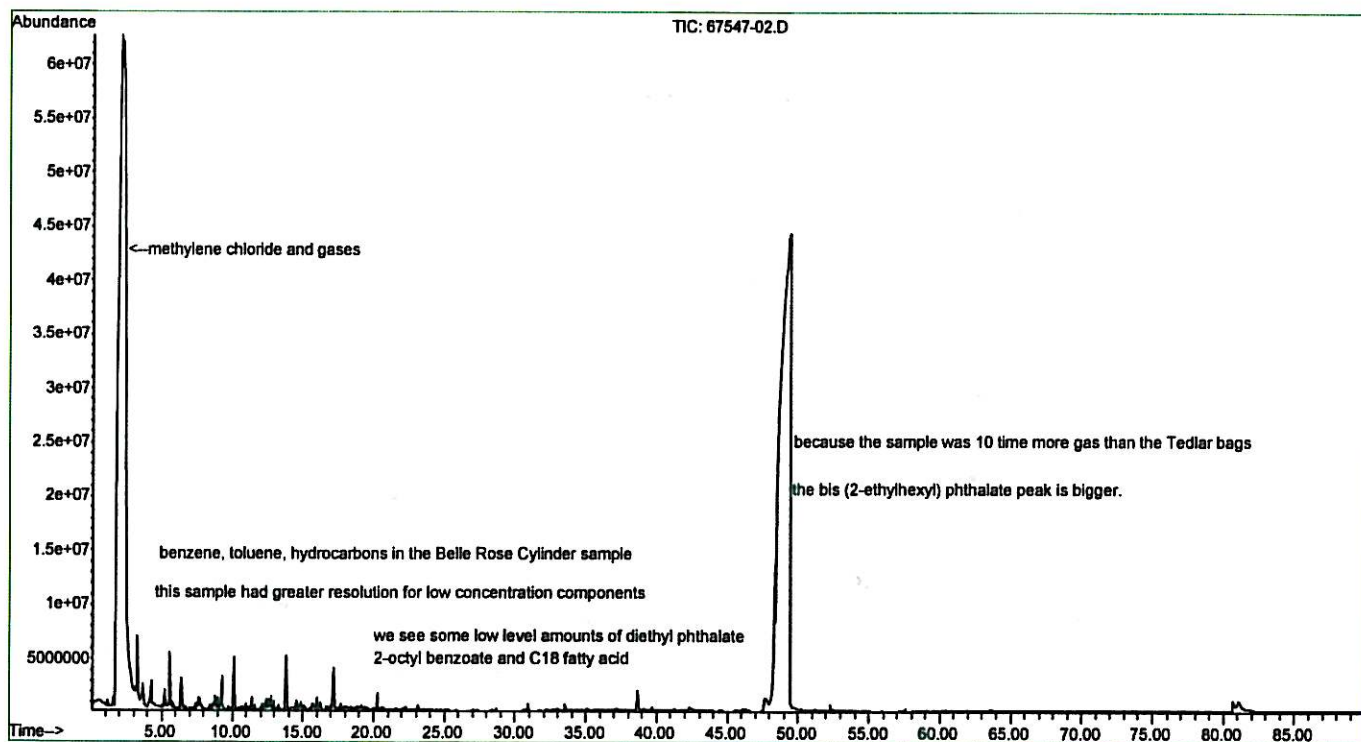
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Operator :
Acquired : 24 Jun 2012 2:49 pm using AcqMethod ASTMZERO
Instrument : GCMS03
Sample Name: ACTIVATED CARBON
Misc Info : ACTIVATED CARBON CONC. 0.5 ML MECL
Vial Number: 2



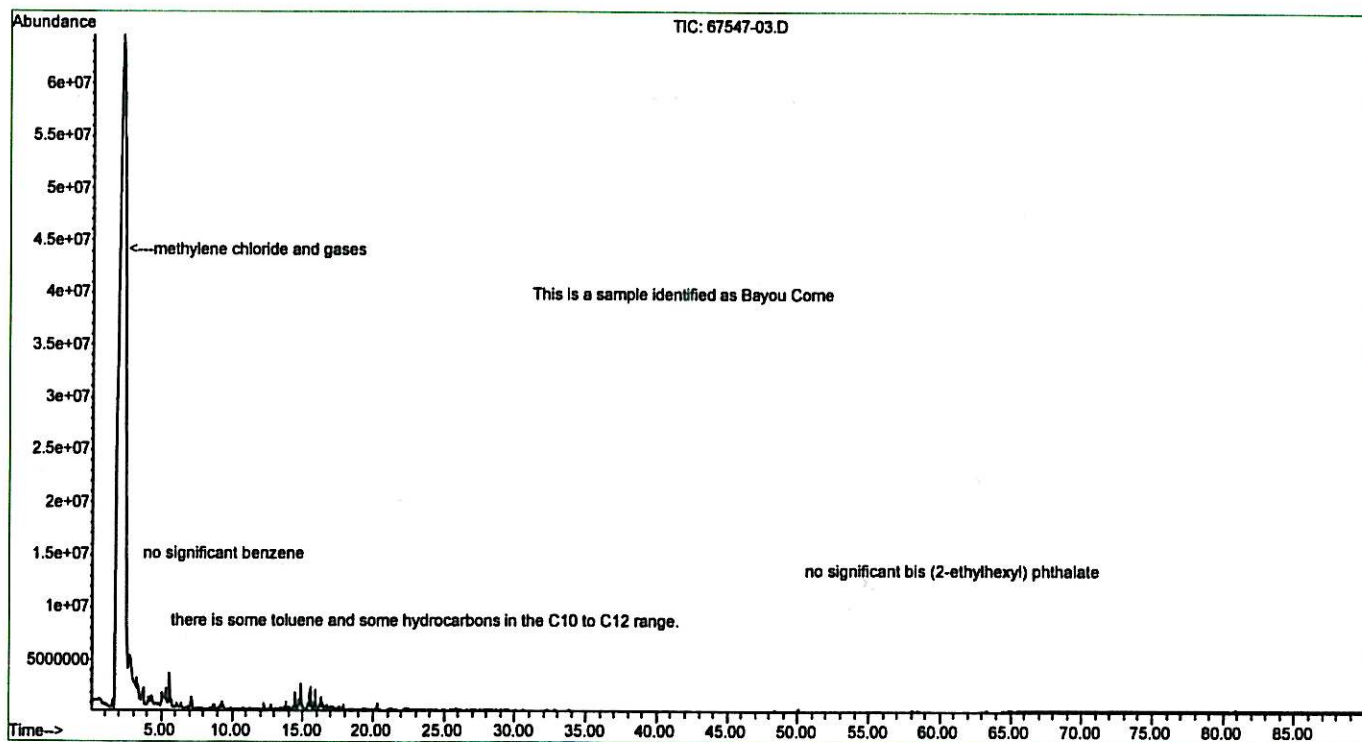
File : K:\DATA\0624T012\67547-01.D
Operator :
Acquired : 24 Jun 2012 4:34 pm using AcqMethod ASTMZERO
Instrument : GCMS03
Sample Name: CROSSTEX
Misc Info : ACTIVATED CARBON CONC. 0.5 ML MECL
Vial Number: 3



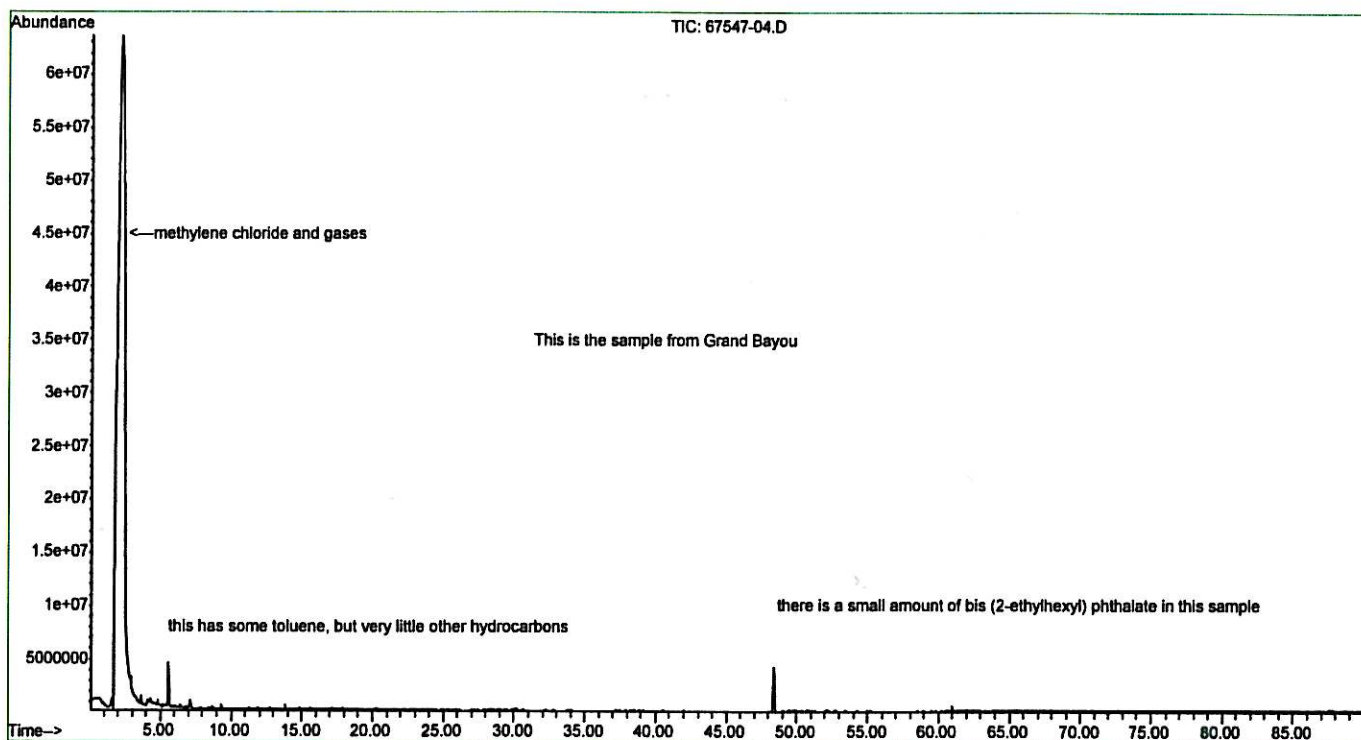
File : K:\DATA\0624T012\67547-02.D
Operator :
Acquired : 24 Jun 2012 6:20 pm using AcqMethod ASTMZERO
Instrument : GCMS03
Sample Name: CROSSTEX
Misc Info : ACTIVATED CARBON CONC. 0.5ML MECL
Vial Number: 4



File : K:\DATA\0624T012\67547-03.D
Operator :
Acquired : 24 Jun 2012 8:06 pm using AcqMethod ASTMZERO
Instrument : GCMS03
Sample Name: CROSSTEX
Misc Info : ACTIVATED CARBON CONC. 0.5 ML MECL
Vial Number: 5



File : K:\DATA\0624T012\67547-04.D
Operator :
Acquired : 24 Jun 2012 9:51 pm using AcqMethod ASTMZERO
Instrument : GCMS03
Sample Name: CROSSTEX
Misc Info : ACTIVATED CARBON CONC. 0.5 ML MECL
Vial Number: 6



CrossTex
CrossTex

#1 Pulled 6-20-12 2:00pm

Client:	Lig Liquids	Requested By:	
Sample:	LIG NAT. GAS	Date/Time:	20-Jun-12, 14:49:12
Lab No.	Plaquemine Plant	P. O. No.	
Operator:	CHAD	Data File:	SIG14816.D
Sample Info:			0

Peak Name	Mol%	Wt%	GPM	CFPG
Carbon dioxide	0.8192	2.1787	0.1415	0.0039
Nitrogen	0.3138	0.5312	0.0351	0.0004
Methane	97.5487	94.5779	16.8406	55.5644
Ethane	1.1267	2.0476	0.3069	0.0117
Propane	0.1181	0.3148	0.0331	0.0001
Isobutane	0.0112	0.0394	0.0037	0.0000
n-Butane	0.0082	0.0287	0.0026	0.0000
Isopentane	0.0000	0.0000	0.0000	0.0000
n-Pentane	0.0000	0.0000	0.0000	0.0000
Hexanes Plus	0.0541	0.2817	0.0223	0.0000
	100.0000	100.0000	17.3859	55.5806

SPGreal Gas	0.5724	
GBTU/real CF	1035.9412	GBTU/real CF
GBTUsat/real CF	1018.5718	GBTUsat/real CF
Molecular Wt.	16.5469	
Compressibility	0.9882	
GPM Recoverable Product (C2+)	0.3687	GPM
GPM Natural Gasoline (C5+)	0.0223	GPM