

INFRA TECHNOLOGY LLC-HOUSTON

Zeeshan Gardezi

2323 S.Shepherd Dr, Suite 1106

Houston, TX 77019

Saybolt Petroleum Services A Core Laboratories Company

201 Deerwood Glen Dr Deer Park, TX 77536 281-478-1300

Report Number: 13071- 14579

Date Reported:

11/8/2018

Date Received:

9/24/2018

Analytical Report

Sample No.: 7184166

Sample ID Synthetic Crude Oil

Date Sampled

Whole Oil

Test	Result	Units	Method	Date	Analyst	
Distillation Data						
API Gravity	59.3	° API	ASTM D-287/4052	10/11/2018	DBC	
Specific Gravity	0.7416	60/60 Deg. F	ASTM D-1298/4052			

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(IBP-300 F)

Test	Result	Units	Method	Date	Analyst	
Distillation Data Liquid Volume	36.73	%	ASTM D-2892	10/11/2018	DBC	
Weight Percent	34.70	%	ASTM D-2892			
API Gravity	70.5	° API	ASTM D-287/4052			
Specific Gravity	0.7006	60/60 Deg. F	ASTM D-1298/4052			
Acid Number	0.10	mg KOH/g	ASTM D-664A	11/5/2018	DN	
Motor Octane Number	51		ASTM D-2700	11/2/2018	BM	

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(IBP-300 F)

Test	Result	Units	Method	Date	Analyst
Simulated Distillation					
IBP	33	Deg F	ASTM D-2887	11/5/2018	JT
5 % off	101	Deg F			
10 % off	156	Deg F			
15 % off	159	Deg F			
20 % off	162	Deg F			
25 % off	208	Deg F			
30 % off	211	Deg F			
35 % off	213	Deg F			
40 % off	214	Deg F			
45 % off	215	Deg F			
50 % off	218	Deg F			
55 % off	259	Deg F			
60 % off	262	Deg F			
65 % off	264	Deg F			
70 % off	265	Deg F			
75 % off	266	Deg F			
80 % off	267	Deg F			
85 % off	292	Deg F			
90 % off	306	Deg F			
95 % off	309	Deg F			
FBP	313	Deg F			
Vapor Pressure, ASTM Eq.	5.43	psi @100F	ASTM D-5191	11/2/2018	RS

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Analytical Report

Sample No.: 7184168

Sample ID Synthetic Crude Oil

Date Sampled

(300+F)

Test	Result	Units	Method	Date	Analyst	
Distillation Data						
Liquid Volume	63.27	%	ASTM D-2892	10/11/2018	DBC	
Weight Percent	65.30	%	ASTM D-2892			
API Gravity	53.3	° API	ASTM D-287/4052			
Specific Gravity	0.7656	60/60 Deg. F	ASTM D-1298/4052			
Acid Number	0.15	mg KOH/g	ASTM D-664A	10/8/2018	DN	
End Point Type	Inflection					
Bromine Number	32	g/100g	ASTM D-1159	10/8/2018	DN	
Cetane Index, Calculated	70.7		ASTM D-976	10/11/2018	DBC	
Cloud Point	54	Deg F	ASTM D-2500		AW	
Cold Filter Plugging Point	5	Deg C	ASTM D-6371	10/8/2018	DN	



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Sample ID Synthetic Crude Oil Sample No.: 7184168

Date Sampled

(300+F)

Test	Result	Units	Method	Date	Analyst
Distillation					
IBP	335	Deg. F.	ASTM D-86	10/11/2018	DBC
5% Rec	351	Deg. F.			
10% Rec	362	Deg F			
20% Rec	375	Deg. F.			
30% Rec	392	Deg. F.			
40% Rec	413	Deg. F.			
50% Rec	436	Deg. F.			
60% Rec	468	Deg. F.			
70% Rec	504	Deg. F.			
80% Rec	552	Deg. F.			
90% Rec	619	Deg. F.			
95% Rec	667	Deg. F.			
FBP	682	Deg. F.			
Recovery	96.5	Vol %			
Residue	3.2	Vol %			
Loss	0.3	Vol %			
Flash Point, PMCC	138	Deg F	ASTM D-93A	10/5/2018	AW
Hydrocarbon Type - FIA					
Aromatics	0.6	LV %	ASTM D-1319	10/5/2018	KC
Olefins	35.2	LV %	ASTM D-1319		
Saturates	64.2	LV %	ASTM D-1319		
Kinematic Viscosity	0.8924	cSt @ 100 C	ASTM D-445	11/2/2018	MW
Kinematic Viscosity	1.811	cSt @ 40 C	ASTM D-445	11/5/2018	MW
Pour Point	30	Deg F	ASTM D-97	10/5/2018	AW

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Date Sampled

(300+F)

Test	Result	Units	Method	Date	Analyst
Simulated Distillation					
IBP	292	Deg F	ASTM D-2887	10/4/2018	JT
5 % off	306	Deg F			
10 % off	341	Deg F			
15 % off	347	Deg F			
20 % off	349	Deg F			
25 % off	368	Deg F			
30 % off	386	Deg F			
35 % off	389	Deg F			
40 % off	410	Deg F			
45 % off	423	Deg F			
50 % off	431	Deg F			
55 % off	458	Deg F			
60 % off	472	Deg F			
65 % off	491	Deg F			
70 % off	520	Deg F			
75 % off	543	Deg F			
80 % off	572	Deg F			
85 % off	602	Deg F			
90 % off	650	Deg F			
95 % off	716	Deg F			
FBP	854	Deg F			
Smoke Point	30.9	mm	ASTM D-1322	10/9/2018	СВ

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Date Sampled

(300+F)

Test

Result

Units

Method

Analyst Date

Approved By:

Dan B. Carlson Laboratory Supervisor Nomination

Object

13071/00014579

Infra Technology LLC

Object (Sample)

Coordinator

Infra Technology LLC D

Dan Carlson



Instructions:							
CUSTOMERS:							
SAMPLE				OBJECT		PRODU	
7184167 (IBP-300 F)			Infra	Technology LL	.C MI	SCELLAN	EOUS
NAME	METHOD	UNIT	SI MIN	PECS MAX	RESULT	INT	TYP
received sample - 7184167 Hydrocarbon group type and Oxygenates	ASTM D 6839						
Saturates		vol %			54.08	A	
Olefins		vol %			45.27	A	
Aromatics		vol %			0.32	A	
Total Oxygen		wt %			0.09	A	
Benzene		vol %			<0.01	A	
MTBE		vol %			<0.01	A	
Ethanol		vol %			0.05	A	
ETBE		vol %			<0.01	A	
TAME		vol %			<0.01	A	
Hydrocarbon group type and Oxygenates	ASTM D 6839						
Methanol		vol %			<0.01	A_	
Isopropanol		vol %			<0.01	A	
1-Propanol		vol %			<0.01	A	
tert-Amyl alcohol		vol %			<0.01	A	
tert-Butanol		vol %			0.02	A	
2-Butanol		vol %			0.05	Α	
Isobutanol		vol %			0.03	Α	
1-Butanol		vol %			0.17	Α	
DIPE		vol %	Y Y		<0.01	Α	

