



Cartagena Laboratory  
 Cabezo Bozas  
 Telephone: +34 868 06 71 42 E-mail:  
 CIF: 072883769

**ANALYTICAL REPORT**

Job Number: 004/1  
 O/ Ref: SP1901-082  
 Y/ Ref: T0119101 m/n "Histría Gemma"  
 Grade: GASOIL A  
 Origin: TERMINALES CANARIAS, TENERIFE  
 Label: AMSPEC

Date of reception: 04th/02/19  
 Date Analysis started: 04th/02/19  
 Date Analysis completed: 04th/02/19  
 Sample Package: 2 X 1L CAN  
 Sampling date: 30/01/19  
 Seal No: n/a

Identification: SHORE TANK 101  
 Description: SHORE TANK COMPOSITE

Customer: REPSOL PETROLEO  
 Address: Mendéz Alvaro 44, 28045, Madrid, Spain.  
 Customer: BP OIL  
 Address: Avd. de Barajas 30, Parque Empresarial Omega - Edificio D, Alcobendas, Madrid 28108, España.

Parameter	Units	Method	Result	Limit	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,8356		
Viscosity at 40°C	mm <sup>2</sup> /s	ISO 3104:1994/Cor.1:1997(E)	2,808		
Sulphur content	mg/kg	ISO 20846:2011	7,0		
Distillation	%C	ASTM D86 - 16a			
65% Recovered			296,7		
85% Recovered			330,6		
95% Recovered			357,5		
Flash point (Proced. A - Electric Ignitor)	°C	ISO 2719:2002(E)	57		(I)
Water Karl Fischer	mg/kg	ISO 12937:2000(E)	74		
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1b		
Conductivity at 20°C	ps/m	ASTM D2624 - 15	50		(II)
FAME content	%vol	EN 14078:2010	3,8		
CFPP	°C	UNE-EN 116:2015	-19		

(I) 103,2 Kpa; Absolute Barometric Pressure.

(II) Test performed at 20°C

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were drawn.  
 Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
 The samples will be kept for a period of three months.

Date of Report: 05/02/2019  
 Name/s: Ana Belén Sanchez  
 Signature/s: Chief Analyst

AmSpec Iberia S.L.  
 C/Océano Parquesol  
 Parque Empresarial Las Manzanillas  
 11379 Los Barrios (Cádiz, Spain)



**Cartagena Laboratory**

Calle Riga nº 11 30353 Cartagena(Murcia)  
Telephone: +34 868 06 71 42 E-mail: cartagena.lab@amspecgroup.com  
CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 036-1  
O/ Ref: SP1902-110  
Clients/ Ref: RP: FEB19/BP:N/A  
Grade: GASOIL A  
Origin: TERMINALES CANARIAS, TENERIFE  
Label: AMSPEC  
Identification: SHT 102-T0219102- m/n"Eberhardt Artic"  
Description: SHORE TANK COMPOSITE  
Customer: REPSOL PETROLEO S.A  
Address: Mendéz Alvaro 44, 28045, Madrid, Spain.  
Customer: BP OIL SPAIN  
Address: Avd. de Barajas 30, Parque Empresarial Omega - Edificio D, Alcobendas, Madrid 28108, España.

Date of reception: 08/03/2019  
Date Analysis started: 08/03/2019  
Date Analysis completed: 08/03/2019  
Sample Package: 2 X 1L CAN  
Sampling date: 28/02/19  
Seal Nº: n/a

Parameter	Units	Method	Result	Limit	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,8391		
Viscosity at 40°C	mm <sup>2</sup> /s	ISO 3104:1994/Cor.1:1997(E)	2,563		
Sulphur content	mg/Kg	ISO 20846:2011	7,9		
Distillation	°C	ASTM D86 - 16a			
65% Recovered			290,9		
85% Recovered			325,8		
95% Recovered			358,3		
Flash point (Proced. A - Electric ignitor)	°C	ISO 2719:2002(E)	59		(I)
Water Karl Fischer	mg/Kg	ISO 12937:2000(E)	100		
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1b		
Conductivity at 20°C	ps/m	ASTM D2624 - 15	35		(II)
FAME content	%vol	EN 14078:2010	6,02		
CFPP	°C	UNE-EN 116:2015	-17		

(I) 103,2 Kpa; Absolute Barometric Pressure.

(II) Test performed at 20°C

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were drawn.  
Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Excep for RFG), IP.367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
The samples will be kept for a period of three months.

Date of Report: 10/03/2019  
Name/s: Ana Belén Sanchez  
Signature/s: Chief Analyst

AmSpec  
AmSpec Iberia S.L.  
C/Oceano Purificadora  
Parque Empresarial Los Taxismas  
11379 Los Barrios (Cádiz, Spain)

Authorized by José Manuel Fernández  
Technical Manager



**Cartagena Laboratory**

Calle Riga nº 11 30353 Cartagena(Murcia)  
Telephone: +34 868 06 71 42 E-mail: cartagena.lab@amspecgroup.com  
CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 046  
O/ Ref: SP1903-147  
Clients/ Ref: RP: N/A/BP:N/A  
Grade: GASOIL A  
Origin: TERMINALES CANARIAS, TENERIFE  
Label: AMSPEC

Date of reception: 27/03/2019  
Date Analysis started: 27/03/2019  
Date Analysis completed: 27/03/2019  
Sample Package: 2 X 1L CAN  
Sampling date: 22/03/2019  
Seal Nº: n/a

Identification: SHT 101-T0219101M.

Description: SHORE TANK COMPOSITE

Customer: REPSOL PETROLEO S.A

Address: Mendéz Alvaro 44, 28045, Madrid, Spain.

Customer: BP OIL SPAIN

Address: Avd. de Barajas 30, Parque Empresarial Omega - Edificio D, Alcobendas, Madrid 28108, España.

Parameter	Units	Method	Result	Limit	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,8367		
Distillation	°C	ASTM D86 - 16a			
65% Recovered			295,2		
85% Recovered			329,4		
95% Recovered			358,7		
Flash point (Proced. A - Electric ignitor)	°C	ISO 2719:2002(E)	58		(I)
Water Karl Fischer	mg/Kg	ISO 12937:2000(E)	57		
FAME content	%vol	EN 14078:2010	4,50		
CFPP	°C	UNE-EN 116:2015	-20		
Appearance at 20°C		visual	C & B		

(I) 103,2 Kpa; Absolute Barometric Pressure.

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were drawn.  
Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
The samples will be kept for a period of three months.

Date of Report 27/03/2019  
Name/s Ana Belén Sanchez  
Signature/s Chief Analyst

AmSpec Iberia S.L.  
C/Oceano Pacifico 371  
Parque Empresarial 'Los Matorrales'  
11379 Los Barrios (Cádiz, Spain)



**Algeciras Laboratory**

Pol. Ind. Cabazo Beza C/ Riga nº 11  
Telephone: +34 868 06 71 42 E-mail:  
CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 004/2  
O/ Ref: SP1901-082  
Y/ Ref: T0219211 m/n "Hlstria Gemma"  
Grade: GASOLINE 95  
Origin: TERMINALES CANARIOS, TENERIFE  
Label: AMSPEC

Date of reception: 04/02/2019  
Date Analysis started: 04/02/2019  
Date Analysis completed: 04/02/2019  
Sample Package: 2 X 1L CAN  
Sampling date: 30/01/19  
Seal Nº: N/A

Identification: SHORE TANK 211  
Description: SHORE TANK COMPOSITE  
Customer: REPSOL PETROLEO  
Address: Mendéz Alvaro 44, 28045, Madrid, Spain.  
Customer: BP OIL  
Address: Avd. de Barajas 30, Parque Empresarial Omega - Edificio D, Alcobendas, Madrid 28108, España.

Parameter	Units	Method	Result	Limit	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,7386		
DVPE	Kpa	EN ISO 13016-1:2008	64,2		
Distillation		ASTM D86 - 16a			
Evap at 70°C	%Vol		35,5		
Evap at 100°C	%Vol		59,2		
Evap at 150°C	%Vol		95,0		
FBP	°C		174,4		
Residue	%Vol		1,0		
Sulphur	mg/Kg	EN ISO 20846:2011	4,6		
Lead Content	g/L	ASTM D 3237 - 17	<0,005		
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a		
Existent Gums (Washed)	mg/100ml	ASTM D 381 - 12(2017)	<1		
Total Contamination	mg/Kg	EN ISO 12662:2014	<1		

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were drawn.  
Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.

The samples will be kept for a period of three months.

"This Analytical Report 893 - Revision 1, cancel and replace the analytical report 893".

Date of Report: 05/02/2019  
Name/s: Ana Belén Sánchez  
Signature/s: Chief Analyst

AmSpec Iberia S.L.  
C/Oceanic Petrol  
Parque Empresarial Las Minervas  
11378 Los Barrios (Cádiz, Spain)

Authorized by José M. Fernández  
Laboratory Manager



**Cartagena Laboratory**

C/Rta Nº11 30353 Cartagena (Murcia)  
Telephone: +34 868 06 71 42 E-mail: cartagena.lab@amspecgroup.com  
CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 036-2  
O/ Ref: SP1902-110  
Clients/ Ref: RP: FEB19/BP:N/A  
Grade: Gasolina 95  
Origin: TERMINALES CANARIAS, TENERIFE  
Label: AMSPEC  
Identification: SHT 211-T0319211- m/n"Eberhardt Artic"  
Description: SHORE TANK COMPOSITE

Date of reception: 08/03/2019  
Date Analysis started: 08/03/2019  
Date Analysis completed: 08/03/2019  
Sample Package: 2 X 1L CAN  
Sampling date: 28/02/19  
Seal Nº: n/a

Customer: REPSOL PETROLEO S.A  
Address: Mendéz Alvaro 44, 28045, Madrid, Spain.

Customer: BP OIL SPAIN  
Address: Avd. de Barajas 30, Parque Empresarial Omega - Edificio D, Alcobendas, Madrid 28108, España.

Parameter	Units	Method	Result	Limit	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,7396		
DVPE	Kpa	EN ISO 13016-1:2008	61,6		
Distillation		ASTM D86 - 16a			
Evap at 70°C	%Vol		33,5		
Evap at 100°C	%Vol		60,7		
Evap at 150°C	%Vol		92,5		
FBP	°C		170,2		
Residue	%Vol		1,0		
Sulphur	mg/Kg	EN ISO 20846:2011	4,48		
Lead Content	g/L	ASTM D 3237 - 17	<0,005		
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a		
Existent Gums (Washed)	mg/100ml	ASTM D 381 - 12(2017)	<1		
Total Contamination	mg/Kg	EN ISO 12662:2014	3		

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were drawn.  
Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
The samples will be kept for a period of three months.

Date of Report : 08/03/2019  
Name/s : Ana Belén  
Signature/s : \* Chief Analyst

AmSpec Iberia S.L.  
C/Oceania Rta 200  
Parque Empresarial Las Marismas  
11370 Los Barrios (Cádiz, Spain)

Authorized by José M. Fernández  
Laboratory Manager



**Cartagena Laboratory**

C/Riça Nº11 30353 Cartagena (Murcia)  
Telephone: +34 868 06 71 42 E-mail: cartagena.lab@amspecgroup.com  
CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 036-3	Date of reception: 08/03/2019
O/ Ref: SP1902-110	Date Analysis started: 08/03/2019
Clients/ Ref: RP: FEB19/BP:N/A	Date Analysis completed: 08/03/2019
Grade: Gasolina 95	Sample Package: 2 X 1L CAN
Origin: TERMINALES CANARIAS, TENERIFE	Sampling date: 28/02/19
Label: AMSPEC	Seal Nº: n/a
Identification: SHT 212-T0219212- m/n"Eberhardt Artic"	
Description: SHORE TANK COMPOSITE	
Customer: REPSOL PETROLEO S.A	
Address: Mendéz Alvaro 44, 28045, Madrid, Spain.	
Customer: BP OIL SPAIN	
Address: Avd. de Barajas 30, Parque Empresarial Omega - Edificio D, Alcobendas, Madrid 28108, España.	

Parameter	Units	Method	Result	Limit	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,7412		
DVPE	Kpa	EN ISO 13016-1:2008	59,9		
Distillation		ASTM D86 - 16a			
Evap at 70°C	%Vol		32,4		
Evap at 100°C	%Vol		61,9		
Evap at 150°C	%Vol		92,8		
FBP	°C		169,0		
Residue	%Vol		1,0		
Sulphur	mg/Kg	EN ISO 20846:2011	4,47		
Lead Content	g/L	ASTM D 3237 - 17	<0,005		
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a		
Existent Gums (Washed)	mg/100ml	ASTM D 381 - 12(2017)	<1		
Total Contamination	mg/Kg	EN ISO 12662:2014	2		

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were drawn.  
Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
The samples will be kept for a period of three months.

Date of Report: 08/03/2019  
Name/s: Ana Belén  
Signature/s: Chief Analyst

AmSpec Iberia S.L.  
C/Oceano Rincón 37  
Parque Empresarial Los Transtinas  
11379 Los Barrios (Cádiz, Spain)

Authorized by José M. Fernández  
Laboratory Manager



Algeciras Laboratory  
 Pol. Ind. Cabeza Beaza C/ Riga nº 11  
 Telephone: +34 868 06 71 42 E-mail:  
 CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 004/5  
 O/ Ref: SP1901-082  
 Y/ Ref: T0119312 m/n "Historia Gemma"  
 Grade: GASOLINE 98  
 Origin: TERMINALES CANARIOS, TENERIFE  
 Label: AMSPEC

Date of reception: 04/02/2019  
 Date Analysis started: 04/02/2019  
 Date Analysis completed: 04/02/2019  
 Sample Package: 2 X 1L CAN  
 Sampling date: 30/01/19  
 Seal N°: N/A

Identification: SHORE TANK 312  
 Description: SHORE TANK COMPOSITE  
 Customer: REPSOL PETROLEO  
 Address: Mendéz Alvaro 44, 28045, Madrid, Spain.  
 Customer: BP OIL  
 Address: Avd. de Barajas 30, Parque Empresarial Omega - Edificio D, Alcobendas, Madrid 28108, España.

Parameter	Units	Method	Result	Limit	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,7424		
DVPE	Kpa	EN ISO 13016-1:2008	75,6		
Distillation		ASTM D86 - 16a			
Evap at 70°C	%Vol		34,4		
Evap at 100°C	%Vol		50,9		
Evap at 150°C	%Vol		93,0		
FBP	°C		169,7		
Residue	%Vol		1,0		
Sulphur	mg/Kg	EN ISO 20846:2011	<1		
Lead Content	g/l	ASTM D 3237 - 17	<0,005		
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a		
Existent Gums (Washed)	mg/100ml	ASTM D 381 - 12(2017)	<1		
Total Contamination	mg/Kg	EN ISO 12662:2014	<1		

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were drawn.  
 Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications.  
 The samples will be kept for a period of three months.  
 "This Analytical Report 893 - Revision 1, cancel and replace the analytical report 893".

Date of Report: 05/02/2019  
 Name/s: Ana Belén Sánchez  
 Signature/s: Chief Analyst

AmSpec Iberia S.L.  
 C/Océano Pacífico  
 Parque Empresarial "Las Manzanas"  
 11379 Los Barrios (Cádiz, Spain)

Authorized by José M. Fernández  
 Laboratory Manager



**Cartagena Laboratory**

C/Riça Nº11 30353 Cartagena(Murcia)

Telephone: +34 858 06 71 42 E-mail: cartagena.lab@amspecgroup.com

CIF : B72083769

**ANALYTICAL REPORT**

Job Number: 036/4

O/ Ref: SP1902-110

Clients/ Ref: RP: FEB19/BP:N/A

Grade: GASOLINE 98

Origin: TERMINALES CANARIOS, TENERIFE

Label: AMSPEC

Identification: SHT 311-T0319311- m/n"Eberhardt Artic"

Description: SHORE TANK COMPOSITE

Customer: REPSOL PETROLEO S.A

Address: Mendéz Alvaro 44, 28045, Madrid, Spain.

Customer: BP OIL SPAIN

Address: Avd. de Barajas 30, Parque Empresarial Omega - Edificio D, Alcobendas, Madrid 28108, España.

Date of reception: 08/03/2019

Date Analysis started: 08/03/2019

Date Analysis completed: 08/03/2019

Sample Package: 2 X 1L CAN

Sampling date: 28/02/19

Seal Nº: N/A

Parameter	Units	Method	Result	Limit	Note
Density at 15°C	g/ml	ISO 12185:1996/Cor.1:2001(E)	0,7489		
DVPE	Kpa	EN ISO 13016-1:2008	64,4		
Distillation		ASTM D86 - 16a			
Evap at 70°C	%Vol		28,2		
Evap at 100°C	%Vol		58,9		
Evap at 150°C	%Vol		92,8		
FBP	°C		170,1		
Residue	%Vol		1,0		
Sulphur	mg/Kg	EN ISO 20846:2011	4,15		
Lead Content	g/L	ASTM D 3237 - 17	<0,005		
Copper corrosion, 3h 50°C	Class 1	ASTM D130 - 12	1a		
Existent Gums (Washed)	mg/100ml	ASTM D 381 - 12(2017)	2,4		
Total Contamination	mg/Kg	EN ISO 12662:2014	1		

The test results shown on this report affect only to the samples received in this laboratory, and not necessarily to the whole from which these samples were drawn. Precision parameters apply in the evaluation of the test results specified above. Please also refer to ASTM D3244 (Except for RFG), IP 367 and appendix E of IP standard methods for analysis and testing in respect to the utilization of test data to determine conformance with the specifications. The samples will be kept for a period of three months.

Date of Report: 08/03/2019  
Name/s: Ana Belén  
Signature/s: Chief Analyst

AmSpec Group S.L.  
C/Colectivo Pinar de las  
Parque Empresarial Las Martineras  
11378 Los Berros (Cádiz, Spain)