



CERTIFICATE OF ANALYSIS

RE: Submitted Sample from USSEC	REF #:
AT: AMSPEC HOUSTON	FILE: HO59926
PRODUCT: Light Bio-Crude Fraction (Vetroleum)	AS AT: 2/21/08
MOVEMENT: Fractionation Performed by Inspectorate	LAB ID#: HO59926-1
Fraction: IBP to 400 cut	

 The following analytical results were obtained from a Submitted sample

PRODUCT PROPERTY *****	METHODS *****	RESULTS *****
Gravity, API @ 60° F.	D-4052	26.3
Sulfur, wt%	D-4294	0.26
Oxidation Stability, min	D-525	180
Gums content, unwashed, mg/100ml	D-381	1809
Gums content, washed, mg/100ml	D-381	1547
GS-1000 Mid-IR	D-5845	
	MeOH, vol%	3.3
	EtOH, vol%	0.0
	MTBE, vol%	7.3
	ETBE, vol%	0.0
	TAME, vol%	8.1
	Oxygen, wt%	4.6
	Benzene, vol%	0.0
	Total Xylenes, vol%	0.0
	Toluene, vol%	0.0
	RON	79.7
	MON	37.7
	R+M/2	58.7

RESULTS ARE VALID "AS AT" DATE AND LOCATION LISTED

Samples are retained for a period of 30 days unless otherwise requested in writing

Ruben Hernandez



CERTIFICATE OF ANALYSIS

RE: Submitted Sample from USSEC	REF #:
AT: AMSPEC HOUSTON	FILE: HO59926
PRODUCT: Light Bio-Crude (Vetroleum)	AS AT: 2/21/08
MOVEMENT: Fractionation Performed by Inspectorate	LAB ID#: HO59926-4
Fraction: At or above 400 cut	

The following analytical results were obtained from a Submitted Sample

PRODUCT PROPERTY	METHODS	RESULTS
*****	*****	*****
Gravity, API @ 60° F.	D-4052	18.7
ASTM Color	D-1500	D-8.0
Sulfur, wt%	D-4294	0.193
*****	*****	*****

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CERTIFICATE OF ANALYSIS

RE: Submitted Sample from USSEC	REF #:
AT: AMSPEC HOUSTON	FILE: HO59926
PRODUCT: Heavy Bio-crude Fraction (Vetroleum)	AS AT: 2/21/08
MOVEMENT: Fractionation Performed by Caleb Brett	LAB ID#: HO59926-2
Fraction: IBP to 400 cut	

 The following analytical results were obtained from a Submitted sample

PRODUCT PROPERTY	METHODS	RESULTS
*****	*****	*****
Gravity, API @ 60° F.	D-4052	27.0
Sulfur, wt%	D-4294	0.167
Gumscontent, unwashed, mg/100ml	D-381	13933
GS-1000 Mid-IR	D-5845	
	MeOH, vol%	1.8
	EtOH, vol%	0.0
	MTBE, vol%	28.3
	ETBE, vol%	0.0
	TAME, vol%	30.3
	TBA, vol%	24.0
	Oxygen, wt%	14.6
	Benzene, vol%	0.0
	Total Xylenes, vol%	0.0
	Toluene, vol%	0.0
	RON	102.5
	MON	79.7
	R+M/2	91.1

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CERTIFICATE OF ANALYSIS

RE: Submitted Sample from USSEC	REF #:
AT: AMSPEC HOUSTON	FILE: HO59926
PRODUCT: Heavy Bio-Crude Fraction (Vetroleum)	AS AT: 2/21/08
MOVEMENT: Fractionation Performed by Caleb Brett	LAB ID#: HO59926-3
Fraction: At or above 400 cut	

 The following analytical results were obtained from a Submitted sample

PRODUCT PROPERTY *****	METHODS *****	RESULTS *****
Gravity, API @ 60° F.	D-4052	20.7
Sulfur, wt%	D-4294	0.111
Cloud Point, °C	D-2500	-14
Cloud Point, °F	D-2500	6.8
Pour Point, °C	D-97	-18.0
Pour Point, °F	D-97	-0.4
Cetane Index	D-976	23.4
Cetane Index	D-4737	26.0
Distillation, °F	D-86	IBP 244.7
		10% 442.5
		50% 484.1
		90% 602.9
		FBP 648.0
		% Recovered 99.0
		% Residue 0.5
	% Loss 0.5	

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CERTIFICATE OF ANALYSIS

REF: Submitted Sample from USSEC	EPA #: 1284
AT: AMSPEC HOUSTON	FILE # HO59926
PRODUCT: Heavy Bio-Crude Fraction (Vetroleum)	AS AT: 03/2/08
Movement: Fractionation performed by Caleb Brett	LAB ID#: HO59926-5
Fraction: Approximately 400°F + resid	

The following analytical results were obtained from a submitted sample.

PRODUCT PROPERTY *****	METHODS *****	RESULTS *****
Gravity, API @ 60° F.	D-287	4.9
FLASH DEG.F	D-93	>230
VISCOSITY @122	D-445	N/A
POUR POINT DEG.C	D-97	+12
SULFUR,WT%	D-4294	0.130
ASH,WT%	D-482	0.37
SEDIMENT BY EXTRACTION,WT%	D-473	0.72
WATER BY DISTILLATION,VOL%	D-95	0.1
CARBON RESIDUE	D-4530	21.7
COMPATIBILITY	D-4740	5.0
METALS	ICP	V 2.9
		Na <0.1
		Al <0.1
		Si 2.6
Percent Cut		5.00%
ASPHALTENES	D-3249	44.4
Styrene Content, ppm	GC	<50

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