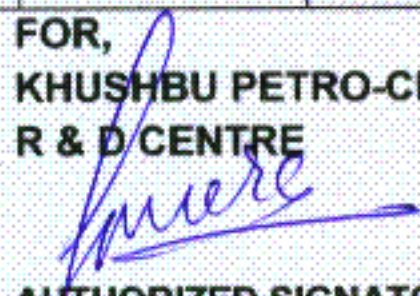


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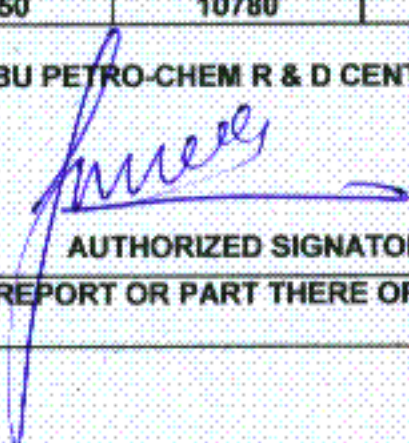
Analysis of Petroleum Products & Lubricants

TEST REPORT					
				ORIGINAL	
TO BIO-MARINE SOLUTION (NZ) LTD. P.O. BOX 15-996 AUCKLAND 0640			SAMPLE SUBMITTED BY PARTY AS LIGHT DIESEL OIL & LIGHT DIESEL OIL + New Formula Fuel Stick TEST REPORT NO.: KPC/326/SEP/2008 DATE: 15 th September 2008		
SR. NO.	SPECIFICATIONS	UNITS	TEST RESULTS		STANDARD VALUE BIS:1460
			LDO	LDO + New Formula Fuel Stick	
1.	KINEMATIC VISCOSITY AT 40°C	CST	7.8	7.9	2.4– 15.7
2.	ACIDITY, TOTAL	%	Nil	Nil	NIL
3.	ASH	% BY WT	0.02	0.02	0.02
4.	FLASH POINT, COC	°C	82	84	66 MIN.
5.	WATER CONTENT	% BY WT	Nil	Nil	1.0 MAX.
6.	POUR POINT	°C	+ 9	+8	12 – 18
7.	DENSITY AT 27°C	GM/CC	0.854	0.856	TO REPORT
8.	SEDIMENTS	% BY MASS	0.08	0.05	0.10
9.	TOTAL SULPHUR	% BY MASS	1.45	1.28	1.80
10.	COPPER STRIP CORROSION TEST FOR 3 HRS AT 100°C	NO UNITS	1a	1a	1 MAX.
11.	GROSS CALORIFIC VALUE	KCAL/KG	10050	10460	ABV.10000
INTERPRETATION / CONCLUSION: The addition of New Formula Fuel Stick in LDO decreases Sulphur content to 0.17 % by mass & sediments to 0.03 % by mass. It also increases gross calorific value upto 410 Kcal/Kg.			FOR, KHUSHBU PETRO-CHEM R & D CENTRE  AUTHORIZED SIGNATORY		
THIS REPORT IS PREPARED IN GOOD FAITH UNDER STANDARD TEST CONDITIONS. THE REPORT OR PART THERE OF MUST NOT BE USED FOR ANY LEGAL MATTER. REGISTRATION NO.: 0401/32623					



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Analysis of Petroleum Products & Lubricants

TEST REPORT							ORIGINAL
TO BIO-MARINE SOLUTION (NZ) LTD. P.O. BOX 15-996 AUCKLAND 0640				SAMPLE SUBMITTED BY PARTY AS Diesel & Diesel + New Formula Fuel Stick TEST REPORT NO.: KPC/324/SEP/2008 DATE: 15 th September 2008			
SR. NO.	SPECIFICATIONS	TEST METHOD ASTM	UNITS	TEST RESULTS		STANDARD VALUE (DIESEL) BIS: 1460	
				Diesel	Diesel + New Formula Fuel Stick		
1.	KINEMATIC VISCOSITY AT 40°C	D445	cSt	2.32	2.85	2.0 - 7.5	
2.	ACIDITY, INORGANIC	D664	mgKOH/gm	NIL	NIL	NIL	
3.	ASH	D874	% by wt	NIL	NIL	0.02 MAX.	
4.	FLASH POINT, COC	D93	°C	45	48	32 MIN.	
5.	WATER CONTENT	D2709	% by wt	NIL	NIL	0.05 MAX.	
6.	POUR POINT	D2500	°C	+ 6	+7	12 - 18	
7.	DENSITY AT 27°C	D1278	gm/cm ³	0.832	0.834	0.82-0.88	
8.	SEDIMENTS	D2709	mg/100ml	NIL	NIL	1.0 MAX.	
9.	TOTAL SULPHUR	D5864	% by mass	0.65	0.63	1.0 MAX.	
10.	CARBON RESIDUE, RAMSBOTTOM	D4530	%	0.16	0.17	0.20 MAX.	
11.	COPPER STRIP CORROSION TEST FOR 3 HRS AT 100°C	D130	---	<1a	<1a	1 MAX.	
12.	DISTILLATION, RECOVERY OF 85% AT °C	D1160	°C	332	334	350 MAX.	
13.	DISTILLATION, RECOVERY OF 90% AT °C	D1160	°C	354	355	366 MAX.	
14.	DISTILLATION, RECOVERY OF 95% AT °C	D1160	°C	379	382	370 MAX.	
15.	COLOUR INDEX	---	---	0.0	0.5	TO REPORT	
16.	CETEN NUMBER, DIESEL INDEX	D613	---	46	52	46 MIN.	
17.	ACIDITY, TOTAL	D664	mgKOH/gm	0.02	0.04	0.50 MAX.	
18.	GROSS CLORIFIC VALUE	D5865	Kcal/Kg	10350	10780	Abv. 10000	
INTERPRETATION / CONCLUSION: The addition of New Formula Fuel Stick to Diesel Fuel increases Ceten Number upto 6 and Gross calorific value upto 430 Kcal/Kg.				FOR, KHUSHBU PETRO-CHEM R & D CENTRE  AUTHORIZED SIGNATORY			
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Analysis of Petroleum Products & Lubricants

TEST REPORT

ORIGINAL

TO,
BIO-MARINE SOLUTION (NZ) LTD.
P.O. BOX 15-996
AUCKLAND 0640

SAMPLE SUBMITTED BY PARTY AS
PETROL & PETROL + NEW FORMULA FUEL STICK

TEST REPORT NO.:
KPC/325/SEP/2008

DATE: 15TH September 2008

SR. NO.	SPECIFICATIONS	UNITS	TEST RESULTS		STANDARD VALUE BIS:2796
			Petrol	Petrol + New Formula Fuel Stick	
1.	COLOUR, VISUAL	---	ORANGE	ORANGE	ORANGE
2.	COPPER STRIP CORROSION FOR 3HRS. AT 50°C	---	<1A	<1A	1 MAX.
3.	DENSITY AT 15°C	gm/cm ³	0.752	0.759	TO REPORT
4.	DISTILLATION	---	---	---	---
	(A) INITIAL BOILING POINT	°C	38	40	TO REPORT
	(B) RECOVERY UPTO 70°C	% by vol.	15	16	10 MIN.
	(C) RECOVERY UPTO 125°C	% by vol.	57	59	50 MIN.
	(D) RECOVERY UPTO 180°C	% by vol.	93	95	90 MIN.
	(E) FINAL BIOLING POINT	°C	210	215	215 MAX.
	(F) RESIDUE	% by vol.	NIL	NIL	2 MAX.
5.	OCTANE NUMBER (RESEARCH METHOD)	---	87	94	83 MIN.
6.	RESIDUE ON EVAPORATION	mg/100ml	NIL	NIL	4.0 MAX.

INTERPRETATION / CONCLUSION:

The addition of New Formula Fuel Stick to Petrol Fuel increases Octane Number upto 7.

FOR,
KHUSHBU PETRO-CHEM R & D CENTRE

AUTHORIZED SIGNATORY

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Khushbu Petro-Chem R & D Centre

Analysis of Petroleum Products & Lubricants

TEST REPORT						
				ORIGINAL		
TO BIO-MARINE SOLUTION (NZ) LTD. P.O. BOX 15-996 AUCKLAND 0640				SAMPLE SUBMITTED BY PARTY AS Kerosene & Kerosene + New Formula Fuel Stick TEST REPORT NO.: KPC/327/SEP/2008 DATE: 15 th September 2008		
SR. NO.	SPECIFICATIONS	Test Method IS:1448	UNITS	TEST RESULTS		STANDARD VALUE BIS:1459
				Kerosene	Kerosene + New Formula Fuel Stick	
1.	Acidity, inorganic	P:2	mgKOH/gm	Nil	Nil	Nil
2.	Burning Quality	P:5				
	a) Char Value		mg/kg of oil consumed	16	13	20 max.
	b) Bloom on Glass chimney		----	Grey	Light Grey	Not Darker than Grey
3.	Colour, Saybolt	P:14	----	8	10	10
4.	Copper Strip Corrosion Test for 3 Hrs. @ 50°C	P:15	-----	<1a	<1a	Not worse than No.1
5.	Distillation	P:18	----			
	a) Percent Recovered below 200°C		% by vol	18	18	20 min.
	b) Final Boiling Point		°C	285	288	300 max.
6.	Flash Point, Abel	P:20	°C	41	45	35 min.
7.	Smoke Point	P:31	mm	18	14	18 min.
8.	Total Sulphur	P:34	% by mass	0.22	0.18	0.25 max.
INTERPRETATION / CONCLUSION: Addition of New Formula Fuel Stick to Kerosene decreases the char value to 3 mg/kg, smoke point to 4 mm, sulphur to 0.04 % by mass & increases flash point upto 4 °C.				FOR, KHUSHBU PETRO-CHEM R & D CENTRE  AUTHORIZED SIGNATORY		
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Khushbu Petro-Chem R & D Centre

Analysis of Petroleum Products & Lubricants

Date: 15th September 2008

Test Report No: KPC/328/SEP/2008

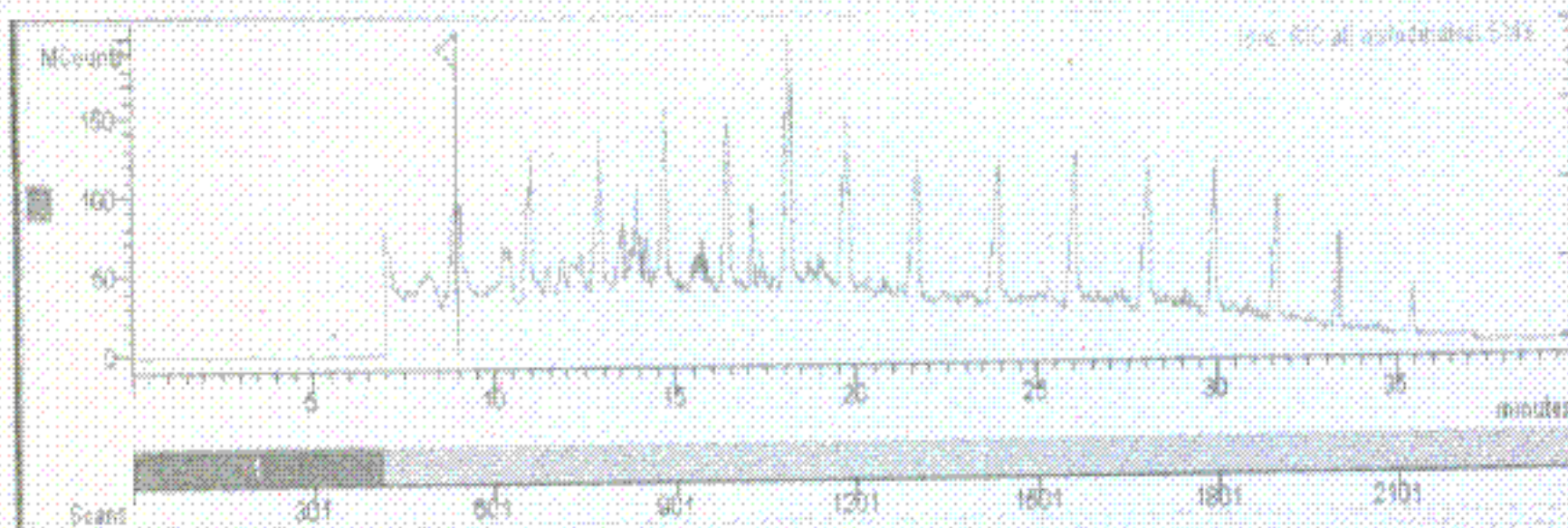
To,

Bio-Marine Solution (NZ) Ltd.
P.O. Box 15-996
Auckland 0640

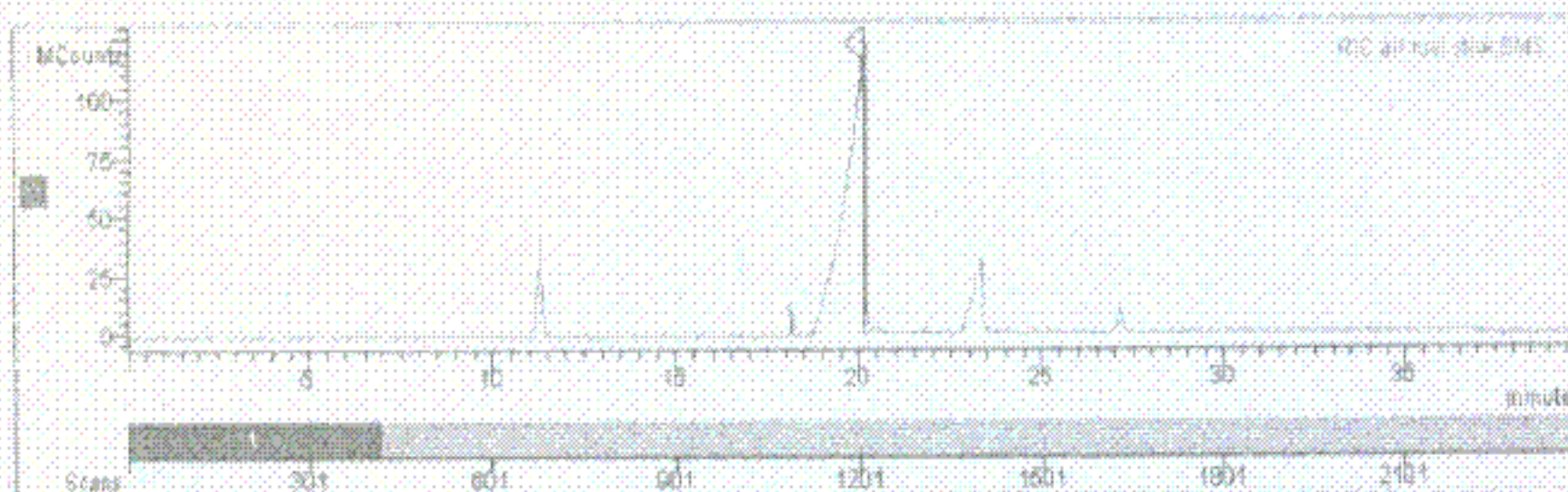
TEST REPORT (GC/MS)

ORIGINAL

1. Gas Chromatograph of Diesel



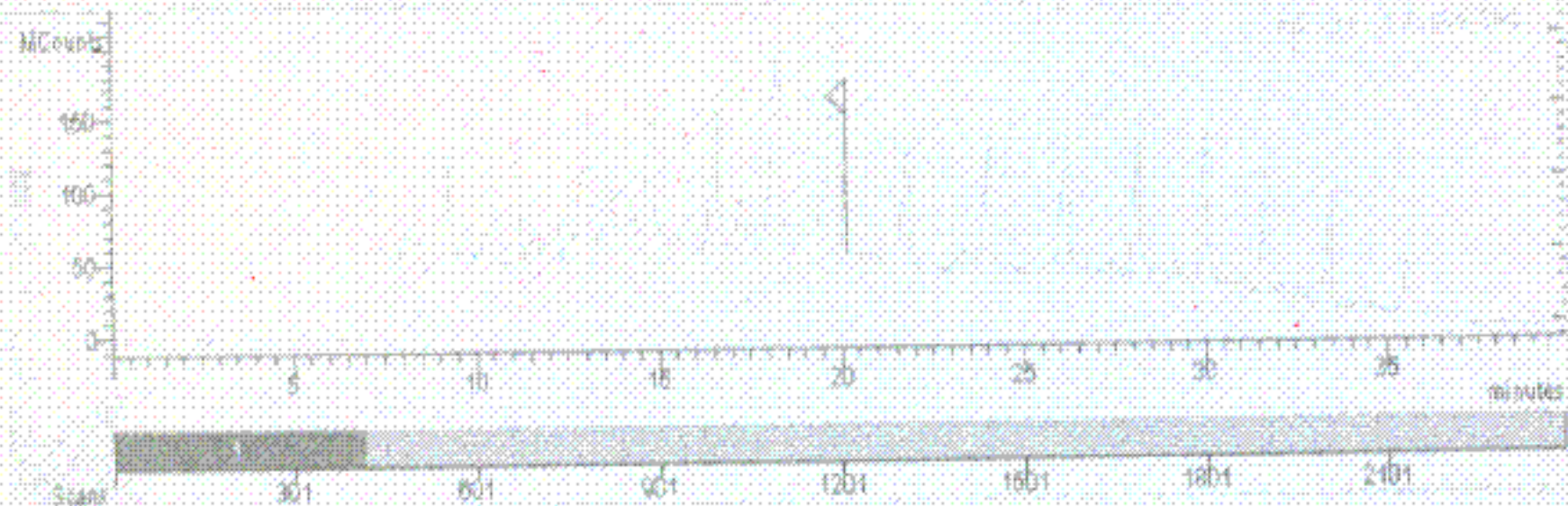
2. Gas Chromatograph of Fuel Stick



Khushbu Petro-Chem R & D Centre

Analysis of Petroleum Products & Lubricants

3. Gas Chromatograph of Diesel + Fuel Stick



INTERPRETATION / CONCLUSION:

The addition of Fuel Stick to Diesel fuel does not change any inherent properties of Diesel.

FOR;

KHUSHBU PETRO-CHEM R & D CENTRE

Authorized Signatory



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