

Oil Companies International Marine Forum

MTIS Programme

Terminal TPQ

Terminal TPQ: REPSOL PETROLEO, S.A. - CARTAGENA

ReportName 58c59862-0eeb-44b0-98e7-91f27a9b02fb

Terminal Name: REPSOL PETROLEO, S.A. - CARTAGENA Terminal Port: PUERTO DE CARTAGENA Terminal Port Authority: Autoridad Portuaria de Cartagena Country: Spain

05 October 2017

1	General	
1.1	Date this TPQ document was completed/updated	05 October 2017
1.2	Specify units used	Metres and Metric Tonnes
2	Port Details	
2.1	Port Name	PUERTO DE CARTAGENA
2.2	UN LOCODE	ESCAR
2.3	Country	Spain
2.4	Latitude and Longitude of Port	
1	Latitude	373350 North
2	Longitude	0005732 West
2.5	Is this location affected by ice?	No
2.6	Name of port authority	Autoridad Portuaria de Cartagena
2.7	Port authority contact name and title	Javier Delgado Trapiella & Jefe División Operaciones Portuarias
2.8	Port authority full style contact address	
1	Address Line 1	Plaza Héroes de Cavite, S/N
2	Address Line 2	nil
3	Address Line 3	nil
4	City	Cartagena
5	County/State	Spain
6	Postcode/Zipcode	30201
7	Phone	+34 968 325 800
8	Fax	+34 968 325 824
9	Email	jdelgado@apc.es
10) Website	www.apc.es
3	Terminal Details	
3.1	Terminal name	REPSOL PETROLEO, S.A CARTAGENA
3.2	Terminal owner	APC
3.2	Number of berths included in this TPQ	8
3.3	Name of first point of contact for terminal owner	Javier Delgado Trapiella
3.4	Terminal owner full style contact address	
1	Address Line 1	Plaza Héroes de Cavite, S/N
2	Address Line 2	nil
3	Address Line 3	nil
4	City	Cartagena
5	County/State	Spain

IMO: 58c59862-0eeb-44b0-98e7-91f27a9b02fb

Valle de Escombreras S/N

+34 968 129 398; +34 968 129 494

jvilasg@repsol.com; jmnovoa@repsol.com

Cartagena

30350

Murcia/Spain

+34 968 129 496

6	5 P	ostcode/Zipcode	30201
7	7 P	hone	+34 968 325 800
8	8 F	ax	+34 968 325 824
9	9 E	mail	jdelgado@apc.es
1	10 V	Vebsite	www.apc.es
3.5	Те	erminal operator, if different from owner	REPSOL PETROLEO,S.A.
3.6	Na	ame of first point of contact for terminal operator	Jesus Novo Aparicio
3.7	Te	erminal operator full style contact address	
1	1 A	ddress Line 1	Edificio del Terminal Maritimo de Repsol
2	2 A	ddress Line 2	Terminal de Graneles Líquidos /TGL)
3	3 A	ddress Line 3	Valle de Escombreras S/N
4	4 C	ity	Cartagena
5	5 C	County/State	Murcia
6	5 P	ostcode/Zipcode	30350
7	7 P	hone	+34968129398
8	8 F	ax	+34968129496
9	9 E	mail	rpcartagenapuerto@repsol.com
1	10 V	Vebsite	www.repsol.energy
4	т	PQ Accountability	
4.1	Na	ame and title of person completing this TPQ	Jesus Novo & José Vilas
4.2	Fu	Ill style contact details of person completing this TPQ	
1	1 A	ddress Line 1	Edificio Terminal Maritimo Repsol
2	2 A	ddress Line 2	Terminal de Graneles Líquídos (TGL)

- 3 Address Line 3
- 4 City
- 5 County/State
- 6 Postcode/Zipcode
- 7 Phone
- 8 Fax
- 9 Email

5 Port Facility Security Officer Details

5.1		Does the port facility comply with the ISPS code?	
	1		Yes
	2	Port Facillity Security Officer contact name	Jesus Novo Aparicio
5.2		Port Facility Security Officer full style contact details	
	1	Address Line 1	Edificio del Terminal Maritimo de Repsol
	2	Address Line 2	Terminal de Graneles Líquidos (TGL)
	3	Address Line 3	Valle de Escombreras S/N
	4	City	Cartagena

5	County/State	Murcia
6	Postcode/Zipcode	30201
7	Phone	+34 968 129 494
8	Fax	+34 968 129 496
9	Email	jmnovoa@repsol.com
6	Operational Integrity Details	
6.1	State details of any pre-arrival/operational clearance formalities for vessels	 Confirm Vessel Status for REPSOL Vetting and Confirm Vessel Clearance by Port Authorities REPSOL CARTAGENA PRE-ARRIVAL QUESTIONNAIRE
6.2	Has the terminal completed an assessment using the standard industry process?	
1		Yes
2	If 'Yes', state date completed	08 November 2012
6.3	Additional comments or information	NIL



Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: E017

ReportName 27e36b3f-0da3-46b3-a8b2-02b77fc38708

Terminal Name: REPSOL PETROLEO, S.A. - CARTAGENA

Terminal Port: PUERTO DE CARTAGENA

Terminal Port Authority: Autoridad Portuaria de Cartagena

Country: Spain

Berth Name: E017

13 October 2017

1 Berth General

1.1		Berth name or number	E017
1.2		Berth type	
	1		Wharf or Quay
	2	If 'Other' please specify	
1.3	1	Terrestrial co-ordinates of manifold centreline Latitude	373354 North
	2	Longitude	0005747 West
1.4		Berth users for liquid and gas cargoes	Operator : REPSOL PETROLEO,S.A.
1.5		Has a structural survey of the berth been undertaken, including its underwater	
	1	structure?	No
	2	If 'Yes', state date of last survey	
1.6		Has an engineering (mooring and fendering) analysis of berth been undertaken?	
	1	undentaken:	No
	2	If 'Yes', state date of last analysis	
1.7		Additional comments or information	NOT APPLICABLE
2		Berth Approaches	
2.1		Is pilotage compulsory?	
	1 2	If 'Yes', state if any vessels are exempted	Yes No vessels exempted
2.2	2		
2.2 2.3		State distance from pilot station(s) to berth	Approx. 2 Miles
2.5	1	Is a waiting anchorage available?	Yes
	3	If 'Yes', state distance from waiting anchorage to berth	From 3 to 6 Miles
2.4		Controlling depth of water for transit to and from berth	
	1	Water depth	11.60 Metres
	2 3	State datum used If 'Other' please specify datum	Chart Datum (CD)
2.5	3	Date of latest survey from which transit depth has been determined	31 December 2012
2.5		Date next survey is due	31 December 2012
2.0		State Maximum Tidal Range in berth approaches	0.30
2.7		Is laden transit to and/or from the berth conducted using the tide?	
2.0	1	is later transit to analor nom the berth conducted using the flue:	No
	2	If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	
2.9		State details of any specific berthing and/or unberthing restrictions	NOT APPLICABLE

Minimum under keel clearance (UKC) in berth approaches	
Value	0.80 Meters
Percentage	7.40 Vessel static draft
Specify other UKC criterion where applicable	No any
Absolute maximum draught in berth approaches, if applicable	10.80
State minimum vertical clearance of any bridges/power cables/vertical obstructions	
Vertical clearance	0.00 Metres
State datum used	Chart Datum (CD)
If 'Other' specify other datum used	
Further details	NOT APPLICABLE
Does the port require tankers and gas carriers to be escorted by tugs?	
	Yes
If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	Active 60 MT
Additional comments or information	NIL
Water Depth Alongside	
	11.60 Metres
	Chart Datum (CD)
Date of latest survey from which alongside depth has been determined	31 March 2012
Date next survey is due	31 December 2017
Minimum static under keel clearance (UKC) alongside berth	
Value	0.80 Meters
Percentage	7.40 Vessel static draft
Specify other UKC criterion where applicable	NIL
State range of water densities at berth	
From	1025.00
То	1028.00
Further details	As Ordinary Survey Practice
Type of bottom alongside berth	
	Mud
If 'Other' please specify	
Absolute maximum draft alongside, if applicable	10.80
	10.80 0.30
Absolute maximum draft alongside, if applicable	
	Value Percentage Specify other UKC criterion where applicable Absolute maximum draught in berth approaches, if applicable State minimum vertical clearance of any bridges/power cables/vertical obstructions Vertical clearance State datum used If 'Other' specify other datum used Further details Does the port require tankers and gas carriers to be escorted by tugs? Additional comments or information Additional comments or information Water Depth Alongside Minimum controlled water depth alongside berth at chart datum Water depth State datum used If 'Other' specify datum Date of latest survey from which alongside depth has been determined Date next survey is due Minimum static under keel clearance (UKC) alongside berth Value Percentage Specify other UKC criterion where applicable To ther details at berth From To Further details

IMO: 27e36b3f-0da3-46b3-a8b2-02b77fc38708

		02b77fc38708
1	Provide details	No NOT APPLICABLE
3.11	Additional comments or information	NIL
4	Limiting Vessel Dimensions	
4.1 1 2 3	Summer deadweight TPQ NA Selector Minimum Maximum	No restrictions 0.00 Metric Tonnes 0.00 Metric Tonnes
4.2 1 2 3 4.3 1 2 3	Berthing displacement TPQ NA Selector Minimum Maximum Alongside displacement TPQ NA Selector Minimum Maximum	No restrictions 0.00 0.00 No restrictions 0.00 0.00
4.4 1 2 4.5	State any deadweight/displacement exceptions TPQ NA Selector Cubic capacity (gas carriers)	No restrictions NIL
4.5 1 2 3	TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.6 1 2 3	Length over all (LOA) TPQ NA Selector Minimum Maximum	Applicable 0.00 Metres 190.00 Metres
4.7 1 2 3	Beam TPQ NA Selector Minimum Maximum	No restrictions 0.00 0.00
4.8 1 2	Minimum parallel body length (PBL) TPQ NA Selector	No restrictions 0.00
4.9 1 2	Minimum PBL forward of manifold TPQ NA Selector	No restrictions 0.00
4.10 1	Minimum PBL aft of manifold TPQ NA Selector	No restrictions

		0207/1038/08
2		0.00
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.13	Freeboard	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.14	Manifold height above water	
1	TPQ NA Selector	Applicable
2	Minimum	3.20 Metres
3	Maximum	17.00 Metres
4.15	Manifold to shipside rail distance	
1	TPQ NA Selector	Applicable
2	Minimum	0.00
3	Maximum	3.60
4.16	Height of manifold above deck or drip tray	
1	TPQ NA Selector	Applicable
2	Minimum	0.60 Metres
3	Maximum	1.20
4	Specify whether height is from the deck or the drip tray	Drip tray.
4.17	Manifold spacing	
1	TPQ NA Selector	Applicable
2	Minimum	1.00
3	Maximum	0.00
4.18	Maximum air draft alongside	
1	TPQ NA Selector	No restrictions
2		0.00
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	
1	TPQ NA Selector	Applicable
2		1.50 Metric Tonnes
4.20	Additional comments or information	10.6 Lenght over all (LOA): Max 190 m, Depending on nearby E018 occupied 10.6 Lenght over all (LOA): Min. No Restrictions

5 Mooring and Berthing Information

5.1		State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	5 TUGS AVAILABLE Tug V.B. ANIBAL 5,263 HP and 57.10 MT. Lenght:29.50 m Breadth 11.00.m Tug V.B. ASDRUBAL 5,263 HP and 57.10 MT. Lenght 29.50 m Breadth 11.00 m Tug V.B. CARTAGENA 4,162 HP and 46.00 MT. Lenght 28.00 m Breadth 11.00 m Tug V.B. GLACIAL 5,263 HP and 57.1 MT. Lenght 29.50 m Breath 11.00 m Tug V.B. TIRRENO 4,200 HP and 52 MT. Lenght 28.00 m Breath 11.00 m 4 MOORING CRAFTS AVAILABLE AMARRE 2: 160 HP and Lenght 8.5 m AMARRE 3: 90 HP and Lenght 9.0 m AMARRE 6: 210HP and Lenght 9.0 m
5.2		Are ship's or tug's lines used?	
	1	Ship/Tug	Tug's Lines
	2	Comments	As Per Pilot Instructions
5.3		Type of fenders installed at berth	
5.5	1	Type of fenders installed at bertin	Tyre fenders
	2	If 'Other' please specify	Tyre reliders
	2		
5.4		State orientation of vessel alongside berth	Either Port & Starboard Side To
5.5		At buoy moorings, state which side hose is normally connected	
	1		Not applicable
	2	If 'Other' please specify	
5.6		Minimum mooring arrangement	4 Headlines 2 Forward Back-Springs 4 Sternlines 2 After Back-Springs
5.7		Describe any additional mooring requirements	Brakes should have been tested (BHC) to prove they render at a load that is equivalent to 60% of the lines's MBL
5.8		Are there any restrictions using wire mooring ropes?	
	1		No
	2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	
5.9		Are there any restrictions using synthetic mooring ropes?	
	1		No
	2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	
5.10)	Are there any restrictions on using high modulus synthetic mooring ropes?	
	1		No
	2	If 'yes' provide details	

5.11	Details of any specific mooring equipment required for any vessel utilising the berth	As ISGOTT
5.12 1	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	Yes
2	If 'Yes', provide details of particular requirements regarding ETOPs.	Compulsory at this terminal.
5.13	Details of any shore-provided mooring equipment	No shore mooring ropes or swamped moorings are to be secured on board. Emergency Release System (remote) is available at mooring hooks.
5.14	Are berthing aids provided?	
1		Νο
2	If 'Yes', state type of aids	
5.15	State allowable speed of approach if applicable	
1		NOT APPLICABLE 0.00 Knots
5.16	Is a mooring tension monitor fitted?	No
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements Applicable	Νο
1 2	Аррисале	N/A
5.19	Largest ship handled at berth to date	ENERGY COMMANDER 228 m IMO No.
		9275658
5.20	Additional comments or information	Mooring lines of different materials not to be used on the same hook or shore bollard.
6	Berth Equipment and Facilities	
6.1	Number, type and size of cargo transfer connections	4 Loading Arms Woodfield MK9 No1 8" No2 12" No3 12" No4 10"
6.2	List grades handled at berth	Crude Oils/Condensates, Black Petroleum Products, Heavy Distillates, Gasoils, Diesels and Kerosenes, Naphtha
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Usual products handled: Gasoil, HC Residue, Fuel Oil, Vaccum Gasoil, Light or Heavy Crude Oils, Naphtha.
6.3	State transfer rate restrictions and back pressure for each cargo grade	For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; Gasoil 550; Vgo 700.
6.4	Are transfer connections fitted with insulation flanges?	
1		Yes

IMO: 27e36b3f-0da3-46b3-a8b2-02b77fc38708

		020771036706
2	Provide details	Insulation flange is located at the loading arm and tested at 6 months basis. Refer. 8.3.9 OCIMF "Design and Construction Specification for Marine Loading Arms"
6.5	State storage type for LPG	Not applicable
6.6	Describe any terminal-specific requirements for vessel manifolds	Manifold Flange Hinges in Top Position if applicable.
6.7 1	Is berth fitted with a vapour manifold connection?	No
2	If 'Yes' state type and size of vapour connection	
3	State cargo types for which it is required to use vapour connection (if applicable)	NOT APPLICABLE
6.8	State throughput rate(s) of vapour recovery system	NOT APPLICABLE
6.9	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	
1		Yes
2	Supply details	Manufactured by M.I.B international (Italy) and included at Woodfield loading arm MK9. Automatic (out of range) or manual released. Ball valves closure time is less than 5 sec. No release is available if ball valves are not completely closed. Shore side loading arm is 3 meters raised after disconnection.
6.10	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	
1		No
2	If 'yes' provide details	
6.11	Describe access arrangements between ship and shore.	Ship's gangway net rigged
6.12	Does the berth have pollution response equipment?	
1		Yes
2	If 'yes' provide details	Containment boom(s) Skimming equipment Absorbent materials Dispersant stocks
6.13	Additional comments or information	NIL
7	Berth Operations	
7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	Primary Dedicated VHF CH17 Backup by Voice
7.2	Is it required that terminal or shore representatives stay on board during operations?	Y.
1		Yes
2	If 'Yes', state requirements including number of persons and their roles	Logistical Constraints: 1 Cargo Inspector appointed by terminal for COW and Squeezing Operations Control (Crude Oil only)

7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots for continuous periods of at least 10 minutes
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		Yes
2	If 'Yes' provide full details of these restrictions	No tank cleaning is allowed while at berth. C.O.W. as per Charter Party.
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		Yes
2	If 'Yes', state requirements	All cargo tanks atmospheres of vessels operating at this terminal should be gas free or inert at positive pressure with oxygen content of 8% or less by volume. For vessels loading volatile cargo, tanks to be loaded should be under inert gas, at positive pressure with oxygen content of 8% or less by volume
7.6	Is there a temperature limit for cargo handled?	
1		Yes
2	If 'Yes', state temperature limits	Max. Temperature permitted at the Ship's Manifold: +80ºC Min Temperature permitted at the Ship's Manifold: -10ºC
7.7	Is it permitted for vessels to undertake double-banked operations alongside the berth?	
1		No
2	If 'Yes', state limiting criteria	
7.8	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
1		No
2	If 'Yes', provide operational details	
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1		Yes
2	Provide details	Depending on Products and Under Customs Clearance
7.10	State details regarding any environmental restrictions applicable at the berth	Boiler soot blowing, Black Smoke and Sparks emitting from Funnel Stack Not Allowed
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT

7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?	
1		Yes
2	If 'Yes', state restriction	Not permitted during handling Cargo.
7.14	Additional comments or information	Draining lines before disconnection as follow: Shore side loading arm: to shore by gravity. Ship's side loading arm: to ship by gravity (residual tank)
8	Available Services	
8.1	Are Fuel Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.2	Are Diesel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe
8.3	Are Intermediate Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.4	Is fresh water available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe, operated by Port Authority via Agent. (No Operated by REPSOL PETROLEO,S.A.)
8.5	Are slop reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	Ex-Pipe (tank cleaning slops) or ex-barge.
3	State capacity of slop reception facilities (if applicable)	9999.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	No Allowed: Chemicals, Detergents and Cleaning Agents.
8.6	Are dirty ballast reception facilities available?	
1		Yes
2	If 'Yes', state how received	Ex-pipe only in emergency. Repsol Terminal operates SBT tankers only.
3	State capacity of dirty ballast receiption facilities	N/A
8.7	Are engine room sludge and bilge reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	Barge: No Operated by REPSOL PETROLEO,S.A.
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Segregated containers ashore. Barge is also available.

8.9 Additional comments or information

No inerting facilities are available at Repsol Terminal. Terminal Receives any Slop or Dirty Ballast from Ship's Operating at REPSOL Berths.

9 Berth Low Temperature Impact

9.1	What is the typical range of temperatures the terminal operates in during a winter season?	2ºC to 18ºC
9.2	Which months of the year can ice be expected?	Not applicable
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	Not applicable
9.4	State any limitations for cargo operations in sub-zero temperatures	Not applicable
9.5	State the minimum allowable ambient temperature for safe cargo operations	Not applicable
9.6	State the minimum temperature of cargoes handled	NOT APPLICABLE
9.7	State the minimum temperature for the emergency shut-down system to operate safely	Not applicable
9.8 1	Does the terminal have its own resources for conducting icebreaker escort	Νο
2	If 'Yes' provide details and specify how they can be requested	
9.9	Are there icebreakers available to operate in the terminal area	No
1	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	NU
9.10	Does the terminal have ice-capable tugs and support craft	
1		No
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?	
1	,	No
2	If 'Yes', provide details	
9.12	Does the terminal provide its own ice navigator/advisor?	
1	If 'Yes', provide details of how the service may be requested	No
9.13	Additional comments or information	No ice restrictions.
5.15		No ice restrictions.
10	Supplementary Information	
10.1	Berth transparency	Solid Wharf
10.2	Specify datum used for height and depth measurements in this section	
1 2	If 'Other' please specify other	Chart Datum (CD)
		2 70
10.3	Berth height above datum	2.70
10.4	Berth heading	140º(T) - 320º(T)

10.5	Width of the chanr	nel adjacent to	the berth				1	.50.0	0	
10.6	Position of moorin	g bollards and	hooks							
		Hook/Bo Number		'x' dist to Fend Face (m)	der	'y' dist t Line (m	o Target)	Hei	ght (m)	SWL (tonnes)
		1		2.00		149.00		3.00)	100.00
		2		2.00		114.00		3.00)	100.00
		3		2.00		72.00		3.00)	100.00
		4		2.00		26.00		3.00)	100.00
		5		2.00		-23.00		3.00)	100.00
		6		2.00		-72.00		3.00)	100.00
		7		2.00		-140.00		3.00)	100.00
		8		2.00		-171.00		3.00)	100.00
		А		2.00		151.00		3.00)	100.00
		В		2.00		117.00		3.00)	100.00
		С		2.00		76.00		3.00)	100.00
		D		2.00		31.00		3.00)	100.00
		E		2.00		-20.00		3.00)	100.00
		F		2.00		-69.00		3.00)	100.00
		G		2.00		-136.00		3.00)	100.00
		н		2.00		-166.00		3.00)	100.00
L0.7	Position of moorin	g buoys								
		Mooring Number	Buoy ID	'x' Distance to Target Line F & (m)		'y' Dista Target I athwart	ine	Hei	ght (m)	Max. Allow Load (tonnes)
		NIL		0.00		0.00		0.00)	0.00
.0.8	Fender Location									
		Fender ID Number	'x' Dist to Target Lir (m)	Elevation on Elevation of Eleva			Fender Height	(m)	Fender Contact Area (m2)	
		Cylindrical fenders	152.00	1.50	2.0	0	1.80		1.80	
		Cylindical fender	112.00	1.50	2.0	0	1.80		1.80	
		Cylindical fender	79.00	1.50	2.0	0	1.80		1.80	
		Cylindrical fender	43.00	1.50	2.0	0	1.80		1.80	
		Cylindrical fender	27.00	1.50	2.0	0	1.80		1.80	
		Cylindrical fender	-23.00	1.50	2.0	0	1.80		1.80	
		Cylindrical fender	-40.00	1.50	2.0	0	1.80		1.80	
		Cylindrical fender	-77.00	1.50	2.0	0	1.80		1.80	

							02b77fc387
		Cylindrical fender	-114.00	1.50	2.00	1.80	1.80
		Cylindrical fender	-150.00	1.50	2.00	1.80	1.80
10.9	Fender Reaction Da	ita					
		Fender Id	l Number P	oint No.	Compre (metres		oad (tonnes)
		CYLINDRI FENDER	CAL 1		0.40	25	50.00
		CYLINDRI FENDER	CAL 2		0.45	30	00.00
		CYLINDRI FENDER	CAL 3	•	0.52	32	25.00
		CYLINDRI FENDER	CAL 4	ļ	0.60	34	40.00
10.10	Fender friction coef	fficient (μ)				0.40)
10.11	State identity and h	orizontal pos	ition of loadi	ng arms			
		Loading Arm/Shore Connection ID Number		Horizontal co-ordinate Y	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
		660k- F17/104	-4.50	3.00	4.50	4.60	13.90
		660K- F17/101	-1.00	3.00	4.50	4.60	13.90
		660K- F17/102	2.00	3.00	4.50	4.60	13.90
		660-K- F17/103	5.00	3.00	4.60	4.60	13.90
10.12	State loading arm o	perating limit	S				
		Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
		660-K- F17/104	17.00	3.20	4.50	4.60	13.90
		660-K- F17/101	17.00	3.20	4.50	4.60	13.90
		660-K- F17/102	17.00	3.20	4.50	4.60	13.90
		660-K- F17/103	17.00	3.20	4.50	4.60	13.90
10.13	Additional commen	its or informa	tion				7 Position of mooring Buoys NOT PLICABLE



Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: E013

ReportName a4305c44-4e13-4d7b-ba7e-1fd59b32c9f3

Terminal Name: REPSOL PETROLEO, S.A. - CARTAGENA

Terminal Port: PUERTO DE CARTAGENA

Terminal Port Authority: Autoridad Portuaria de Cartagena

Country: Spain

Berth Name: E013

13 October 2017

Berth General 1 1.1 Berth name or number E013 1.2 Berth type 1 Wharf or Quay 2 If 'Other' please specify 1.3 Terrestrial co-ordinates of manifold centreline 1 Latitude 373359 North 2 Longitude 0005729 West 1.4 Berth users for liquid and gas cargoes **REPSOL PETROLEO REPSOL BUTANO** CLH 1.5 Has a structural survey of the berth been undertaken, including its underwater structure? 1 No 2 If 'Yes', state date of last survey 1.6 Has an engineering (mooring and fendering) analysis of berth been undertaken? 1 No 2 If 'Yes', state date of last analysis 1.7 Additional comments or information N/A 2 **Berth Approaches** 2.1 Is pilotage compulsory? 1 Yes 2 If 'Yes', state if any vessels are exempted No vessels exempted 2.2 State distance from pilot station(s) to berth Approx. 2 Miles 2.3 Is a waiting anchorage available? 1 Yes If 'Yes', state distance from waiting anchorage to berth 3 From 3 to 6 Miles 2.4 Controlling depth of water for transit to and from berth 1 Water depth 14.10 Metres 2 State datum used Chart Datum (CD) 3 If 'Other' please specify datum 2.5 31 December 2012 Date of latest survey from which transit depth has been determined 2.6 Date next survey is due 31 December 2017 2.7 State Maximum Tidal Range in berth approaches 0.30 2.8 Is laden transit to and/or from the berth conducted using the tide? 1 No 2 If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)

2.9	State details of any specific berthing and/or unberthing restrictions	NOT APPLICABLE
2.10 1 2 3	Minimum under keel clearance (UKC) in berth approaches Value Percentage Specify other UKC criterion where applicable	0.90 Meters 6.80 Vessel static draft No any
2.11	Absolute maximum draught in berth approaches, if applicable	13.20
2.12 1 2 3 4	State minimum vertical clearance of any bridges/power cables/vertical obstructions Vertical clearance State datum used If 'Other' specify other datum used Further details	0.00 Metres Chart Datum (CD) NOT APPLICABLE
2.13 1 2	Does the port require tankers and gas carriers to be escorted by tugs? If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	Yes Active 60 MT
2.14	Additional comments or information	NIL
3	Water Depth Alongside	
3.1 1 2 3	Minimum controlled water depth alongside berth at chart datum Water depth State datum used If 'Other' specify datum	14.10 Metres Chart Datum (CD)
3.2	Date of latest survey from which alongside depth has been determined	31 March 2012
3.3	Date next survey is due	31 December 2017
3.4 1 2 3	Minimum static under keel clearance (UKC) alongside berth Value Percentage Specify other UKC criterion where applicable	0.90 Centimeters 6.80 Vessel static draft No any
3.5 1 2 3	State range of water densities at berth From To Further details	1025.00 1028.00 As Ordinary Survey Practice
3.6 1 2	Type of bottom alongside berth If 'Other' please specify	Mud
3.7	Absolute maximum draft alongside, if applicable	13.20
3.8	State maximum tidal range at berth, if applicable	0.30
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	No

3.10 1	Does the berth location experience water-level anomalies?	Νο
2	Provide details	
3.11	Additional comments or information	NIL
4	Limiting Vessel Dimensions	
4.1 1 2 3	Summer deadweight TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.2 1 2 3	Berthing displacement TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.3 1 2 3	Alongside displacement TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.4 1 2	State any deadweight/displacement exceptions TPQ NA Selector	Not applicable NIL
4.5 1 2 3	Cubic capacity (gas carriers) TPQ NA Selector Minimum Maximum	No restrictions 0.00 0.00
4.6 1 2 3	Length over all (LOA) TPQ NA Selector Minimum Maximum	Applicable 0.00 Metres 230.00 Metres
4.7 1 2 3	Beam TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.8 1 2	Minimum parallel body length (PBL) TPQ NA Selector	Not applicable 0.00
4.9 1 2	Minimum PBL forward of manifold TPQ NA Selector	Not applicable 0.00

4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	Not applicable
2		0.00
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	Applicable
2	Minimum	0.00 Metres
3	Maximum	114.00 Metres
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.13	Freeboard	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.14	Manifold height above water	
1	TPQ NA Selector	Applicable
2	Minimum	3.20 Metres
3	Maximum	17.00 Metres
4.15	Manifold to shipside rail distance	
4.15	TPQ NA Selector	Applicable
2	Minimum	0.00
3	Maximum	3.60
4.16		
4.10	Height of manifold above deck or drip tray TPQ NA Selector	Applicable
2	Minimum	0.60
3	Maximum	1.20
4	Specify whether height is from the deck or the drip tray	Drip tray
4.17	Manifold spacing	Applicable
1	TPQ NA Selector	Applicable
2	Minimum	1.00
3	Maximum	0.00
4.18	Maximum air draft alongside	
1	TPQ NA Selector	Not applicable
2		0.00
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	
1	TPQ NA Selector	Applicable
2		1.50 Metric Tonnes
4.20	Additional comments or information	NIL

5 Mooring and Berthing Information

5.1		State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	5 TUGS AVAILABLE Tug V.B. ANIBAL 5,263 HP and 57.10 MT. Lenght:29.50 m Breadth 11.00.m Tug V.B. ASDRUBAL 5,263 HP and 57.10 MT. Lenght 29.50 m Breadth 11.00 m Tug V.B. CARTAGENA 4,162 HP and 46.00 MT. Lenght 28.00 m Breadth 11.00 m Tug V.B. GLACIAL 5,263 HP and 57.1 MT. Lenght 29.50 m Breath 11.00 m Tug V.B. TIRRENO 4,200 HP and 52 MT. Lenght 28.00 m Breath 11.00 m 4 MOORING CRAFTS AVAILABLE AMARRE 2: 160 HP and Lenght 8.5 m AMARRE 3: 90 HP and Lenght 8.5 m AMARRE 5: 210 HP and Lenght 9.0 m
5.2		Are ship's or tug's lines used?	
	1	Ship/Tug	Tug's Lines
	2	Comments	As per Pilots Instructions
5.3		Type of fenders installed at berth	
	1		Cell Type
	2	If 'Other' please specify	
5.4		State orientation of vessel alongside berth	Either Port & Starboard Side To
5.5		At buoy moorings, state which side hose is normally connected	
	1		Not applicable
	2	If 'Other' please specify	
5.6		Minimum mooring arrangement	2 Headlines
			2 Forward Breastlines
			2 Forward Back-Springs
			2 Sternlines 2 After Breastlines
			2 After Back-Springs
5.7		Describe any additional mooring requirements	Brakes should have been tested (BHC) to
			prove they render at a load that is equivalent
			to 60% of the lines's MBL
5.8		Are there any restrictions using wire mooring ropes?	
	1		No
	2	If 'yes', provide details of restrictions in wire moorings as part of the mooring	
		pattern	
5.9		Are there any restrictions using synthetic mooring ropes?	
	1		No
	2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	
5.10)	Are there any restrictions on using high modulus synthetic mooring ropes?	
	1		No

2	If 'yes' provide details	
5.11	Details of any specific mooring equipment required for any vessel utilising the berth	As ISGOTT
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	
1		Yes
2	If 'Yes', provide details of particular requirements regarding ETOPs.	Compulsory
5.13	Details of any shore-provided mooring equipment	No shore mooring ropes or swamped moorings are to be secured on board
5.14	Are berthing aids provided?	
1		No
2	If 'Yes', state type of aids	
5.15	State allowable speed of approach if applicable	
1		NOT APPLICABLE
1		0.00 Knots
5.16	Is a mooring tension monitor fitted?	No
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements	
1	Applicable	No
2		NOT APPLICABLE
5.19	Largest ship handled at berth to date	BERGE SUMMIT 230 m IMO No. 8902371
5.20	Additional comments or information	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
6	Berth Equipment and Facilities	
6.1	Number, type and size of cargo transfer connections	1 Loading Arm 10" ANSI 150 Manufactured by CONNEX 1 Loading Arm 10" ANSI 150 Manufactured by FMC
6.2	List grades handled at berth	Biodiesel/Biosiesel Blends, Commercial LPG, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Usual products handled: GASOLINES, NAPHTHA, ETBE, GASOIL, BUTANE, PROPANE & JET-A1
6.3	State transfer rate restrictions and back pressure for each cargo grade	For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; GOA 1.100, Gasoil C 550; Jet A-1 600, Gasoline 600.
6.4	Are transfer connections fitted with insulation flanges?	
1		Yes

IMO: a4305c44-4e13-4d7b-ba7e-1fd59b32c9f3

		11059032(913
2	Provide details	Located at loading arms. Tested in 6 months basis. Refer. 8.3.9 OCIMF "Design and Construction Specification for Marine Loading Arms"
6.5	State storage type for LPG	Not applicable
6.6	Describe any terminal-specific requirements for vessel manifolds	NOT APPLICABLE
6.7 1 2 3	Is berth fitted with a vapour manifold connection? If 'Yes' state type and size of vapour connection State cargo types for which it is required to use vapour connection (if applicable)	No
6.8	State throughput rate(s) of vapour recovery system	NOT APPLICABLE
6.9 1 2	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms? Supply details	Yes 1 Manufactured by CONNEX & 1 Manufactured by FMC. Ball valves closure and system release time is less than 15 sec. Manual and automatic (out of range) release system.
6.10 1 2	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship? If 'yes' provide details	Νο
6.11	Describe access arrangements between ship and shore.	Shore or Ship´s gangway net rigged. If shore ganway is used, service fees are to be paid.
6.12 1 2	Does the berth have pollution response equipment? If 'yes' provide details	Yes Containment boom(s) Skimming equipment
		Absorbent materials Dispersant stocks
6.13	Additional comments or information	NIL
7	Berth Operations	
7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	Primary Dedicated VHF CH17 Backup by Voice
7.2	Is it required that terminal or shore representatives stay on board during operations?	Νο
2	If 'Yes', state requirements including number of persons and their roles	
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots for continuous periods of at least 10 minutes

7.4		Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
	1		Yes
	2	If 'Yes' provide full details of these restrictions	No allowed at berth by REPSOL Proceedings. No Crude Oil operations are available at this pier.
7.5		Are there any berth specific requirements regarding tanker inerting procedures?	
	1		Yes
	2	If 'Yes', state requirements	All cargo tanks atmospheres of vessels operating at this terminal should be gas free or inert at positive pressure with oxygen content of 8% or less by volume. For vessels loading volatile cargo, tanks to be loaded should be under inert gas, at positive pressure with oxygen content of 8% or less by volume
7.6		Is there a temperature limit for cargo handled?	
	1		No
	2	If 'Yes', state temperature limits	
7.7		Is it permitted for vessels to undertake double-banked operations alongside the	
1.1		berth?	
	1		No
	2	If 'Yes', state limiting criteria	
7.8		Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
	1		No
	2	If 'Yes', provide operational details	
7.9		Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
	1		Yes
	2	Provide details	Depending on Products and Under Customs Clearance
7.10		State details regarding any environmental restrictions applicable at the berth	Boiler soot blowing, Black Smoke and Sparks emitting from Funnel Stack Not Allowed
7.11		Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
	1		Yes
	2	If 'Yes', state restriction	Reference ISGOTT
7.12		Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
	1		Yes
	2	If 'Yes', state restriction	Reference ISGOTT
7.13			
7.13		Are there any restrictions on handling stores when a ship is moored alongside berth?	
	1		Yes
	2	If 'Yes', state restriction	Not permitted during handling Cargo

7.14 Additional comments or information

Draining lines before disconnection as follow: Shore side loading arm: to shore by gravity. Ship's side loading arm: to ship by gravity (residual tank)

8 Available Services

8.1	1	Are Fuel Oil bunkers available?	No
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.2		Are Diesel Oil bunkers available?	
	1		Yes
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-Pipe
8.3		Are Intermediate Oil bunkers available?	
	1	If West state how delivered (one Ty Dine house truck)	No
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.4	1	Is fresh water available?	Ver
	1 2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Yes Ex-Pipe, operated by Port Authority via Agent.
	2	in res, state now delivered (e.g. Ex ripe, bulge, track)	(No Operated by REPSOL PETROLEO,S.A.)
8.5		Are slop reception facilities available?	
	1		Yes
	2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	Ex-Pipe (tank cleaning slops)
	3	State capacity of slop reception facilities (if applicable)	0.00 Cubic metres
	4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	No Allowed: Chemicals, Detergents and Cleaning Agents
8.6		Are dirty ballast reception facilities available?	
	1		Yes
	2	If 'Yes', state how received	Ex-Pipe only in emergencies. Repsol Terminal operates SBT tankers only.
	3	State capacity of dirty ballast receiption facilities	0
8.7		Are engine room sludge and bilge reception facilities available?	
	1		Yes
	2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	Barge: No Operated by REPSOL PETROLEO,S.A.
8.8		Are garbage reception facilities available at the berth.	
	1		Yes
	2	If 'Yes', provide details	Segregated Containers ashore. Barge is also available.
8.9		Additional comments or information	Terminal Receives any Slop or Dirty Ballast from Ship's Operating at REPSOL Berths

IMO: a4305c44-4e13-4d7b-ba7e-1fd59b32c9f3

9.1		What is the typical range of temperatures the terminal operates in during a winter season?	2ºC to 18ºC
9.2		Which months of the year can ice be expected?	NIL
9.3		Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	Not Aplicable
9.4		State any limitations for cargo operations in sub-zero temperatures	Not Aplicable
9.5		State the minimum allowable ambient temperature for safe cargo operations	Not Aplicable
9.6		State the minimum temperature of cargoes handled	Not Aplicable
9.7		State the minimum temperature for the emergency shut-down system to operate safely	Not Aplicable
9.8	1	Does the terminal have its own resources for conducting icebreaker escort	No
:	2	If 'Yes' provide details and specify how they can be requested	
9.9	1	Are there icebreakers available to operate in the terminal area	No
2		Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.10		Does the terminal have ice-capable tugs and support craft	
	1		No
	2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11		Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?	
	1 2	If 'Yes', provide details	No
9.12		Does the terminal provide its own ice navigator/advisor?	
	1		No
:	2	If 'Yes', provide details of how the service may be requested	
9.13		Additional comments or information	Low temperature restrictions are not aplicable at this terminal.
10		Supplementary Information	
10.1		Berth transparency	Solid Wharf
10.2		Specify datum used for height and depth measurements in this section	
	1	If lOther stars most setter	Chart Datum (CD)
	2	If 'Other' please specify other	2 - 2
10.3		Berth height above datum	2.70
10.4		Berth heading	145º(T) / 325º(T)
10.5		Width of the channel adjacent to the berth	220.00
10.6		Position of mooring bollards and hooks	

										IIUJ	
		Hook/Bol Number a		'x' dist to Fenc Face (m)	ler	'y' dist t Line (m)	o Target	Heig	ght (m)	SWL (tonnes)	
		A(2)		-150.00		22.00		2.70)	100.00	
		B(2)		-115.00		29.00		2.70)	100.00	
		С		-78.00		1.50		2.70)	60.00	
		D		-45.00		1.50		2.70)	60.00	
		E		-13.00		1.50		2.70)	60.00	
		F		18.00		1.50		2.70)	60.00	
		G		56.00		1.50		2.70)	60.00	
		H(2)		56.00		26.00		2.70)	60.00	
		I(4)		135.00		35.00		2.70)	60.00	
		J(4)		173.00		35.00		2.70)	100.00	
L0.7	Position of mooring	g buoys									
		Mooring Number		'x' Distance to Target Line F & (m)		'y' Dista Target L athwart	ine	Heig	sht (m)	Max. Allow Lo (tonnes)	ad
		NIL		0.00		0.00		0.00)	0.00	
10.8	Fender Location										
		Fender ID Number	'x' Dist to Target Lin (m)	Elevation o e Fenders (m			Fender Height ((m)	Fender Contact Area (m2)		
		аа	-77.00	-1.35	2.3	0	2.70		6.21		
		bb	-60.00	-1.35	2.3	0	2.70		6.21		
		сс	-45.00	-1.35	2.3	0	2.70		6.21		
		dd	-28.00	-1.35	2.3	0	2.70		6.21		
		ee	-14.00	-1.35	2.3	0	2.70		6.21		
		ff	2.00	-1.35	2.3	0	2.70		6.21		
		gg	18.00	-1.35	2.3	0	2.70		6.21		
10.9	Fender Reaction Da	ita									
		Fender Id		Point No.		Compre (metres			d (tonnes)		
		NO DATA		1		0.00		0.00			
10.10	Fender friction coe	fficient (μ)					0	.20			
10.11	State identity and h	orizontal posi		•							
		Loading Arm/Shore Connection ID Number		l Horizontal te co-ordinate Y	Ma Exc Sur	ursion	Max Excursio Sway	on	Max Excursion Heave		
		660-K-3A	4.00	3.00	3.2	0	6.00		13.90		
		660-K-F13/2	2.00	3.00	3.2	0	6.00		13.90		
10.12	State loading arm operating limits										
		Loading Arm ID Number	Max Op Height	Min Op Height	Ma Exc Sur	ursion	Max Excursio Sway	on	Max Excursion Heave		

	660-K-3A	17.00	3.20	3.20	6.00	13.90
	660-K-F13/2	17.00	3.20	3.20	6.00	13.90
10.13	Additional comments or informat	ion			NIL	-



Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: E016

ReportName 4a1d668c-1680-4727-a225-20e2f9c53094

Terminal Name: REPSOL PETROLEO, S.A. - CARTAGENA

Terminal Port: PUERTO DE CARTAGENA

Terminal Port Authority: Autoridad Portuaria de Cartagena

Country: Spain

Berth Name: E016

13 October 2017

Berth General 1 1.1 Berth name or number E016 1.2 Berth type 1 Wharf or Quay 2 If 'Other' please specify 1.3 Terrestrial co-ordinates of manifold centreline 1 Latitude 373349 North 2 Longitude 0005737 West 1.4 Berth users for liquid and gas cargoes REPSOL PETROLEO, S.A.; ILBOC; MASOL, RYLESA. 1.5 Has a structural survey of the berth been undertaken, including its underwater structure? 1 No 2 If 'Yes', state date of last survey 1.6 Has an engineering (mooring and fendering) analysis of berth been undertaken? 1 No 2 If 'Yes', state date of last analysis NIL 1.7 Additional comments or information 2 **Berth Approaches** 2.1 Is pilotage compulsory? 1 Yes 2 If 'Yes', state if any vessels are exempted No vessels exempted 2.2 State distance from pilot station(s) to berth Approx. 2 Miles 2.3 Is a waiting anchorage available? 1 Yes 3 If 'Yes', state distance from waiting anchorage to berth From 3 to 6 Miles 2.4 Controlling depth of water for transit to and from berth 1 Water depth 10.60 Metres 2 State datum used Chart Datum (CD) 3 If 'Other' please specify datum 2.5 Date of latest survey from which transit depth has been determined 31 December 2012 2.6 Date next survey is due 31 December 2017 2.7 State Maximum Tidal Range in berth approaches 0.30 2.8 Is laden transit to and/or from the berth conducted using the tide? 1 No 2 If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr) 2.9 State details of any specific berthing and/or unberthing restrictions NOT APPLICABLE

2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	0.70 Meters
2	Percentage	7.10 Vessel static draft
3	Specify other UKC criterion where applicable	No any
2.11	Absolute maximum draught in berth approaches, if applicable	9.90
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	0.00 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	
4	Further details	NOT APPLICABLE
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	Active 60 MT
2.14	Additional comments or information	NIL
3	Water Depth Alongside	
3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	10.60 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	31 March 2012
3.3	Date next survey is due	31 December 2017
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	0.70 Meters
2	Percentage	7.10 Vessel static draft
3	Specify other UKC criterion where applicable	No any
3.5	State range of water densities at berth	
1	From	1025.00
2	То	1028.00
3	Further details	As Ordinary Survey Practice
3.6	Type of bottom alongside berth	
1		Mud
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	9.90
3.8	State maximum tidal range at berth, if applicable	0.30
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	No
3.10	Does the berth location experience water-level anomalies?	

		206219053094
1 2	Provide details	Νο
3.11	Additional comments or information	NIL
4	Limiting Vessel Dimensions	
4.1	Summer deadweight	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.2	Berthing displacement	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.3	Alongside displacement	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.4	State any deadweight/displacement exceptions	
1	TPQ NA Selector	Not applicable
2		NOT APPLICABLE
4.5	Cubic capacity (gas carriers)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.6	Length over all (LOA)	
1	TPQ NA Selector	Applicable
2	Minimum	0.00 Metres
3	Maximum	160.00 Metres
4.7	Beam	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.8	Minimum parallel body length (PBL)	
1	TPQ NA Selector	Not applicable
2		0.00
4.9	Minimum PBL forward of manifold	
1	TPQ NA Selector	Not applicable
2		0.00
4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	Not applicable

		20219(55094
2		0.00
4.11 1 2 3	Bow to centre of manifold (BCM) TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.12 1 2 3 4.13 1 2 3	Stern to centre of manifold (SCM) TPQ NA Selector Minimum Maximum Freeboard TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00 Not applicable 0.00 0.00
4.14 1 2 3	Manifold height above water TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.15 1 2 3	Manifold to shipside rail distance TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.16 1 2 3 4	Height of manifold above deck or drip tray TPQ NA Selector Minimum Maximum Specify whether height is from the deck or the drip tray	Not applicable 1.00 0.00 DRIP TRAY
4.17 1 2 3	Manifold spacing TPQ NA Selector Minimum Maximum	Applicable 1.00 0.00
4.18 1 2	Maximum air draft alongside TPQ NA Selector	Not applicable 0.00
4.19 1 2	Vessel's minimum derrick/crane Safe Working Load (SWL) TPQ NA Selector	Applicable 1.50 Metric Tonnes
4.20	Additional comments or information	10.6 Lenght over all (LOA): Max. 160.00 m considering nearby E015 occupied by another vessel 10.6 Lenght over all (LOA): Min. No Restrictions

5 Mooring and Berthing Information

5.1		State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	5 TUGS AVAILABLE Tug V.B. ANIBAL 5,263 HP and 57.10 MT. Lenght:29.50 m Breadth 11.00.m Tug V.B. ASDRUBAL 5,263 HP and 57.10 MT. Lenght 29.50 m Breadth 11.00 m Tug V.B. CARTAGENA 4,162 HP and 46.00 MT. Lenght 28.00 m Breadth 11.00 m Tug V.B. GLACIAL 5,263 HP and 57.1 MT. Lenght 29.50 m Breath 11.00 m Tug V.B. TIRRENO 4,200 HP and 52 MT. Lenght 28.00 m Breath 11.00 m 4 MOORING CRAFTS AVAILABLE AMARRE 2: 160 HP and Lenght 8.5 m. AMARRE 3: 90 HP and Lenght 9.0 m AMARRE 6: 210HP and Lenght 9.0 m
5.2		Are ship's or tug's lines used?	
	1	Ship/Tug	Tug's Lines
	2	Comments	As Per Pilot Instructions
5.3		Type of fenders installed at berth	
	1		Tyre fenders
	2	If 'Other' please specify	
5.4		State orientation of vessel alongside berth	Either Port & Starboard Side To
5.5		At buoy moorings, state which side hose is normally connected	
	1		Not applicable
	2	If 'Other' please specify	
5.6		Minimum mooring arrangement	2 Headlines 1 Forward Back-Spring 2 Sternlines
			1 After Back-Spring
5.7		Describe any additional mooring requirements	None
5.8		Are there any restrictions using wire mooring ropes?	
	1		Yes
	2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
5.9		Are there any restrictions using synthetic mooring ropes?	
	1		Yes
	2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
5.10	D	Are there any restrictions on using high modulus synthetic mooring ropes?	
	1		No
	2	If 'yes' provide details	
5.11	1	Details of any specific mooring equipment required for any vessel utilising the berth	As ISGOTT

5.12	2 Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?				
1		Yes			
2	If 'Yes', provide details of particular requirements regarding ETOPs.	Compulsory			
5.13	Details of any shore-provided mooring equipment	No shore mooring ropes or swamped moorings are to be secured on board			
5.14	Are berthing aids provided?				
1		No			
2	If 'Yes', state type of aids				
5.15	State allowable speed of approach if applicable				
1		NOT APPLICABLE			
1		Knots			
5.16	Is a mooring tension monitor fitted?	No			
5.17	Are mooring hook quick release arrangements provided?	No			
5.18	Chain stopper requirements				
1	Applicable	No			
2		NOT APPLICABLE			
5.19	Largest ship handled at berth to date	MAERSK ELLIOT 185.6 m IMO No. 9274678			
5.20	Additional comments or information	NIL			
6	Berth Equipment and Facilities				
6.1	Number, type and size of cargo transfer connections	Hoses 8"/6" ANSI 150.			
6.2	List grades handled at berth	Bitumen (including cut-backs), Black Petroleum Products, Gasoils, Diesels and Kerosenes			
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	FUEL OIL, VACUUM GASOIL, GASOIL C, BITUMEN (OPERATED BY RYLESA)			
6.3	State transfer rate restrictions and back pressure for each cargo grade	For discharging operations Max. Pressure Allowed 10 kg/cm2. Loading rates (typical, cm/h): Gasoil 550; Fuel Oil 550.			
6.4	Are transfer connections fitted with insulation flanges?				
1		Yes			
2					
2	Provide details	Insulation Flange between Hoses			
6.5	Provide details State storage type for LPG	Insulation Flange between Hoses Not applicable			
		-			
6.5	State storage type for LPG	Not applicable			
6.5 6.6	State storage type for LPG Describe any terminal-specific requirements for vessel manifolds Is berth fitted with a vapour manifold connection?	Not applicable			
6.5 6.6 6.7	State storage type for LPG Describe any terminal-specific requirements for vessel manifolds	Not applicable NOT APPLICABLE			

6.8		State throughput rate(s) of vapour recovery system	NOT APPLICABLE
6.9		Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	
	1 2	Supply details	Yes Emergency Release Coupling are used between Ship's and Shore Flanges.
6.10		Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	
	1 2	If 'yes' provide details	Νο
6.11		Describe access arrangements between ship and shore.	Ship's gangway net rigged
6.12	1	Does the berth have pollution response equipment?	Yes
	2	If 'yes' provide details	Containment boom(s) Skimming equipment Absorbent materials Dispersant stocks
6.13		Additional comments or information	NIL
7		Berth Operations	
7.1		What is the primary and backup communication system between ship and terminal during cargo operations?	Primary Dedicated VHF CH17 Backup by Voice.
7.2		Is it required that terminal or shore representatives stay on board during operations?	
	1 2	If 'Yes', state requirements including number of persons and their roles	No
7.3		Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots for continuous periods of at least 10 minutes
7.4		Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
	1		Yes
	2	If 'Yes' provide full details of these restrictions	Tank cleaning is not allowed at berth by REPSOL Procedures. No Crude Oil operations are available at this pier.
7.5		Are there any berth specific requirements regarding tanker inerting procedures?	
	1		Yes
	2	If 'Yes', state requirements	All cargo tanks atmospheres of vessels operating at this terminal should be gas free or inert at positive pressure with oxygen content of 8% or less by volume. For vessels loading volatile cargo, tanks to be loaded should be under inert gas, at positive pressure with oxygen content of 8% or less by volume

7.6 1	Is there a temperature limit for cargo handled?	No
2	If 'Yes', state temperature limits	NU
7.7	Is it permitted for vessels to undertake double-banked operations alongside the	
	berth?	
1	If West state limiting oritoria	No
2	If 'Yes', state limiting criteria	
7.8	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
1		No
2	If 'Yes', provide operational details	
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1		Yes
2	Provide details	Depending on Products and Under Customs Clearance
7.10	State details regarding any environmental restrictions applicable at the berth	Boiler soot blowing, Black Smoke and Sparks emitting from Funnel Stack Not Allowed
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1	If 'Yes', state restriction	Yes Reference ISGOTT
2	·	
7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?	
1		Yes
2	If 'Yes', state restriction	Not permitted during handling Cargo
7.14	Additional comments or information	Draining lines before disconnection as follow: Shore side hose: to shore by gravity. Ship's side hose: to ship by gravity (residual tank)
8	Available Services	
8.1	Are Fuel Oil bunkers available?	
1		No
1 2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	No
1 2 8.2		
1 2 8.2 1	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck) Are Diesel Oil bunkers available?	Yes
1 2 8.2 1 2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck) Are Diesel Oil bunkers available? If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
1 2 8.2 1 2 8.3	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck) Are Diesel Oil bunkers available?	Yes Ex-Pipe
1 2 8.2 1 2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck) Are Diesel Oil bunkers available? If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Yes

8.4	Is fresh water available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe No Operated by REPSOL PETROLEO,S.A. Operated by Port Authority via Agent.
8.5	Are slop reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	Ex-Pipe
3	State capacity of slop reception facilities (if applicable)	0.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	No Allowed: Chemicals, Detergents and Cleaning Agents
8.6	Are dirty ballast reception facilities available?	
1		Yes
2	If 'Yes', state how received	Ex-Pipe, only in emergency. Repsol terminal only operates SBT tankers.
3	State capacity of dirty ballast receiption facilities	0
8.7	Are engine room sludge and bilge reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	Barge: No Operated by REPSOL PETROLEO,S.A.
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Segregated containers ashore. Barge is also available.
8.9	Additional comments or information	NIL
9	Berth Low Temperature Impact	
	· ·	
9.1	What is the typical range of temperatures the terminal operates in during a winter season?	2ºC to 20ºC
9.1 9.2	What is the typical range of temperatures the terminal operates in during a	2ºC to 20ºC NONE
	What is the typical range of temperatures the terminal operates in during a winter season?	
9.2	What is the typical range of temperatures the terminal operates in during a winter season?Which months of the year can ice be expected?Specify any terminal requirements for vessel Ice Class notation and	NONE
9.2 9.3	What is the typical range of temperatures the terminal operates in during a winter season?Which months of the year can ice be expected?Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	NONE Not Aplicable.
9.2 9.3 9.4	 What is the typical range of temperatures the terminal operates in during a winter season? Which months of the year can ice be expected? Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities State any limitations for cargo operations in sub-zero temperatures 	NONE Not Aplicable. Not Aplicable.
9.2 9.3 9.4 9.5	 What is the typical range of temperatures the terminal operates in during a winter season? Which months of the year can ice be expected? Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities State any limitations for cargo operations in sub-zero temperatures State the minimum allowable ambient temperature for safe cargo operations 	NONE Not Aplicable. Not Aplicable. Not Aplicable.
9.2 9.3 9.4 9.5 9.6	 What is the typical range of temperatures the terminal operates in during a winter season? Which months of the year can ice be expected? Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities State any limitations for cargo operations in sub-zero temperatures State the minimum allowable ambient temperature for safe cargo operations State the minimum temperature of cargoes handled State the minimum temperature for the emergency shut-down system to 	NONE Not Aplicable. Not Aplicable. Not Aplicable. Not Aplicable.
 9.2 9.3 9.4 9.5 9.6 9.7 	 What is the typical range of temperatures the terminal operates in during a winter season? Which months of the year can ice be expected? Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities State any limitations for cargo operations in sub-zero temperatures State the minimum allowable ambient temperature for safe cargo operations State the minimum temperature of cargoes handled State the minimum temperature for the emergency shut-down system to operate safely Does the terminal have its own resources for conducting icebreaker escort 	NONE Not Aplicable. Not Aplicable. Not Aplicable. Not Aplicable.
9.2 9.3 9.4 9.5 9.6 9.7 9.8	 What is the typical range of temperatures the terminal operates in during a winter season? Which months of the year can ice be expected? Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities State any limitations for cargo operations in sub-zero temperatures State the minimum allowable ambient temperature for safe cargo operations State the minimum temperature of cargoes handled State the minimum temperature for the emergency shut-down system to operate safely 	NONE Not Aplicable. Not Aplicable. Not Aplicable. Not Aplicable.
9.2 9.3 9.4 9.5 9.6 9.7 9.8 9.8	 What is the typical range of temperatures the terminal operates in during a winter season? Which months of the year can ice be expected? Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities State any limitations for cargo operations in sub-zero temperatures State the minimum allowable ambient temperature for safe cargo operations State the minimum temperature of cargoes handled State the minimum temperature for the emergency shut-down system to operate safely Does the terminal have its own resources for conducting icebreaker escort 	NONE Not Aplicable. Not Aplicable. Not Aplicable. Not Aplicable.
9.2 9.3 9.4 9.5 9.6 9.7 9.8 1 2	 What is the typical range of temperatures the terminal operates in during a winter season? Which months of the year can ice be expected? Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities State any limitations for cargo operations in sub-zero temperatures State the minimum allowable ambient temperature for safe cargo operations State the minimum temperature of cargoes handled State the minimum temperature for the emergency shut-down system to operate safely Does the terminal have its own resources for conducting icebreaker escort If 'Yes' provide details and specify how they can be requested 	NONE Not Aplicable. Not Aplicable. Not Aplicable. Not Aplicable.

2	Specify details (e.g. N	Name/IMO Nr/GRT/Po	ower/Ice Class)				
9.10	Does the terminal have ice-capable tugs and support craft						
1	Νο						
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)						
9.11		ve specific requirement	nts for the vessel spe	ed and			
1	manoeuvrability char				No		
2	If 'Yes', provide deta	ils					
9.12	Does the terminal pro	ovide its own ice navig	vator/advisor?				
1					No		
2	If 'Yes', provide deta	ils of how the service	may be requested				
9.13	Additional comments	or information			NO ICING, MEDITERF	ANEAN WEATHER.	
					,		
10	Supplementary In	formation					
10.1	Berth transparency				Solid Wharf		
10.2	Specify datum used for	or height and depth m	neasurements in this	section			
1					Chart Datum (CD)		
2	If 'Other' please spec	cify other					
10.3	Berth height above da	atum			2.70		
10.4	Berth heading				057º(T) - 237º(T)		
10.5	Width of the channel	adjacent to the berth	I.		200.00		
10.6	Position of mooring b	ollards and hooks					
		Hook/Bollard ID Number and Type	'x' dist to Fender Face (m)	'y' dist to Targe Line (m)	et Height (m)	SWL (tonnes)	
		А	-85.00	2.50	2.70		
		В	-62.00	2.50	2.70		
		С	-35.00	2.50	2.70		
		D	-12.00	2.50	2.70		
		E	13.00	2.50	2.70		
		F	38.00	2.50	2.70		
		G	54.00	2.50	2.70		
		H	63.00 88.00	2.50 2.50	2.70 2.70		
40 -			00.00	2.30	2.70		
10.7	Position of mooring b	-	ly! Distance to	lul Distances t	Lloight (m)		
		Mooring Buoy ID Number	'x' Distance to Target Line F & A (m)	'y' Distance to Target Line athwart (m)	Height (m)	Max. Allow Load (tonnes)	
		NIL	0.00	0.00	0.00	0.00	

10.8 Fender Location

Fender ID Number	'x' Dist to Target Line (m)	Elevation of Fenders (m)		Fender Height (m)	Fender Contact Area (m2)
1	93.00	-1.50	2.00	1.80	1.80
2	81.00	-1.50	2.00	1.80	1.80
3	68.00	-1.50	2.00	1.80	1.80
4	56.00	-1.50	2.00	1.80	1.80
5	43.00	-1.50	2.00	1.80	1.80
6	30.00	-1.50	2.00	1.80	1.80
7	18.00	-1.50	2.00	1.80	1.80
8	6.00	-1.50	2.00	1.80	1.80
9	-7.00	-1.50	2.00	1.80	1.80
10	-18.00	-1.50	2.00	1.80	1.80
11	-34.00	-1.50	2.00	1.80	1.80
12	-56.00	-1.50	2.00	1.80	1.80
13	-84.00	-1.50	2.00	1.80	1.80

10.9 Fender Reaction Data

Fender Id Number	Point No.	Compression (metres)	Load (tonnes)
CYLINDRICAL FENDER	1	0.40	250.00
CYLINDRICAL FENDER	2	0.45	300.00
CYLINDRICAL FENDER	3	0.52	325.00
CYLINDRICAL FENDER	4	0.60	340.00

0.40

10.10 Fender friction coefficient (μ)

10.11 State identity and horizontal position of loading arms

		Loading Arm/Shore Connection ID Number HOSES	Horizontal co-ordinate X 0.00	Horizontal co-ordinate Y	Max Excursion Surge 0.00	Max Excursion Sway 0.00	Max Excursion Heave
10.12	State loading arm o	perating limit Loading Arm ID		Min Op Height	Max Excursion	Max Excursion	Max Excursion
		Number	-	-	Surge	Sway	Heave
		HOSES	0.00	0.00	0.00	0.00	0.00
10.13	Additional commen	ts or informa	tion			PIER	PERATIONS ARE CARRIED OUT AT THIS BY REPSOL PETROLEO EXCEPT IN VERY AL CASES.



Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: E018

ReportName 089eed4d-3aef-454e-adaf-298ab2a017a0

Terminal Name: REPSOL PETROLEO, S.A. - CARTAGENA

Terminal Port: PUERTO DE CARTAGENA

Terminal Port Authority: Autoridad Portuaria de Cartagena

Country: Spain

Berth Name: E018

13 October 2017

1 Berth General

-	berth General		
1.1	Berth name or number E018		
1.2	Berth type		
1		Jetty - 'T' finger	
2	If 'Other' please specify		
1.3	Terrestrial co-ordinates of manifold centreline		
1	Latitude	373403 North	
2	Longitude	0005755 West	
1.4	Berth users for liquid and gas cargoes	REPSOL PETROLEO,S.A.	
1.5	Has a structural survey of the berth been undertaken, including its underwater structure?		
1		Yes	
2	If 'Yes', state date of last survey	31 October 2011	
1.6	Has an engineering (mooring and fendering) analysis of berth been undertaken?		
1	undertaken	Yes	
2	If 'Yes', state date of last analysis	31 December 2012	
1.7	Additional comments or information	NIL	
2	Berth Approaches		
2			
2.1	Is pilotage compulsory?	No.	
2.1 1	Is pilotage compulsory?	Yes No vessels exempted	
2.1 1 2	Is pilotage compulsory? If 'Yes', state if any vessels are exempted	No vessels exempted	
2.1 1 2 2.2	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth		
2.1 1 2 2.2 2.3	Is pilotage compulsory? If 'Yes', state if any vessels are exempted	No vessels exempted Approx. 2 Miles	
2.1 1 2 2.2	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available?	No vessels exempted	
2.1 1 2 2.2 2.3 1 3	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth	No vessels exempted Approx. 2 Miles Yes	
2.1 1 2 2.2 2.3 1	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available?	No vessels exempted Approx. 2 Miles Yes	
2.1 1 2 2.2 2.3 1 3 2.4	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth	No vessels exempted Approx. 2 Miles Yes From 3 to 6 Miles	
2.1 1 2 2.2 2.3 1 3 2.4 1	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth Water depth	No vessels exempted Approx. 2 Miles Yes From 3 to 6 Miles 21.00 Metres	
2.1 1 2 2.2 2.3 1 3 2.4 1 2 2 4	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth Water depth State datum used	No vessels exempted Approx. 2 Miles Yes From 3 to 6 Miles 21.00 Metres	
2.1 1 2 2.2 2.3 1 3 2.4 1 2 3	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth Water depth State datum used If 'Other' please specify datum	No vessels exempted Approx. 2 Miles Yes From 3 to 6 Miles 21.00 Metres Chart Datum (CD)	
2.1 1 2 2.2 2.3 1 3 2.4 1 2 3 2.5	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth Water depth State datum used If 'Other' please specify datum Date of latest survey from which transit depth has been determined	No vessels exempted Approx. 2 Miles Yes From 3 to 6 Miles 21.00 Metres Chart Datum (CD) 31 December 2012	
2.1 1 2 2.2 2.3 1 3 2.4 1 2 3 2.5 2.5	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth Water depth State datum used If 'Other' please specify datum Date of latest survey from which transit depth has been determined Date next survey is due	No vessels exempted Approx. 2 Miles Yes From 3 to 6 Miles 21.00 Metres Chart Datum (CD) 31 December 2012 31 December 2017	
2.1 1 2 2.2 2.3 1 3 2.4 1 2 3 2.5 2.5 2.6 2.7	Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth Water depth State datum used If 'Other' please specify datum Date of latest survey from which transit depth has been determined Date next survey is due State Maximum Tidal Range in berth approaches	No vessels exempted Approx. 2 Miles Yes From 3 to 6 Miles 21.00 Metres Chart Datum (CD) 31 December 2012 31 December 2017	

2.9	State details of any specific berthing and/or unberthing restrictions	DRAFT RESTRICTIONS NIGHT TIME Max 18.00 m
		DRAFT RESTRICTIONS SAILING: Max 15.00 m
2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	1.50 Meters
2	Percentage	7.70 Vessel static draft
3	Specify other UKC criterion where applicable	No any
2.11	Absolute maximum draught in berth approaches, if applicable	19.50
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	0.00 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	
4	Further details	NOT APPLICABLE
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	Active 60 MT
2.14	Additional comments or information	NIL
3	Water Depth Alongside	
3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	21.40 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	31 March 2012
3.3	Date next survey is due	31 March 2017
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	1.50 Meters
2	Percentage	7.70 Vessel static draft
3	Specify other UKC criterion where applicable	None
3.5	State range of water densities at berth	
1	From	1025.00
2	То	1028.00
3	Further details	As Ordinary Survey Practice
3.6	Type of bottom alongside berth	
1		Mud
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	21.40

IMO: 089eed4d-3aef-454e-adaf-298ab2a017a0

3.8	State maximum tidal range at berth, if applicable	0.30
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	No
3.10 1 2	Does the berth location experience water-level anomalies? Provide details	No
3.11	Additional comments or information	ABSOLUTE MAXIMUM DRAFT ALONGSIDE ANY SEASON: FWD 19.5 m AFT 21.4 m
4	Limiting Vessel Dimensions	
4.1 1 2 3 4.2	Summer deadweight TPQ NA Selector Minimum Maximum Berthing displacement	Applicable 0.00 Metric Tonnes 275000.00 Metric Tonnes
1 2 3	TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.3 1 2 3	Alongside displacement TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
1.4 1 2	State any deadweight/displacement exceptions TPQ NA Selector	No restrictions NIL
4.5 1 2 3	Cubic capacity (gas carriers) TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.6 1 2 3	Length over all (LOA) TPQ NA Selector Minimum Maximum	180.00 Metres 360.00 Metres
4.7 1 2 3	Beam TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.8 1	Minimum parallel body length (PBL) TPQ NA Selector	Applicable

		230802801780
2		74.00 Metres
4.9	Minimum PBL forward of manifold	
1	TPQ NA Selector	Not applicable
2		0.00
4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	Not applicable
2		0.00
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.13	Freeboard	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.14	Manifold height above water	
1	TPQ NA Selector	Applicable
2	Minimum	5.10 Metres
3	Maximum	23.00 Metres
4.15	Manifold to shipside rail distance	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.16	Height of manifold above deck or drip tray	
1	TPQ NA Selector	Applicable
2	Minimum	0.60
3	Maximum	1.20
4	Specify whether height is from the deck or the drip tray	DRIP TRAY
4.17	Manifold spacing	
1	TPQ NA Selector	Applicable
2	Minimum	1.00
3	Maximum	0.00
4.18	Maximum air draft alongside	
1	TPQ NA Selector	Not applicable
2		0.00
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	

IMO: 089eed4d-3aef-454e-adaf-298ab2a017a0

		298ab2a017a0
1	TPQ NA Selector	Applicable
2		1.50 Metric Tonnes
4.20	Additional comments or information	NIL
5	Mooring and Berthing Information	
5.1	State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	5 TUGS AVAILABLE Tug V.B. ANIBAL 5,263 HP and 57.10 MT. Lenght:29.50 m Breadth 11.00.m Tug V.B. ASDRUBAL 5,263 HP and 57.10 MT. Lenght 29.50 m Breadth 11.00 m Tug V.B. CARTAGENA 4,162 HP and 46.00 MT. Lenght 28.00 m Breadth 11.00 m Tug V.B. GLACIAL 5,263 HP and 57.1 MT. Lenght 29.50 m Breath 11.00 m Tug V.B. TIRRENO 4,200 HP and 52 MT. Lenght 28.00 m Breath 11.00 m 4 MOORING CRAFTS AVAILABLE AMARRE 2: 160 HP and Lenght 8.5 m AMARRE 3: 90 HP and Lenght 9.0 m AMARRE 6: 210 HP and Lenght 9.0 m
5.2	Are ship's or tug's lines used?	
1	Ship/Tug	Tug's Lines
2	Comments	As Per Pilots Instructions
5.3	Type of fenders installed at berth	
1 2	If 'Other' please specify	Wooden Piles or Wooden Panel Fenders
5.4	State orientation of vessel alongside berth	Starboard Side To
	-	
5.5 1	At buoy moorings, state which side hose is normally connected	Not applicable
2	If 'Other' please specify	
5.6	Minimum mooring arrangement	4 Headlines 2 Forward Breastlines 2 Forward Back-Springs 4 Sternlines 2 After Breastlines 2 After Back-Springs
5.7	Describe any additional mooring requirements	Brakes should have been tested (BHC) to prove they render at a load that is equivalent to 60% of the lines's MBL
5.8	Are there any restrictions using wire mooring ropes?	
1		Yes
2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
5.9	Are there any restrictions using synthetic mooring ropes?	
1		Yes

2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
5.10 1	Are there any restrictions on using high modulus synthetic mooring ropes?	No
2	If 'yes' provide details	
5.11	Details of any specific mooring equipment required for any vessel utilising the berth	As ISGOTT
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	
1 2	If 'Yes', provide details of particular requirements regarding ETOPs.	Yes Compulsory
5.13	Details of any shore-provided mooring equipment	No shore mooring ropes or swamped moorings are to be secured on board
5.14	Are berthing aids provided?	
1		Yes
2	If 'Yes', state type of aids	DOCKMASTER Laser Berthing System
5.15 1 1	State allowable speed of approach if applicable	Only Parallel Approach to Achieve Berthing Line 0.65 Km/h
5.16	Is a mooring tension monitor fitted?	Yes
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements	
1	Applicable	No
2		NOT APPLICABLE
5.19	Largest ship handled at berth to date	MARAN CARINA 332 m IMO No. 9240512
5.20	Additional comments or information	NIL
6	Berth Equipment and Facilities	
6.1	Number, type and size of cargo transfer connections	5 Hard Arms No 1 8" WOODFIELD MK 9 No 2 16" WOODFIELD MK 9 No 3 16" WOODFIELD MK 9 No 4 16" WOODFIELD MK 9 No 5 8" WOODFIELD MK 9
6.2	List grades handled at berth	Black Petroleum Products, Crude Oils/Condensates, Naphtha
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	CRUDE OIL, FUELOIL, VACUUM GASOIL, NAPHTHAS
6.3	State transfer rate restrictions and back pressure for each cargo grade	For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; VGO 700;

1 2	Provide details	Yes Insulation flange is located at the loading arm and tested at 6 months basis. Refer. 8.3.9 OCIMF "Design and Construction Specification for Marine Loading Arms"
6.5	State storage type for LPG	Not applicable
6.6	Describe any terminal-specific requirements for vessel manifolds	Manifold Flange Hinges in Top Position "If
0.0	Describe any terminal specific requirements for vesser manifolds	any"
6.7	Is berth fitted with a vapour manifold connection?	
1		No
2	If 'Yes' state type and size of vapour connection	
3	State cargo types for which it is required to use vapour connection (if applicable)	
6.8	State throughput rate(s) of vapour recovery system	NOT APPLICABLE
6.9 1 2	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms? Supply details	Yes Manufactured by MIB (ITALY) Ball valves closure and system release time is less than 15 sec. Manual and automatic (out of range) release system.
6.10	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	
1 2	If 'yes' provide details	No
6.11	Describe access arrangements between ship and shore.	Shore Gangway : Hydraulically Operated (Telescopic System) Service fees are to be paid.
5.12	Does the berth have pollution response equipment?	
1		Yes
2	If 'yes' provide details	Containment boom(s) Skimming equipment Absorbent materials Dispersant stocks
6.13	Additional comments or information	NIL
7	Berth Operations	
7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	Primary Dedicated VHF CH17 Backup by Voice
7.2	Is it required that terminal or shore representatives stay on board during operations?	
1		Yes
2	If 'Yes', state requirements including number of persons and their roles	Logistical Constraints: 1 Cargo Inspector for COW and Squeezing Operations Control

7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots for continuous periods of at least 10 minutes
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		Yes
2	If 'Yes' provide full details of these restrictions	Tank cleaning is not allowed at berth by REPSOL TERMINAL Proceedings. C.O.W. is allowed (Port Captain authorization to be granted)
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		Yes
2	If 'Yes', state requirements	All cargo tanks atmospheres of vessels operating at this terminal should be gas free or inert at positive pressure with oxygen content of 8% or less by volume. For vessels loading volatile cargo, tanks to be loaded should be under inert gas, at positive pressure with oxygen content of 8% or less by volume
7.6	Is there a temperature limit for cargo handled?	
1		No
2	If 'Yes', state temperature limits	NOT APPLICABLE
7.7	Is it permitted for vessels to undertake double-banked operations alongside the berth?	
1		No
2	If 'Yes', state limiting criteria	
7.8	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
1		No
2	If 'Yes', provide operational details	
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1		Yes
2	Provide details	Depending on Products and Under Customs Clearance
7.10	State details regarding any environmental restrictions applicable at the berth	Boiler soot blowing, Black Smoke and Sparks emitting from Funnel Stack Not Allowed
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT

7.13	}	Are there any restrictions on handling stores when a ship is moored alongside berth?	
	1		Yes
	2	If 'Yes', state restriction	Not permitted during handling Cargo
7.14	l	Additional comments or information	NIL
8		Available Services	
8.1		Are Fuel Oil bunkers available?	
	1		No
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.2		Are Diesel Oil bunkers available?	
	1		Yes
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe
8.3		Are Intermediate Oil bunkers available?	
	1		No
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.4		Is fresh water available?	
0	1		Yes
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe, operated by Port Authority via Agent. (No Operated by REPSOL PETROLEO,S.A.)
8.5		Are slop reception facilities available?	
	1		Yes
	2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	Ex-Pipe (tank cleaning slops) or ex-barge.
	3	State capacity of slop reception facilities (if applicable)	0.00 Cubic metres
	4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	No Allowed: Chemicals, Detergents and Cleaning Agents
8.6		Are dirty ballast reception facilities available?	
	1		Yes
	2	If 'Yes', state how received	Ex-pipe only in emergency. Repsol Terminal operates SBT tankers only.
	3	State capacity of dirty ballast receiption facilities	0
8.7		Are engine room sludge and bilge reception facilities available?	
	1		Yes
	2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	Barge: No Operated by REPSOL PETROLEO,S.A.
8.8		Are garbage reception facilities available at the berth.	
	1		Yes
	2	If 'Yes', provide details	Containers and Barge
8.9		Additional comments or information	NIL

9 Berth Low Temperature Impact

9.2Which months of the year can ice be expected?NONE9.3Specify any terminal requirements for vessel Ice Class notation and winterisation capabilitiesNOT APPLICABLE9.4State any limitations for cargo operations in sub-zero temperaturesNOT APPLICABLE9.5State the minimum allowable ambient temperature for safe cargo operationsNOT APPLICABLE9.6State the minimum temperature of cargoes handledNOT APPLICABLE9.7State the minimum temperature for the emergency shut-down system to operate safelyNOT APPLICABLE9.8Does the terminal have its own resources for conducting icebreaker escort 1 2 if 'Yes' provide details and specify how they can be requestedNo9.9Are there icebreakers available to operate in the terminal area 1 2 specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)No9.10Does the terminal have ice-capable tugs and support craft 1 2 specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)No9.11Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 1No
winterisation capabilities9.4State any limitations for cargo operations in sub-zero temperaturesNOT APPLICABLE9.5State the minimum allowable ambient temperature for safe cargo operationsNOT APPLICABLE9.6State the minimum temperature of cargoes handledNOT APPLICABLE9.7State the minimum temperature for the emergency shut-down system to operate safelyNOT APPLICABLE9.8Does the terminal have its own resources for conducting icebreaker escort 1 2No9.9Are there icebreakers available to operate in the terminal area 1 2No9.10Does the terminal have ice-capable tugs and support craft 1 2No9.11Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 1No
9.5State the minimum allowable ambient temperature for safe cargo operationsNOT APPLICABLE9.6State the minimum temperature of cargoes handledNOT APPLICABLE9.7State the minimum temperature for the emergency shut-down system to operate safelyNOT APPLICABLE9.8Does the terminal have its own resources for conducting icebreaker escort 1NO2If 'Yes' provide details and specify how they can be requestedNo9.9Are there icebreakers available to operate in the terminal area 1No2Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)No9.10Does the terminal have ice-capable tugs and support craft 1No1Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)No9.11Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 1No
9.6State the minimum temperature of cargoes handledNOT APPLICABLE9.7State the minimum temperature for the emergency shut-down system to operate safelyNOT APPLICABLE9.8Does the terminal have its own resources for conducting icebreaker escortNo11No2If 'Yes' provide details and specify how they can be requestedNo9.9Are there icebreakers available to operate in the terminal areaNo12Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)No9.10Does the terminal have ice-capable tugs and support craftNo2Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)No9.11Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?No
9.7State the minimum temperature for the emergency shut-down system to operate safelyNOT APPLICABLE9.8Does the terminal have its own resources for conducting icebreaker escort 1No1No2If 'Yes' provide details and specify how they can be requestedNo9.9Are there icebreakers available to operate in the terminal area 1No2Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)No9.10Does the terminal have ice-capable tugs and support craft 1No2Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)No9.11Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 1No
operate safely 9.8 Does the terminal have its own resources for conducting icebreaker escort 1 No 2 If 'Yes' provide details and specify how they can be requested 9.9 Are there icebreakers available to operate in the terminal area 1 No 2 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) 9.10 Does the terminal have ice-capable tugs and support craft 1 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) 9.11 Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 1 No
1No2If 'Yes' provide details and specify how they can be requested9.9Are there icebreakers available to operate in the terminal area1No2Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)9.10Does the terminal have ice-capable tugs and support craft1Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)9.11Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?1No
 9.9 Are there icebreakers available to operate in the terminal area 1 No 2 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) 9.10 Does the terminal have ice-capable tugs and support craft 1 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) 9.10 Does the terminal have ice-capable tugs and support craft 2 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) 9.11 Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 1 No
1No2Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)9.10Does the terminal have ice-capable tugs and support craft1No2Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)9.11Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 11No
2 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) 9.10 Does the terminal have ice-capable tugs and support craft 1 No 2 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) 9.11 Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 1 No
 9.10 Does the terminal have ice-capable tugs and support craft 1 No 2 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) 9.11 Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 1 No
1 No 2 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) 9.11 Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? 1 No
 Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class) Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? No
manoeuvrability characteristics in ice? 1 No
2 If 'Yes', provide details
9.12 Does the terminal provide its own ice navigator/advisor?1 No
2 If 'Yes', provide details of how the service may be requested
9.13 Additional comments or information NO ICING, MEDITERRANEAN WEATHER.
10 Supplementary Information
10.1Berth transparencyPiled Jetty - Inside Inner Harbor-
10.2 Specify datum used for height and depth measurements in this section
1 Chart Datum (CD) 2 If 'Other' please specify other
10.3 Berth height above datum 2.70
10.4 Berth heading 140º(T) - 320º(T) 10.5 Width of the shapped adjacent to the berth 220.00
10.5Width of the channel adjacent to the berth320.0010.6Position of mooring bollards and hooks

		Hook/Bo Number a		'x' dist to Fende Face (m)	er	'y' dist t Line (m)	o Target)	Hei	ght (m)	S	WL (tonnes)	
		A(2)		-192.00		33.00		2.70)	1	.00.00	
		B(2)		-142.00		33.00		2.70)	1	.00.00	
		C(2)		-101.00		33.00		2.70)	1	.00.00	
		D(2)		-63.00		2.00		6.50)	1	.00.00	
		E(2)		-30.00		2.00		5.00)	1	.00.00	
		F(2)		35.00		2.00		5.00)	1	.00.00	
		G(2)		65.00		2.00		6.50)	1	.00.00	
		H(2)		105.00		33.00		2.70)	1	.00.00	
		I(2)		180.00		33.00		2.70)	1	.00.00	
		J(2)		234.00		27.00		2.70)	1	.00.00	
10.7	Position of mooring	g buovs										
		Mooring	Buov ID	'x' Distance to		'y' Dista	nce to	Heia	ght (m)	Ν	Лах. Allow Lo	bad
		Number		Target Line F & (m)	A	Target L athwart	ine		5		tonnes)	
		NIL		0.00		0.00		0.00)	0	0.00	
10.8	Fender Location											
		Fender ID Number	'x' Dist to Target Line (m)	Elevation of e Fenders (m)			Fender Height		Fender Contact Area (m2)			
		аа	-60.00	0.55	5.0	0	6.50		32.50			
		bb	-30.00	-0.20	3.5		5.00		17.50			
		CC	35.00	-0.20	3.5		5.00		17.50			
		dd	65.00	0.55	5.0		6.50		32.50			
10.0	Fonder Departies De			0.00	0.0	•	0.00		01.00			
10.9	Fender Reaction Da		l Number	Point No.		Compre (metres		Load	d (tonnes)			
		NO DATA		0		0.00	1	0.00)			
			•	•		0.00	_					
10.10	Fender friction coel	fficient (µ)					C).40				
10.11	State identity and h			-								
		Loading Arm/Shore Connection ID Number		l Horizontal e co-ordinate Y	Ma Exc Sur	cursion	Max Excursio Sway	on	Max Excursion Heave			
		660K- F18/201	6.00	3.00	4.6	0	4.60		12.80			
		660K- F18/202	3.00	3.00	4.6	0	4.60		12.80			
		660K- F18/203	0.00	3.00	4.6	0	4.60		12.80			
		660K- F18/204	-3.00	3.00	4.6	0	4.60		12.80			
		660K- F18/205	-6.00	3.00	4.6	0	4.60		12.80			

10.12 State loading arm operating limits

10.13

	Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
	660-K- F18/205	23.00	5.10	4.60	4.60	12.80
	660-K- F18/204	23.00	5.10	4.60	4.60	12.80
	660-K- F18/203	23.00	5.10	4.60	4.60	12.80
	660-K- F18/202	23.00	5.10	4.60	4.60	12.80
	660-K- F18/201	23.00	5.10	4.60	4.60	12.80
Additional comme	nts or inform	ation			NIL	



Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: E012

ReportName 565c6e26-a89f-4ba7-8cb0-2a46826c1cc2

Terminal Name: REPSOL PETROLEO, S.A. - CARTAGENA

Terminal Port: PUERTO DE CARTAGENA

Terminal Port Authority: Autoridad Portuaria de Cartagena

Country: Spain

Berth Name: E012

13 October 2017

1		Berth General	
1.1		Berth name or number	E012
	1 2	Berth type If 'Other' please specify	Wharf or Quay
	1 2	Terrestrial co-ordinates of manifold centreline Latitude Longitude	373356 North 0005724 West
1.4		Berth users for liquid and gas cargoes	- REPSOL PETROLEO,S.A. - REPSOL BUTANO, S.A. - BUNGE - ECOCARBURANTES -LBC
	1 2	Has a structural survey of the berth been undertaken, including its underwater structure?	No
	1 2	Has an engineering (mooring and fendering) analysis of berth been undertaken? If 'Yes', state date of last analysis	No
1.7		Additional comments or information	Berth used for LPG cargoes.
1.7 2		Additional comments or information Berth Approaches	Berth used for LPG cargoes.
2 2.1	1 2		Berth used for LPG cargoes. Yes No vessels exempted
2 2.1		Berth Approaches Is pilotage compulsory?	Yes
2 2.1 2.2 2.2 2.3 1		Berth Approaches Is pilotage compulsory? If 'Yes', state if any vessels are exempted	Yes No vessels exempted
2 2.1 2.2 2.3 1 3 2.4	2	Berth Approaches Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available?	Yes No vessels exempted Approx. 2 Miles Yes
2 2.1 2.2 2.3 1 3 2.4	2 1 3 1 2	Berth Approaches Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth Water depth State datum used	Yes No vessels exempted Approx. 2 Miles Yes Approx. 3 Miles 8.60 Metres
2 2.1 2.2 2.3 1 3 2.4 1 2 3	2 1 3 1 2	Berth Approaches Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth Water depth State datum used If 'Other' please specify datum	Yes No vessels exempted Approx. 2 Miles Yes Approx. 3 Miles 8.60 Metres Chart Datum (CD)
2 2.1 2.2 2.3 2.3 2.4 1 2 2.4 1 2 3 2.5	2 1 3 1 2	Berth Approaches Is pilotage compulsory? If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth Controlling depth of water for transit to and from berth Water depth State datum used If 'Other' please specify datum Date of latest survey from which transit depth has been determined	Yes No vessels exempted Approx. 2 Miles Yes Approx. 3 Miles 8.60 Metres Chart Datum (CD)

2	If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	
2.9	State details of any specific berthing and/or unberthing restrictions	NOT APPLICABLE
2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	0.60 Meters
2	Percentage	7.50 Vessel static draft
3	Specify other UKC criterion where applicable	No any
2.11	Absolute maximum draught in berth approaches, if applicable	8.00
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	0.00 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	
4	Further details	NOT APPLICABLE
2.13 1 2	Does the port require tankers and gas carriers to be escorted by tugs? If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	Yes Active 60 MT
2.14	Additional comments or information	8.12 Vertical Clearance of any Bridges/Power Cables/Vertical Obstructions NOT APPLICABLE
3	Water Depth Alongside	
3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	8.60 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	31 March 2012
3.3	Date next survey is due	31 December 2017
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	0.60 Meters
2	Percentage	7.50 Vessel static draft
3	Specify other UKC criterion where applicable	NOT APPLICABLE
3.5	State range of water densities at berth	
1	From	1025.00
2	То	1028.00
3	Further details	As Ordinary Survey Practice
3.6	Type of bottom alongside berth	
1		Mud
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	8.00

IMO: 565c6e26-a89f-4ba7-8cb0-2a46826c1cc2

		20+002001002
3.8	State maximum tidal range at berth, if applicable	0.30
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	No
3.10 1 2	Does the berth location experience water-level anomalies? Provide details	No
3.11	Additional comments or information	NOT APPLICABLE
4	Limiting Vessel Dimensions	
4.1 1 2 3	Summer deadweight TPQ NA Selector Minimum Maximum	Not applicable 0.00 Metric Tonnes 0.00 Metric Tonnes
4.2 1 2 3 4.3	Berthing displacement TPQ NA Selector Minimum Maximum Alongside displacement	Not applicable 0.00 Metric Tonnes 0.00 Metric Tonnes
1 2 3	TPQ NA Selector Minimum Maximum	Not applicable 0.00 Metric Tonnes 0.00 Metric Tonnes
4.4 1 2	State any deadweight/displacement exceptions TPQ NA Selector	Not applicable Not Applicable
4.5 1 2 3	Cubic capacity (gas carriers) TPQ NA Selector Minimum Maximum	Not applicable 0.00 Cubic metres 0.00 Cubic metres
4.6 1 2 3	Length over all (LOA) TPQ NA Selector Minimum Maximum	Applicable 0.00 Metres 150.00 Metres
4.7 1 2 3	Beam TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.8 1 2	Minimum parallel body length (PBL) TPQ NA Selector	Not applicable 0.00
4.9	Minimum PBL forward of manifold	

		284682661662
1	TPQ NA Selector	Not applicable
2		0.00
4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	Not applicable
2		0.00
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.13	Freeboard	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.14	Manifold height above water	
1	TPQ NA Selector	Applicable
2	Minimum	2.50
3	Maximum	7.90
4.15	Manifold to shipside rail distance	
1	TPQ NA Selector	Applicable
2	Minimum	0.00
3	Maximum	0.00
4.16	Height of manifold above deck or drip tray	
1	TPQ NA Selector	Not applicable
2	Minimum	1.00
3	Maximum	4.00
4	Specify whether height is from the deck or the drip tray	DRIP TRAY
4.17	Manifold spacing	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00 Metres
3	Maximum	0.00 Metres
4.18	Maximum air draft alongside	
1	TPQ NA Selector	Not applicable
2		0.00
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	
1	TPQ NA Selector	Applicable
2		1.50 Metric Tonnes

4.20		Additional comments or information	ITEM 10.6 Lenght ovel all (LOA): Minimum Not Applicable
5		Mooring and Berthing Information	
5.1		State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	5 TUGS AVAILABLE Tug V.B. ANIBAL 5,263 HP and 57.10 MT. Lenght:29.50 m Breadth 11.00.m Tug V.B. ASDRUBAL 5,263 HP and 57.10 MT. Lenght 29.50 m Breadth 11.00 m Tug V.B. CARTAGENA 4,162 HP and 46.00 MT. Lenght 28.00 m Breadth 11.00 m Tug V.B. GLACIAL 5,263 HP and 57.1 MT. Lenght 29.50 m Breath 11.00 m Tug V.B. TIRRENO 5,000 HP and 52 MT. Lengh 28.00 m Breath 11.00 m 4 MOORING CRAFTS AVAILABLE AMARRE 2: 160 HP and Lenght 8.5 m AMARRE 3: 90 HP and Lenght 8.5 m AMARRE 5: 210 HP and Lenght 9.0 m
5.2		Are ship's or tug's lines used?	
	1	Ship/Tug	Tug's Lines
	2	Comments	Follow Pilot Instructions
5.3		Type of fenders installed at berth	
	1		Cell Type
	2	If 'Other' please specify	
5.4		State orientation of vessel alongside berth	Either Port & Starboard Side To
5.5		At buoy moorings, state which side hose is normally connected	
	1 2	If 'Other' please specify	Not applicable
	2		
5.6		Minimum mooring arrangement	2 Headlines 1 Forward Back-Spring
			2 Sternlines 1 After Back-Spring
5.7		Describe any additional mooring requirements	None
			None
5.8	1	Are there any restrictions using wire mooring ropes?	No
	2	If 'yes', provide details of restrictions in wire moorings as part of the mooring	
		pattern	
5.9		Are there any restrictions using synthetic mooring ropes?	
	1		No
	2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
5.10)	Are there any restrictions on using high modulus synthetic mooring ropes?	
	1		No
2		If 'yes' provide details	

5.11	Details of any specific mooring equipment required for any vessel utilising the berth	As ISGOTT
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	Yes
2	If 'Yes', provide details of particular requirements regarding ETOPs.	Compulsory
5.13	Details of any shore-provided mooring equipment	No shore mooring ropes or swamped moorings are to be secured on board
5.14	Are berthing aids provided?	
1 2	If 'Yes', state type of aids	No
5.15	State allowable speed of approach if applicable	
1		NOT APPLICABLE
1		Km/h
5.16	Is a mooring tension monitor fitted?	No
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements	
1	Applicable	No
2		NOT APPLICABLE
5.19	Largest ship handled at berth to date	STRILEN 149.61 m IMO No. 9391139
5.20	Additional comments or information	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
6	Berth Equipment and Facilities	
6.1	Number, type and size of cargo transfer connections	1 Loading Arm 8" .
6.2	List grades handled at berth	Commercial LPG
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Propane & Butane.
6.3	State transfer rate restrictions and back pressure for each cargo grade	Max Pressure Requested 11 kg/cm2
6.4	Are transfer connections fitted with insulation flanges?	
1		Yes
2	Provide details	Insulation Flange at the loading arm.
6.5	State storage type for LPG	Pressurised
6.6	Describe any terminal-specific requirements for vessel manifolds	
C 7	Describe any terminal-specific requirements for vesser manifolds	NOT APPLICABLE
6.7	Is berth fitted with a vapour manifold connection?	
1	Is berth fitted with a vapour manifold connection?	No
1 2	Is berth fitted with a vapour manifold connection? If 'Yes' state type and size of vapour connection	No Not Applicable
1	Is berth fitted with a vapour manifold connection?	No

6.9	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	Yes
2	Supply details	2 ball valves and collar, less than 5 sec closing interval.
6.10	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	Na
1 2	If 'yes' provide details	No
6.11	Describe access arrangements between ship and shore.	Ship's gangway net rigged
6.12 1	Does the berth have pollution response equipment?	Yes
2	If 'yes' provide details	Containment boom(s) Skimming equipment Absorbent materials Dispersant stocks
6.13	Additional comments or information	NIL
7	Berth Operations	
7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	Primary Dedicated VHF CH17 Backup by Voice
7.2	Is it required that terminal or shore representatives stay on board during operations?	
1 2	If 'Yes', state requirements including number of persons and their roles	No
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots for continuous periods of at least 10 minutes
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		Yes
2	If 'Yes' provide full details of these restrictions	Tank Cleaning is not allowed while at berth according REPSOL TERMINAL Policy. No Crude Oil is operated at this pier.
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		Yes
2	If 'Yes', state requirements	All cargo tanks atmospheres of vessels operating at this terminal should be gas free or inert at positive pressure with oxygen content of 8% or less by volume. For vessels loading volatile cargo, tanks to be loaded should be under inert gas, at positive pressure with oxygen content of 8% or less by volume

		284082001002
1		No
2	If 'Yes', state temperature limits	
7.7	Is it permitted for vessels to undertake double-banked operations alongside the berth?	No
2	If 'Yes', state limiting criteria	
7.8	Is vessel required to pump water ashore or receive water on board for line	
1	clearance purposes?	No
2	If 'Yes', provide operational details	
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1	Provide details	No
7.10	State details regarding any environmental restrictions applicable at the berth	Boiler soot blowing, Black Smoke and Sparks emitting from Funnel Stack Not Allowed
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1	If Mast state restriction	Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1	If Mast state restriction	Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?	
1		Yes
2	If 'Yes', state restriction	Not permitted during handling Cargo
7.14	Additional comments or information	Draining Line After Load/Discharge blowing ashore with hot gas.
8	Available Services	
8.1	Are Fuel Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.2	Are Diesel Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.3	Are Intermediate Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.4	Is fresh water available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe No Operated by REPSOL PETROLEO,S.A.

8.5	Are slop reception facilities available?	
1		No
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	Only by barge, Marpol Company.
3	State capacity of slop reception facilities (if applicable)	300.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	No Chemicals, Detergents, cleaning agents allowed
8.6	Are dirty ballast reception facilities available?	
1		No
2	If 'Yes', state how received	
3	State capacity of dirty ballast receiption facilities	
8.7 1	Are engine room sludge and bilge reception facilities available?	Yes
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	Barge: No Operated by REPSOL
		PETROLEO,S.A.
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Containers and Barge
8.9	Additional comments or information	Pier operated by Repsol Butano S.A.
9	Berth Low Temperature Impact	
9.1	What is the typical range of temperatures the terminal operates in during a winter season?	-2 to 20
9.2	Which months of the year can ice be expected?	Not applicable
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	NIL
9.4	State any limitations for cargo operations in sub-zero temperatures	N/A
9.5	State the minimum allowable ambient temperature for safe cargo operations	N/A
9.6	State the minimum temperature of cargoes handled	N/A
9.7	State the minimum temperature for the emergency shut-down system to operate safely	-10 ºC
9.8	Does the terminal have its own resources for conducting icebreaker escort	
1		No
2	If 'Yes' provide details and specify how they can be requested	
9.9	Are there icebreakers available to operate in the terminal area	
1		No
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.10 1	Does the terminal have ice-capable tugs and support craft	No
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?	

										284682601
1 2	lf 'Yes', provide de	etails					٦	١o		
9.12 1	Does the terminal provide its own ice navigator/advisor?						٩o			
2	lf 'Yes', provide de	etails of how t	he service r	nay be requeste	ed		ľ	NO		
9.13	Additional comme	nts or informa	ation				Ν	lo ici	ing expeted, M	editerranean wheathe
10	Supplementary									
L0.1	Berth transparency	ý					S	olid	Wharf	
10.2	Specify datum use	d for height a	nd depth me	easurements in	this	section				
1 2	If 'Other' please s	pecify other					(Chart	: Datum (CD)	
.0.3	Berth height above	e datum					2	.70		
.0.4	Berth heading						0	j57º(T) - 237º(T)	
.0.5	Width of the chan	nel adjacent to	o the berth				2	60.0	0	
10.6	Position of moorin	g bollards and	l hooks							
		Hook/Bo Number	llard ID and Type	'x' dist to Fende Face (m)	er	'y' dist t Line (m	o Target)	Hei	ght (m)	SWL (tonnes)
		A(2)		3.50		-95.00		2.70)	100.00
		В		3.50		-65.00		2.70	0	100.00
		С		3.50		-40.00		2.70	D	100.00
		D		3.50		-6.00		2.70	D	100.00
		E		3.50		18.00		2.70)	100.00
		F		3.50		40.00		2.70)	100.00
		G		3.50		65.00		2.70)	100.00
		H(2)		3.50		95.00		2.70)	100.00
LO.7	Position of mooring buoys									
		Mooring Number	•	'x' Distance to Target Line F & (m)	A	'y' Dista Target L athwart	ine	Hei	ght (m)	Max. Allow Load (tonnes)
		NIL		0.00		0.00		0.00)	0.00
10.8	Fender Location									
		Fender ID Number	'x' Dist to Target Lin (m)	Elevation of e Fenders (m)			Fender Height ((m)	Fender Contact Area (m2)	
		аа	-98.00	-1.35	2.0	0	2.70		5.40	
		bb	-75.00	-1.35	2.0	0	2.70		5.40	
		сс	-51.00	-1.35	2.0	0	2.70		5.40	
		dd	-31.00	-1.35	2.0	0	2.70		5.40	
		ee	-11.00	-1.35	2.0	0	2.70		5.40	
		ff	9.00	-1.35	2.0	0	2.70		5.40	
		gg	27.00	-1.35	2.0	0	2.70		5.40	

									284002001002
		hh	47.00	-1.35	2.00	2.70		5.40	
		ii	68.00	-1.35	2.00	2.70		5.40	
10.9	Fender Reaction Da	ata							
		Fender Id	l Number	Point No.	Compre (metres		Load	l (tonnes)	
		CELL FEN	DER	1	0.40		250.	00	
		CELL FEN	DER	2	0.45		300.	00	
		CELL FEN	DER	3	0.52		325.	00	
		CELL FEN	DER	4	0.60		340.	00	
10.10	Fender friction coef	fficient (μ)					0.40		
10.11	State identity and horizontal position of loading arms								
		Loading Arm/Shore Connection ID Number		Horizontal e co-ordinate Y	Max Excursion Surge	Max Excurs Sway	ion	Max Excursion Heave	
		Nº1	0.00	2.00	2.50	2.60		5.40	
10.12	State loading arm o	perating limit	:S						
		Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excurs Sway	ion	Max Excursion Heave	
		Nº1	7.90	2.50	2.50	2.60		5.40	
10.13	Additional commen	nts or informa	tion				operat	pier REPSOL PETROLEC ted by REPSOL BUTANO stalations.	-



Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: E020

ReportName 3a0162b5-b69f-4e46-b4a6-93bc937b73b8

Terminal Name: REPSOL PETROLEO, S.A. - CARTAGENA

Terminal Port: PUERTO DE CARTAGENA

Terminal Port Authority: Autoridad Portuaria de Cartagena

Country: Spain

Berth Name: E020

13 October 2017

1 Berth General

T		Bertin General				
1.1		Berth name or number	E020			
1.2	1 2	Berth type If 'Other' please specify	Jetty - Finger Jetty			
1.3	1 2	Terrestrial co-ordinates of manifold centreline Latitude Longitude	373406 North 0005814 West			
1.4		Berth users for liquid and gas cargoes	REPSOL PETROLEO,S.A.			
1.5	1 2	Has a structural survey of the berth been undertaken, including its underwater structure? If 'Yes', state date of last survey	Yes 31 December 2008			
1.6	1 2	Has an engineering (mooring and fendering) analysis of berth been undertaken? If 'Yes', state date of last analysis	Yes 31 December 2008			
	Z	· ·				
1.7		Additional comments or information	E020 New Construction dated 2008			
2		Berth Approaches				
2.1		Is pilotage compulsory?				
	1		Yes			
	2	If 'Yes', state if any vessels are exempted	No vessels exempted			
2.2		State distance from pilot station(s) to berth	Approx. 1 Mile			
2.3	1	Is a waiting anchorage available?	Vez			
	1 3	If 'Yes', state distance from waiting anchorage to berth	Yes From 3 to 6 Miles			
2.4	1 2 3	Controlling depth of water for transit to and from berth Water depth State datum used If 'Other' please specify datum	26.20 Metres Chart Datum (CD)			
2.5		Date of latest survey from which transit depth has been determined	31 December 2012			
2.6		Date next survey is due	31 December 2017			
2.7		State Maximum Tidal Range in berth approaches	0.30			
2.8	1 2	Is laden transit to and/or from the berth conducted using the tide? If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	Νο			

2.9	State details of any specific berthing and/or unberthing restrictions	WIND RESTRICTIONS DAY TIME BERTHING: Max 20 knots UNBERTHING: Max 20 knots WIND RESTRICTIONS NIGHT TIME BERTHING: Max. 10 knots UNBERTHING: Max. 20 knots SEA RESTRICTIONS NIGHT TIME BERTHING: Max. Sea Wave Height 2 m UNBERTHING: Max. Sea Wave Height 1 m VISIBILITY RESTRICTIONS > 1,000 m
2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	2.20 Meters
2	Percentage	9.20 Vessel static draft
3	Specify other UKC criterion where applicable	No any
2.11	Absolute maximum draught in berth approaches, if applicable	24.00
2.12 1 2 3 4	State minimum vertical clearance of any bridges/power cables/vertical obstructions Vertical clearance State datum used If 'Other' specify other datum used Further details	0.00 Metres Chart Datum (CD) NOT APPLICABLE
2.13 1 2	Does the port require tankers and gas carriers to be escorted by tugs? If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	Yes Active 60 MT
2.14	Additional comments or information	NIL
3	Water Depth Alongside	
3.1 1 2 3	Minimum controlled water depth alongside berth at chart datum Water depth State datum used If 'Other' specify datum	26.20 Metres Chart Datum (CD)
3.2	Date of latest survey from which alongside depth has been determined	31 March 2012
3.3	Date next survey is due	31 December 2017
3.4 1 2 3	Minimum static under keel clearance (UKC) alongside berth Value Percentage Specify other UKC criterion where applicable	2.21 Meters 9.20 Vessel static draft None
3.5 1	State range of water densities at berth From	1025.00

IMO: 3a0162b5-b69f-4e46-b4a6-93bc937b73b8

TPQ, R	EPSOL PETROLEO, S.A CARTAGENA, EU2U	93bc937b73b8
2	То	1028.00
3	Further details	As Ordinary Survey Practice
3.6 1 2	Type of bottom alongside berth If 'Other' please specify	Mud
3.7	Absolute maximum draft alongside, if applicable	24.00
3.8	State maximum tidal range at berth, if applicable	0.30
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	No
3.10 1 2	Does the berth location experience water-level anomalies? Provide details	No
3.11	Additional comments or information	NIL
4	Limiting Vessel Dimensions	
4.1 1 2 3	Summer deadweight TPQ NA Selector Minimum Maximum	Applicable 60000.00 Metric Tonnes 315000.00 Metric Tonnes
4.2 1 2 3	Berthing displacement TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.3 1 2 3	Alongside displacement TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.4 1 2	State any deadweight/displacement exceptions TPQ NA Selector	Not applicable NOT APPLICABLE
4.5 1 2 3	Cubic capacity (gas carriers) TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.6 1 2 3	Length over all (LOA) TPQ NA Selector Minimum Maximum	Applicable 0.00 Metres 340.00 Metres
4.7 1	Beam TPQ NA Selector	Not applicable

IMO: 3a0162b5-b69f-4e46-b4a6-93bc937b73b8

		93bc937b73b8
2	Minimum	0.00
3	Maximum	0.00
4.8	Minimum parallel body length (PBL)	
1	TPQ NA Selector	Not applicable
2		0.00
4.9	Minimum PBL forward of manifold	
1.5	TPQ NA Selector	Not applicable
2		0.00
	Minimum PBL aft of manifold	
4.10 1	TPQ NA Selector	Not applicable
2	IT Q INA SElector	0.00
_		0.00
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.13	Freeboard	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.14	Manifold height above water	
1	TPQ NA Selector	Applicable
2	Minimum	6.00 Metres
3	Maximum	27.10 Metres
4.15	Manifold to shipside rail distance	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.16	Height of manifold above deck or drip tray	
1	TPQ NA Selector	Applicable
2	Minimum	0.60
3	Maximum	1.20
4	Specify whether height is from the deck or the drip tray	DRIP TRAY
4.17	Manifold spacing	
1	TPQ NA Selector	Applicable
2	Minimum	1.50
3	Maximum	3.50

4.18	Maximum air draft alongside		
1	TPQ NA Selector	Not applicable	
2		0.00	
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)		
1	TPQ NA Selector	Applicable	
2		1.50 Metric Tonnes	
4.20	Additional comments or information	Min. Distance Bridge Front To Center Manifold: 76.00 m	
5	Mooring and Berthing Information		
5.1	State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	5 TUGS AVAILABLE Tug V.B. ANIBAL 5,263 HP and 57.10 MT. Lenght:29.50 m Breadth 11.00.m Tug V.B. ASDRUBAL 5,263 HP and 57.10 MT. Lenght 29.50 m Breadth 11.00 m Tug V.B. CARTAGENA 4,162 HP and 46.00 MT. Lenght 28.00 m Breadth 11.00 m Tug V.B. GLACIAL 5,263 HP and 57.1 MT. Lenght 29.50 m Breath 11.00 m Tug V.B. TIRRENO 4,200 HP and 52 MT. Lenght 28.00 m Breath 11.00 m 4 MOORING CRAFTS AVAILABLE AMARRE 2: 160 HP and Lenght 8.5 m AMARRE 3: 90 HP and Lenght 9.0 m AMARRE 6: 210HP and Lenght 9.0 m	
5.2	Are ship's or tug's lines used?		
1	Ship/Tug	Tug's Lines	
2	Comments	As Per Pilot Instructions	
5.3	Type of fenders installed at berth		
1		Cell Type	
2	If 'Other' please specify		
5.4	State orientation of vessel alongside berth	Starboard Side To	
5.5	At buoy moorings, state which side hose is normally connected		
1		Not applicable	
2	If 'Other' please specify		
5.6	Minimum mooring arrangement	 4 Headlines 2 Forward Breastlines 2 Forward Back-Springs 4 Sternlines 2 After Breastlines 2 After Back-Springs 	
5.7	Describe any additional mooring requirements	None	
5.8	Are there any restrictions using wire mooring ropes?		
1		Yes	
2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard	

5.9	Are there any restrictions using synthetic mooring ropes?	
1		Yes
2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
5.10	Are there any restrictions on using high modulus synthetic mooring ropes?	
1		No
2	If 'yes' provide details	
5.11	Details of any specific mooring equipment required for any vessel utilising the berth	As ISGOTT
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	
1		Yes
2	If 'Yes', provide details of particular requirements regarding ETOPs.	Compulsory
5.13	Details of any shore-provided mooring equipment	No shore mooring ropes or swamped moorings are to be secured on board
5.14	Are berthing aids provided?	
1		Yes
2	If 'Yes', state type of aids	MARIMATECH Laser Berthing System
5.15	State allowable speed of approach if applicable	
1		Only Parallel Approach to Achieve Berthing
		Line
1		0.65 Km/h
5.16	Is a mooring tension monitor fitted?	Yes
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements	
1	Applicable	No
2		NOT APPLICABLE
5.19	Largest ship handled at berth to date	DS CROWN, IMO № 9179646, LOA 334,45 m.
5.20	Additional comments or information	NIL
6	Berth Equipment and Facilities	
6.1	Number, type and size of cargo transfer connections	6 Hard Arms No1 8" No2 16" No3 16" No4 16" No5 16" No6 8"
6.2	List grades handled at berth	Crude Oils/Condensates, Black Petroleum Products
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	CRUDE OIL, FUELOIL, GASOIL

6.3	State transfer rate restrictions and back pressure for each cargo grade	For discharge (all grades) max. pressure allowed is 10 kg/cm2. Max. discharging rate (Crude Oil) 10.500 cm/h Loading Rates (typical, cm/h): Gasoil C 550; Fuel Oil 550.
6.4 1 2	Are transfer connections fitted with insulation flanges? Provide details	Yes Insulation flange is located at the loading arm and tested at 6 months basis. Refer. 8.3.9 OCIMF "Design and Construction Specification for Marine Loading Arms"
6.5	State storage type for LPG	Not applicable
6.6	Describe any terminal-specific requirements for vessel manifolds	Manifold Flange Hinges in Top Position "If any"
6.7 1 2 3	Is berth fitted with a vapour manifold connection? If 'Yes' state type and size of vapour connection State cargo types for which it is required to use vapour connection (if applicable)	No
6.8	State throughput rate(s) of vapour recovery system	NOT APPLICABLE
6.9 1 2	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms? Supply details	Yes Manufactured by MIB (Italy). Ball valves closure and system release time is less than 15 sec. Manual and automatic (out of range) release system.
6.10 1 2	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship? If 'yes' provide details	No
6.11	Describe access arrangements between ship and shore.	 Shore Gangway : Hydraulically Operated (Telescopic System)
6.12 1 2	Does the berth have pollution response equipment? If 'yes' provide details	Yes Containment boom(s) Skimming equipment Absorbent materials Dispersant stocks
6.13	Additional comments or information	NIL
7	Berth Operations	
7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	Primary Dedicated VHF CH17 Backup by Voice
7.2	Is it required that terminal or shore representatives stay on board during operations?	

		930093707308
1		Yes
2	If 'Yes', state requirements including number of persons and their roles	Logistical Constraints: 1 Cargo Inspector for COW and Squeezing Operations Control
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots for continuous periods of at least 10 minutes
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		Yes
2	If 'Yes' provide full details of these restrictions	Tank cleaning is not allowed at berth by REPSOL TERMINAL Proceedings. C.O.W. is allowed (Port Captain authorization to be granted).
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		Yes
2	If 'Yes', state requirements	All cargo tanks atmospheres of vessels operating at this terminal should be gas free or inert at positive pressure with oxygen content of 8% or less by volume. For vessels loading volatile cargo, tanks to be loaded should be under inert gas, at positive pressure with oxygen content of 8% or less by volume
7.6	Is there a temperature limit for cargo handled?	
1		Yes
2	If 'Yes', state temperature limits	Max. Temperature permitted at the Ship's Manifold: +60°C Min. Temperature permitted at the Ship's Manifold: -10°C
7.7	Is it permitted for vessels to undertake double-banked operations alongside the berth?	
1		No
2	If 'Yes', state limiting criteria	
7.8	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
1		No
2	If 'Yes', provide operational details	
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1		Yes
2	Provide details	Depending on Products and Under Customs Clearance
7.10	State details regarding any environmental restrictions applicable at the berth	Boiler soot blowing, Black Smoke and Sparks emitting from Funnel Stack Not Allowed
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT

7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?	
1		Yes
2	If 'Yes', state restriction	Not permitted during handling Cargo
7.14	Additional comments or information	NIL
8	Available Services	
8.1	Are Fuel Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.2	Are Diesel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe
8.3	Are Intermediate Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.4	Is fresh water available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe, operated by Port Authority via Agent. (No Operated by REPSOL PETROLEO,S.A.)
8.5	Are slop reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	Ex-pipe
3	State capacity of slop reception facilities (if applicable)	0.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	No Allowed: Chemicals, Detergents and Cleaning Agents
8.6	Are dirty ballast reception facilities available?	
1		Yes
2	If 'Yes', state how received	Ex-pipe only in emergency. Repsol Terminal operates SBT tankers only.
3	State capacity of dirty ballast receiption facilities	0
8.7	Are engine room sludge and bilge reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	Barge: No Operated by REPSOL PETROLEO,S.A.
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Containers and Barge

8.9	Additional comments or information	NIL
9	Berth Low Temperature Impact	
9.1	What is the typical range of temperatures the terminal operates in during a winter season?	-2 TO 20 ºC
9.2	Which months of the year can ice be expected?	NONE
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	NOT APPLICABLE
9.4	State any limitations for cargo operations in sub-zero temperatures	NOT APPLICABLE
9.5	State the minimum allowable ambient temperature for safe cargo operations	NOT APPLICABLE
9.6	State the minimum temperature of cargoes handled	NOT APPLICABLE
9.7	State the minimum temperature for the emergency shut-down system to operate safely	NOT APPLICABLE
9.8 1	Does the terminal have its own resources for conducting icebreaker escort	Νο
2	If 'Yes' provide details and specify how they can be requested	
9.9	Are there icebreakers available to operate in the terminal area	
1	Specify datails (e.g. Name /IMO Nr/CPT/Dewer/Ice Class)	No
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.10 1	Does the terminal have ice-capable tugs and support craft	No
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11	Does the terminal have specific requirements for the vessel speed and	
1	manoeuvrability characteristics in ice?	No
2	If 'Yes', provide details	
9.12	Does the terminal provide its own ice navigator/advisor?	
1		No
2	If 'Yes', provide details of how the service may be requested	
9.13	Additional comments or information	NO ICING. MEDITERRANEAN WEATHER.
10	Supplementary Information	
10.1	Berth transparency	Solid Wharf
10.2 1	Specify datum used for height and depth measurements in this section	Chart Datum (CD)
2	If 'Other' please specify other	
10.3	Berth height above datum	3.50
10.4	Berth heading	090º(T) - 270º(T)
10.5	Width of the channel adjacent to the berth	450.00

10.6 Position of mooring bollards and hooks

10.6 Position of mooring bollards and hooks											
		Hook/Bol Number a		'x' dist t Face (m	o Fender)	· 'y' dist Line (m	to Target າ)	Heig	ght (m)	SWL (to	nnes)
	GER № 1		(3)	-220.00		32.00		3.50)	100.00	
	GER №2 (2)		-174.00		32.00		3.50)	150.00		
		GER № 3	(2)	-124.00		32.00		3.50)	150.00	
		GER № 7	(2)	-11.00		6.00		3.50)	150.00	
		GER № 8	(2)	-11.00		3.00		3.50)	150.00	
		GER № 9	(2)	11.00		6.00		3.50)	150.00	
		GER № 1	0 (2)	11.00		3.00		3.50)	150.00	
		GER № 4	(2)	120.00		32.00		3.50)	150.00	
		GER № 5	(2)	170.00		32.00		3.50)	150.00	
		GER № 6	(3)	216.00		32.00		3.50)	100.00	
10.7	Position of mooring	g buoys									
		Mooring Number	Buoy ID	'x' Dista Target L (m)	nce to .ine F & A	-		Heig	;ht (m)	Max. All (tonnes)	
		NIL		0.00		0.00		0.00)	0.00	
10.8	Fender Location										
		Fender ID Number	'x' Dist to Target Lir (m)		ation of I lers (m) N	Fender Width (m)	Fender Height		Fender Contact Area (m2)		
		аа	-68.00	-1.50) 4	4.00	4.00		16.00		
		bb	-21.00	-1.50) 4	4.00	4.00		16.00		
		СС	0.00	-1.50) 4	4.00	4.00		16.00		
		dd	21.00	-1.50) 4	4.00	4.00		16.00		
		ff	68.00	-1.50) 4	4.00	4.00		16.00		
10.9	Fender Reaction Da	ata									
		Fender Id	Number	Point N	0.	Compr (metre		Load	d (tonnes)		
		NO DATA		0		0.00		0.00			
10.10	Fender friction coe	fficient (μ)					().40			
10.11	State identity and h	norizontal pos	ition of loa	ding arm	IS						
		Loading Arm/Shore Connection ID Number			rdinate I	Max Excursion Surge	Max Excursi Sway	on	Max Excursion Heave		
		660-K-F20/1	7.75	4.00	2	4.60	4.60		12.80		
		660-K-F20/2	4.75	4.00	2	4.60	4.60		12.80		
		660-K-F20/3	1.75	4.00	4	4.60	4.60		12.80		
		660-K-F20/4	-1.75	4.00	4	4.60	4.60		12.80		
		660-K-F20/5	-4.75	4.00	2	4.60	4.60		12.80		
		660-K-F20/6	-7.75	4.00	2	4.60	4.60		12.80		

10.12 State loading arm operating limits

		Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
		660-K-F20/1	27.10	6.00	4.60	4.60	12.80
		660-K-F20/2	27.10	6.00	4.60	4.60	12.80
		660-K-F20/3	27.10	6.00	4.60	4.60	12.80
		660-K-F20/4	27.10	6.00	4.60	4.60	12.80
		660-K-F20/5	27.10	6.00	4.60	4.60	12.80
		660-K-F20/6	27.10	6.00	4.60	4.60	12.80
10.13	Additional commen	ts or informat	ion			NIL	



Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: E014

ReportName 4b7e853b-d71d-4f83-a62a-ca5af441968c

Terminal Name: REPSOL PETROLEO, S.A. - CARTAGENA

Terminal Port: PUERTO DE CARTAGENA

Terminal Port Authority: Autoridad Portuaria de Cartagena

Country: Spain

Berth Name: E014

13 October 2017

Berth General 1 1.1 Berth name or number E014 1.2 Berth type 1 Wharf or Quay 2 If 'Other' please specify 1.3 Terrestrial co-ordinates of manifold centreline 1 Latitude 373358 North 2 Longitude 0005731 West 1.4 Berth users for liquid and gas cargoes **REPSOL PETROLEO REPSOL BUTANO** 1.5 Has a structural survey of the berth been undertaken, including its underwater structure? 1 No 2 If 'Yes', state date of last survey 1.6 Has an engineering (mooring and fendering) analysis of berth been undertaken? 1 No 2 If 'Yes', state date of last analysis NIL 1.7 Additional comments or information 2 **Berth Approaches** 2.1 Is pilotage compulsory? 1 Yes 2 If 'Yes', state if any vessels are exempted No vessels exempted 2.2 State distance from pilot station(s) to berth Approx. 2 Miles 2.3 Is a waiting anchorage available? 1 Yes 3 If 'Yes', state distance from waiting anchorage to berth From 3 to 6 Miles 2.4 Controlling depth of water for transit to and from berth Water depth 1 11.10 Metres 2 State datum used Chart Datum (CD) 3 If 'Other' please specify datum 2.5 Date of latest survey from which transit depth has been determined 31 December 2012 2.6 Date next survey is due 31 December 2017 2.7 State Maximum Tidal Range in berth approaches 0.30 2.8 Is laden transit to and/or from the berth conducted using the tide? 1 No 2 If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr) 2.9 State details of any specific berthing and/or unberthing restrictions NOT APPLICABLE

2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	0.60 Meters
2	Percentage	5.80 Vessel static draft
3	Specify other UKC criterion where applicable	No any
2.11	Absolute maximum draught in berth approaches, if applicable	10.50
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	0.00 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	
4	Further details	NOT APPLICABLE
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	Active 60 MT
2.14	Additional comments or information	8.12 Vertical Clearance of any Bridges/Power Cables/Vertical Obstructions NOT APPLICABLE
3	Water Depth Alongside	
2 1	Minimum controlled water denth alongcide barth at chart datum	

3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	11.10 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	31 March 2012
3.3	Date next survey is due	31 December 2017
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	0.30 Meters
2	Percentage	2.90 Vessel static draft
3	Specify other UKC criterion where applicable	No any
3.5	State range of water densities at berth	
1	From	1025.00
2	То	1028.00
3	Further details	As Ordinary Survey Practice
3.6	Type of bottom alongside berth	
1		Mud
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	10.50
3.8	State maximum tidal range at berth, if applicable	0.30
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	No

3.10 1	Does the berth location experience water-level anomalies?	Νο
2	Provide details	
3.11	Additional comments or information	NIL
4	Limiting Vessel Dimensions	
4.1 1 2 3	Summer deadweight TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.2 1 2 3	Berthing displacement TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.3 1 2 3	Alongside displacement TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.4 1 2	State any deadweight/displacement exceptions TPQ NA Selector	Not applicable NIL
4.5 1 2 3	Cubic capacity (gas carriers) TPQ NA Selector Minimum Maximum	No restrictions 0.00 0.00
4.6 1 2 3	Length over all (LOA) TPQ NA Selector Minimum Maximum	Applicable 0.00 Metres 230.00 Metres
4.7 1 2 3	Beam TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.8 1 2	Minimum parallel body length (PBL) TPQ NA Selector	Not applicable 0.00
4.9 1 2	Minimum PBL forward of manifold TPQ NA Selector	Not applicable 0.00

4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	Not applicable
2		0.00
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.13	Freeboard	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.14	Manifold height above water	
1	TPQ NA Selector	Applicable
2	Minimum	2.21 Metres
3	Maximum	17.00 Metres
4.15	Manifold to shipside rail distance	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.16	Height of manifold above deck or drip tray	
1	TPQ NA Selector	Applicable
2	Minimum	0.60
3	Maximum	1.20
4	Specify whether height is from the deck or the drip tray	DRIP TRAY
4.17	Manifold spacing	
1	TPQ NA Selector	Applicable
2	Minimum	1.00
3	Maximum	0.00
4.18	Maximum air draft alongside	
1	TPQ NA Selector	Not applicable
2		0.00
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	
1	TPQ NA Selector	Applicable
2		1.50 Metric Tonnes
4.20	Additional comments or information	NIL

5 Mooring and Berthing Information

5.	1	State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	5 TUGS AVAILABLE Tug V.B. ANIBAL 5,263 HP and 57.10 MT. Lenght:29.50 m Breadth 11.00.m Tug V.B. ASDRUBAL 5,263 HP and 57.10 MT. Lenght 29.50 m Breadth 11.00 m Tug V.B. CARTAGENA 4,162 HP and 46.00 MT. Lenght 28.00 m Breadth 11.00 m Tug V.B. GLACIAL 5,263 HP and 57.1 MT. Lenght 29.50 m Breath 11.00 m Tug V.B. TIRRENO 4,200 HP and 52 MT. Lenght 28.00 m Breath 11.00 m 4 MOORING CRAFTS AVAILABLE AMARRE 2: 160 HP and Lenght 8.5 m AMARRE 3: 90 HP and Lenght 8.5 m AMARRE 5: 210 HP and Lenght 9.0 m
5.	2	Are ship's or tug's lines used?	
	1	Ship/Tug	Tug's Lines
	2	Comments	As per Pilots Instructions
5.	3 1 2	Type of fenders installed at berth If 'Other' please specify	Cell Type
5.	4	State orientation of vessel alongside berth	Either Port & Starboard Side To
5.	5 1 2	At buoy moorings, state which side hose is normally connected If 'Other' please specify	Not applicable
5.	6	Minimum mooring arrangement	2 Headlines 2 Forward Breastlines 2 Forward Back-Springs 2 Sternlines 2 After Breastlines 2 After Back-Springs
5.	7	Describe any additional mooring requirements	None
5.	8	Are there any restrictions using wire mooring ropes?	No
	2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
5.	9	Are there any restrictions using synthetic mooring ropes?	
	1		No
	2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard
5.	10	Are there any restrictions on using high modulus synthetic mooring ropes?	
	1		No
	2	If 'yes' provide details	

5.11		Details of any specific mooring equipment required for any vessel utilising the berth	As ISGOTT
5.12	L	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	Yes
2	2	If 'Yes', provide details of particular requirements regarding ETOPs.	Compulsory
5.13		Details of any shore-provided mooring equipment	No shore mooring ropes or swamped moorings are to be secured on board
5.14 1	L	Are berthing aids provided?	No
2	2	If 'Yes', state type of aids	
5.15 1 1		State allowable speed of approach if applicable	NOT APPLICABLE Knots
5.16		Is a mooring tension monitor fitted?	No
5.17		Are mooring hook quick release arrangements provided?	Yes
5.18 1 2		Chain stopper requirements Applicable	No NOT APPLICABLE
5.19		Largest ship handled at berth to date	YUHSHO 230 m IMO No. 9172739
5.20		Additional comments or information	NIL
6		Berth Equipment and Facilities	
6.1		Number, type and size of cargo transfer connections	3 Loading Arms 10" ANSI 150 manufactured by CONNEX.
6.2	2	List grades handled at berth State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Base Oils and Finished Lubricants, Biodiesel/Biosiesel Blends, Black Petroleum Products, Commercial LPG, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha, Vegetable Oils Usual products handled: GASOLINES, NAPHTHA, ETBE, GASOIL 10 PPM;
			GO C; LUBES, JET A-1, VACUUM GASOIL; FUEL OILS & VEGETABLE OIL.
6.3		State transfer rate restrictions and back pressure for each cargo grade	For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; GOA 1.100, Gasoil C 550; Jet A-1 600, Gasoline 600. VGO 550.
6.4		Are transfer connections fitted with insulation flanges?	
1		Drovido dotaila	Yes
2	2	Provide details	Insulation flange is located at the loading arm and tested at 6 months basis. Refer. 8.3.9 OCIMF "Design and Construction Specification for Marine Loading Arms"

		Ca3a1441308C
6.5	State storage type for LPG	Not applicable
6.6	Describe any terminal-specific requirements for vessel manifolds	NOT APPLICABLE
6.7 1 2 3	Is berth fitted with a vapour manifold connection? If 'Yes' state type and size of vapour connection State cargo types for which it is required to use vapour connection (if applicable)	No
6.8	State throughput rate(s) of vapour recovery system	NOT APPLICABLE
6.9 1 2	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms? Supply details	Yes 1 Manufactured by CONNEX. Ball valves closure and system release time is less than 15 sec. Manual and automatic (out of range) release system.
6.10 1 2	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship? If 'yes' provide details	No
6.11	Describe access arrangements between ship and shore.	Shore or Ship´s gangway net rigged. If shore ganway is used, service fees are to be paid.
6.12 1 2	Does the berth have pollution response equipment? If 'yes' provide details	Yes Containment boom(s) Skimming equipment Absorbent materials Dispersant stocks
6.13	Additional comments or information	NIL
7	Berth Operations	
7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	Primary Dedicated VHF CH17 Backup by Voice
7.2 1 2	Is it required that terminal or shore representatives stay on board during operations? If 'Yes', state requirements including number of persons and their roles	No
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots for continuous periods of at least 10 minutes
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	Yes

	2	If 'Yes' provide full details of these restrictions	No allowed at berth by REPSOL Proceedings. No Crude Oil operations are available at this pier.
7.5		Are there any berth specific requirements regarding tanker inerting procedures?	
	1		Yes
	2	If 'Yes', state requirements	All cargo tanks atmospheres of vessels operating at this terminal should be gas free or inert at positive pressure with oxygen content of 8% or less by volume. For vessels loading volatile cargo, tanks to be loaded should be under inert gas, at positive pressure with oxygen content of 8% or less by volume
7.6		Is there a temperature limit for cargo handled?	
	1		No
	2	If 'Yes', state temperature limits	
7.7		Is it permitted for vessels to undertake double-banked operations alongside the	
		berth?	
	1		No
	2	If 'Yes', state limiting criteria	
7.8		Is vessel required to pump water ashore or receive water on board for line	
		clearance purposes?	
	1		No
	2	If 'Yes', provide operational details	
7.9		Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
	1		Yes
	2	Provide details	Depending on Products and Under Customs
			Clearance
7.10)	State details regarding any environmental restrictions applicable at the berth	Boiler soot blowing, Black Smoke and Sparks emitting from Funnel Stack Not Allowed
7 1 1		Are there are restrictions recording the descent Culphide content in Course Tanks?	
7.11		Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	Vee
	1		Yes
	2	If 'Yes', state restriction	Reference ISGOTT
7.12		Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
	1		Yes
	2	If 'Yes', state restriction	Reference ISGOTT
7.13	1	Are there any restrictions on handling stores when a ship is moored alongside berth?	Yes
	2	If 'Yes', state restriction	Not permitted during handling Cargo
7.14		Additional comments or information	NIL
7.14	r	Additional comments of morniation	
8		Available Services	
8.1		Are Fuel Oil bunkers available?	

		ca5af441968c
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex Barge No Operated by REPSOL PETROLEO,S.A.
8.2	Are Diesel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe
8.3	Are Intermediate Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.4	Is fresh water available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe, operated by Port Authority via Agent. (No Operated by REPSOL PETROLEO,S.A.)
8.5	Are slop reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	Ex-Pipe (tank cleaning slops) or ex-barge.
3	State capacity of slop reception facilities (if applicable)	9999.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	No Allowed: Chemicals, Detergents and Cleaning Agents
8.6	Are dirty ballast reception facilities available?	
1		No
2	If 'Yes', state how received	Ex-pipe only in emergency. Repsol Terminal operates SBT tankers only.
3	State capacity of dirty ballast receiption facilities	999999
8.7	Are engine room sludge and bilge reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	Barge: No Operated by REPSOL PETROLEO,S.A.
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Containers and Barge
8.9	Additional comments or information	NIL
9	Berth Low Temperature Impact	
9.1	What is the typical range of temperatures the terminal operates in during a winter season?	-2 TO 20 ºC
9.2	Which months of the year can ice be expected?	NIL
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	NIL
9.4	State any limitations for cargo operations in sub-zero temperatures	NIL
9.5	State the minimum allowable ambient temperature for safe cargo operations	NIL

9.6	State the minimum temperature of cargoes handled	NIL
9.7	State the minimum temperature for the emergency shut-down system to operate safely	NIL
9.8 1 2	Does the terminal have its own resources for conducting icebreaker escort If 'Yes' provide details and specify how they can be requested	Νο
9.9 1 2	Are there icebreakers available to operate in the terminal area Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	No
9.10 1 2	Does the terminal have ice-capable tugs and support craft Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	Νο
9.11 1 2	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? If 'Yes', provide details	Νο
9.12 1 2	Does the terminal provide its own ice navigator/advisor? If 'Yes', provide details of how the service may be requested	Νο
9.13	Additional comments or information	NO ICING, MEDITERRANEAN WEATHER.
10	Supplementary Information	
10.1	Berth transparency	Solid Wharf
10.2 1 2	Specify datum used for height and depth measurements in this section If 'Other' please specify other	Chart Datum (CD)
10.3	Berth height above datum	2.70
10.4	Berth heading	145º(T) / - 325º(T)
10.5	Width of the channel adjacent to the berth	400.00
10.6	Position of mooring bollards and hooks	

									ca5at4419
		Hook/Bol Number a		'x' dist to Fende Face (m)		v' dist to Ta ine (m)	arget He	ight (m)	SWL (tonnes)
		A(4)		-188.00	2	1.00	2.7	0	100.00
		B(4)		-148.00	2	1.00	2.7	0	60.00
		С		-68.00	1.	.50	2.7	0	60.00
		D(2)		-68.00	12	2.00	2.7	0	60.00
		E		-30.00	1.	.50	2.7	0	60.00
		F		-10.00	1.	.50	2.7	0	60.00
		G		30.00	1.	.50	2.7	0	60.00
		Н		47.00	1.	.50	2.7	0	60.00
		I		65.00	1.	.50	2.7	0	60.00
		J(2)		100.00	14	4.00	2.7	0	100.00
		K(2)		135.00	8.	.00	2.7	0	100.00
LO.7	Position of mooring	g buoys							
		Mooring Number	Buoy ID	'x' Distance to Target Line F & (m)	A Ta	' Distance arget Line thwart (m		ight (m)	Max. Allow Load (tonnes)
		NIL		0.00	0.	.00	0.0	0	0.00
.0.8	Fender Location								
		Fender ID Number	'x' Dist to Target Lin (m)				nder eight (m)	Fender Contact Area (m2)	
		аа	-32.00	-1.35	2.30	2.7	70	6.21	
		bb	-12.00	-1.35	2.30	2.7	70	6.21	
		сс	1.00	-1.35	2.30	2.7	70	6.21	
		dd	16.00	-1.35	2.30	2.7	70	6.21	
		ee	31.00	-1.35	2.30	2.7	70	6.21	
		ff	46.00	-1.35	2.30	2.7	70	6.21	
		gg	65.00	-1.35	2.30	2.7	70	6.21	
.0.9	Fender Reaction Da	ata							
		Fender Id	Number	Point No.		ompressio netres)	on Loa	ad (tonnes)	
		NO DATA		1	0.	.00	0.0	0	
.0.10	Fender friction coe	fficient (µ)					0.20		
10.11	State identity and h	norizontal pos	ition of loa	ding arms					
		Loading Arm/Shore Connection ID Number		l Horizontal te co-ordinate Y	Max Excurs Surge		ax cursion vay	Max Excursion Heave	
		660-K-2A	-3.00	6.00	3.20	6.0	00	13.90	
		660-K-2B	0.00	6.00	3.20	6.0	00	13.90	
		660-K-2C	3.00	6.00	3.20	6.0	00	13.90	
0.12	State loading arm o	operating limit	S						

10.12 State loading arm operating limits

		Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
		660-K-2A	17.00	2.20	3.20	6.00	13.90
		660-K-2B	17.00	2.20	3.20	6.00	13.90
		660-K-2C	17.00	2.20	3.20	6.00	13.90
10.13	Additional commer	nts or informa	ition			NIL	



Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: E015

ReportName 165e912d-2e32-4b23-9948-ef0b2683f9c5

Terminal Name: REPSOL PETROLEO, S.A. - CARTAGENA

Terminal Port: PUERTO DE CARTAGENA

Terminal Port Authority: Autoridad Portuaria de Cartagena

Country: Spain

Berth Name: E015

13 October 2017

1 Berth General

1.1		Berth name or number	E015
	1 2	Berth type If 'Other' please specify	Wharf or Quay
	1 2	Terrestrial co-ordinates of manifold centreline Latitude Longitude Berth users for liquid and gas cargoes	373352 North 0005731 West REPSOL PETROLEO,S.A.
	1 2	Has a structural survey of the berth been undertaken, including its underwater structure? If 'Yes', state date of last survey	Νο
_	1 2	Has an engineering (mooring and fendering) analysis of berth been undertaken? If 'Yes', state date of last analysis	Νο
1.7		Additional comments or information	NIL
2		Berth Approaches	
	1 2	Is pilotage compulsory? If 'Yes', state if any vessels are exempted	Yes No vessels exempted
2.2		State distance from pilot station(s) to berth	Approx. 2 Miles
	1 3	Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth	Yes From 3 to 6 Miles
	1 2 3	Controlling depth of water for transit to and from berth Water depth State datum used If 'Other' please specify datum	10.60 Metres Chart Datum (CD)
2.5		Date of latest survey from which transit depth has been determined	31 December 2012
2.6		Date next survey is due	31 December 2017
2.7		State Maximum Tidal Range in berth approaches	0.30
	1 2	Is laden transit to and/or from the berth conducted using the tide? If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	Νο
2.9		State details of any specific berthing and/or unberthing restrictions	NOT APPLICABLE

2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	0.70 Meters
2	Percentage	7.10 Vessel static draft
3	Specify other UKC criterion where applicable	No any
2.11	Absolute maximum draught in berth approaches, if applicable	9.90
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	0.00 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	
4	Further details	NOT APPLICABLE
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	Active 60 MT
2.14	Additional comments or information	NIL
3	Water Depth Alongside	
3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	10.60 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	31 March 2012
3.3	Date next survey is due	31 March 2017
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	0.70 Meters
2	Percentage	7.10 Vessel static draft
3	Specify other UKC criterion where applicable	No any
3.5	State range of water densities at berth	
1	From	1025.00
2	То	1028.00
3	Further details	As Ordinary Survey Practice
3.6	Type of bottom alongside berth	
1		Mud
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	9.90
3.8	State maximum tidal range at berth, if applicable	0.30
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	No
3.10	Does the berth location experience water-level anomalies?	

		ef0b2683f9c5
1		No
2	Provide details	
3.11	Additional comments or information	NIL
4	Limiting Vessel Dimensions	
4.1	Summer deadweight	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.2	Berthing displacement	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.3	Alongside displacement	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.4	State any deadweight/displacement exceptions	
1	TPQ NA Selector	Not applicable
2		NIL
4.5	Cubic capacity (gas carriers)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.6	Length over all (LOA)	
1	TPQ NA Selector	Applicable
2	Minimum	0.00 Metres
3	Maximum	160.00 Metres
4.7	Beam	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.8	Minimum parallel body length (PBL)	
1	TPQ NA Selector	Not applicable
2		0.00
4.9	Minimum PBL forward of manifold	
1	TPQ NA Selector	Not applicable
2		0.00
4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	Not applicable

		610020651965
2		0.00
4.11 1 2 3	Bow to centre of manifold (BCM) TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.12 1 2 3 4.13 1 2 3	Stern to centre of manifold (SCM) TPQ NA Selector Minimum Maximum Freeboard TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00 Not applicable 0.00 0.00
4.14 1 2 3	Manifold height above water TPQ NA Selector Minimum Maximum	Applicable 2.00 13.00
4.15 1 2 3	Manifold to shipside rail distance TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.16 1 2 3 4	Height of manifold above deck or drip tray TPQ NA Selector Minimum Maximum Specify whether height is from the deck or the drip tray	Applicable 0.60 1.20 DRIP TRAY
4.17 1 2 3	Manifold spacing TPQ NA Selector Minimum Maximum	Applicable 1.00 0.00
4.18 1 2	Maximum air draft alongside TPQ NA Selector	Not applicable 0.00
4.19 1 2	Vessel's minimum derrick/crane Safe Working Load (SWL) TPQ NA Selector	Applicable 1.50 Metric Tonnes
4.20	Additional comments or information	10.6 Lenght over all (LOA): Max. 160.00 m considering nearby E015 occupied by another vessel 10.6 Lenght over all (LOA): Min. No Restrictions

5 Mooring and Berthing Information

5.1		State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	5 TUGS AVAILABLE Tug V.B. ANIBAL 5,263 HP and 57.10 MT. Lenght:29.50 m Breadth 11.00.m Tug V.B. ASDRUBAL 5,263 HP and 57.10 MT. Lenght 29.50 m Breadth 11.00 m Tug V.B. CARTAGENA 4,162 HP and 46.00 MT. Lenght 28.00 m Breadth 11.00 m Tug V.B. GLACIAL 5,263 HP and 57.1 MT. Lenght 29.50 m Breath 11.00 m Tug V.B. TIRRENO 4,200 HP and 52 MT. Lenght 28.00 m Breath 11.00 m 4 MOORING CRAFTS AVAILABLE AMARRE 2: 160 HP and Lenght 8.5 m AMARRE 3: 90 HP and Lenght 9.0 m AMARRE 6: 210HP and Lenght 9.0 m		
5.2		Are ship's or tug's lines used?			
	1	Ship/Tug	Tug's Lines		
	2	Comments	As Per Pilot Instructions		
5.3		Type of fenders installed at berth			
	1		Tyre fenders		
	2	If 'Other' please specify			
5.4		State orientation of vessel alongside berth	Either Port & Starboard Side To		
5.5		At buoy moorings, state which side hose is normally connected			
	1		Not applicable		
	2	If 'Other' please specify			
5.6		Minimum mooring arrangement	2 Headlines 1 Forward Back-Spring 2 Sternlines 1 After Back-Spring		
5.7		Describe any additional mooring requirements	None		
5.8		Are there any restrictions using wire mooring ropes?			
	1		Yes		
	2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard		
5.9		Are there any restrictions using synthetic mooring ropes?			
	1		Yes		
	2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	Mooring Lines of different materials not to be used on the same Hook or Shore Bollard		
5.10)	Are there any restrictions on using high modulus synthetic mooring ropes?			
	1		No		
	2	If 'yes' provide details			
5.11	L	Details of any specific mooring equipment required for any vessel utilising the berth	As ISGOTT		

5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?					
1		Yes				
2	If 'Yes', provide details of particular requirements regarding ETOPs.	Compulsory				
5.13	Details of any shore-provided mooring equipment	No shore mooring ropes or swamped moorings are to be secured on board				
5.14	Are berthing aids provided?					
1		No				
2	If 'Yes', state type of aids					
5.15	State allowable speed of approach if applicable					
1		NOT APPLICABLE				
1		Knots				
5.16	Is a mooring tension monitor fitted?	No				
5.17	Are mooring hook quick release arrangements provided?	No				
5.18	Chain stopper requirements					
1	Applicable	No				
2		NOT APPLICABLE				
5.19	Largest ship handled at berth to date	EBERHARDT ARCTIC; IMO 9251676, 185 m.				
5.20	Additional comments or information	NIL				
6	Berth Equipment and Facilities					
6.1	Number, type and size of cargo transfer connections	2 Loading Arms 8" ANSI 150 (Manufactured				
6.0		by WOODFIELD)				
6.2	List grades handled at berth	by WOODFIELD) Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha				
6.2 2		Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and				
	List grades handled at berth State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded	Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha BASE OIL SN-80, 100, 150, 500, BS, MES,				
2	List grades handled at berth State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	 Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha BASE OIL SN-80, 100, 150, 500, BS, MES, GASOLINE, NAFTA, GOC, JET A-1, ETBE. For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; GOA 1.100, Gasoil C 550; Jet A-1 600, 				
6.3	List grades handled at berth State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1). State transfer rate restrictions and back pressure for each cargo grade	 Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha BASE OIL SN-80, 100, 150, 500, BS, MES, GASOLINE, NAFTA, GOC, JET A-1, ETBE. For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; GOA 1.100, Gasoil C 550; Jet A-1 600, 				
2 6.3 6.4	List grades handled at berth State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1). State transfer rate restrictions and back pressure for each cargo grade	 Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha BASE OIL SN-80, 100, 150, 500, BS, MES, GASOLINE, NAFTA, GOC, JET A-1, ETBE. For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; GOA 1.100, Gasoil C 550; Jet A-1 600, Gasoline 600. 				
2 6.3 6.4 1	List grades handled at berth State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1). State transfer rate restrictions and back pressure for each cargo grade Are transfer connections fitted with insulation flanges?	Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha BASE OIL SN-80, 100, 150, 500, BS, MES, GASOLINE, NAFTA, GOC, JET A-1, ETBE. For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; GOA 1.100, Gasoil C 550; Jet A-1 600, Gasoline 600. Yes Insulation flange is located at the loading arm				
2 6.3 6.4 1 2	List grades handled at berth State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1). State transfer rate restrictions and back pressure for each cargo grade Are transfer connections fitted with insulation flanges? Provide details	Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha BASE OIL SN-80, 100, 150, 500, BS, MES, GASOLINE, NAFTA, GOC, JET A-1, ETBE. For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; GOA 1.100, Gasoil C 550; Jet A-1 600, Gasoline 600. Yes Insulation flange is located at the loading arm and tested at 6 months basis.				
2 6.3 6.4 1 2 6.5	List grades handled at berth State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1). State transfer rate restrictions and back pressure for each cargo grade Are transfer connections fitted with insulation flanges? Provide details State storage type for LPG	 Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha BASE OIL SN-80, 100, 150, 500, BS, MES, GASOLINE, NAFTA, GOC, JET A-1, ETBE. For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; GOA 1.100, Gasoil C 550; Jet A-1 600, Gasoline 600. Yes Insulation flange is located at the loading arm and tested at 6 months basis. Not applicable 				
2 6.3 6.4 1 2 6.5 6.6	List grades handled at berth State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1). State transfer rate restrictions and back pressure for each cargo grade Are transfer connections fitted with insulation flanges? Provide details State storage type for LPG Describe any terminal-specific requirements for vessel manifolds	 Base Oils and Finished Lubricants, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha BASE OIL SN-80, 100, 150, 500, BS, MES, GASOLINE, NAFTA, GOC, JET A-1, ETBE. For discharge (all grades) max. pressure allowed is 10 kg/cm2. Loading Rates (typical, cm/h): Naphtha 1.100; GOA 1.100, Gasoil C 550; Jet A-1 600, Gasoline 600. Yes Insulation flange is located at the loading arm and tested at 6 months basis. Not applicable 				

3	3 State cargo types for which it is required to use vapour connection (if applicable)					
6.8	State throughput rate(s) of vapour recovery system	NOT APPLICABLE				
6.9 1 2	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms? Supply details	Yes Manufactured by WOODFIELD. Ball valves closure and system release time is less than 15 sec. Manual and automatic (out of range) release system.				
6.10 1 2	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship? If 'yes' provide details	No				
6.11	Describe access arrangements between ship and shore.	Ship´s gangway net rigged				
6.12 1 2	Does the berth have pollution response equipment? If 'yes' provide details	Yes Containment boom(s) Skimming equipment Absorbent materials Dispersant stocks				
6.13	Additional comments or information	NIL				
7	Berth Operations					
7 7.1	Berth Operations What is the primary and backup communication system between ship and terminal during cargo operations?	Primary Dedicated VHF CH17 Backup by Voice				
	What is the primary and backup communication system between ship and	-				
7.17.21	What is the primary and backup communication system between ship and terminal during cargo operations? Is it required that terminal or shore representatives stay on board during operations?	Backup by Voice				
7.1 7.2 1 2	What is the primary and backup communication system between ship and terminal during cargo operations?Is it required that terminal or shore representatives stay on board during operations?If 'Yes', state requirements including number of persons and their rolesSpecify weather/environmental restrictions for stopping cargo operations,	Backup by Voice No STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots				
 7.1 7.2 1 2 7.3 7.4 1 	What is the primary and backup communication system between ship and terminal during cargo operations?Is it required that terminal or shore representatives stay on board during operations?If 'Yes', state requirements including number of persons and their rolesSpecify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	Backup by Voice No STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots for continuous periods of at least 10 minutes Yes				
 7.1 7.2 1 2 7.3 7.4 1 	What is the primary and backup communication system between ship and terminal during cargo operations?Is it required that terminal or shore representatives stay on board during operations?If 'Yes', state requirements including number of persons and their rolesSpecify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	Backup by Voice No STOPPING CARGO: Wind 30 Knots for continuous periods of at least 10 minutes DISCONNECTING HARD ARMS: Wind 35 Knots for continuous periods of at least 10 minutes Yes No allowed at berth by REPSOL Proceedings. No Crude Oil operations are available at this				

IMO: 165e912d-2e32-4b23-9948ef0b2683f9c5

2	If 'Yes', state requirements	All cargo tanks atmospheres of vessels operating at this terminal should be gas free or inert at positive pressure with oxygen content of 8% or less by volume. For vessels loading volatile cargo, tanks to be loaded should be under inert gas, at positive pressure with oxygen content of 8% or less by volume	
7.6	Is there a temperature limit for cargo handled?		
1		No	
2	If 'Yes', state temperature limits		
7.7	Is it permitted for vessels to undertake double-banked operations alongside the		
1	berth?	No	
2	If 'Yes', state limiting criteria		
7.8	Is vessel required to pump water ashore or receive water on board for line		
1	clearance purposes?	No	
2	If 'Yes', provide operational details	No	
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?		
1.5	can the berth be used for Ship-to-Ship transfers using terminal facilities:	Yes	
2	Provide details	Depending on Products and Under Customs Clearance	
7.10	State details regarding any environmental restrictions applicable at the berth	Boiler soot blowing, Black Smoke and Sparks emitting from Funnel Stack Not Allowed	
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?		
1		Yes	
2	If 'Yes', state restriction	Reference ISGOTT	
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?		
1	If 'Yes', state restriction	Yes Reference ISGOTT	
7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?		
1		Yes	
2	If 'Yes', state restriction	Not permitted during handling Cargo	
7.14	Additional comments or information	NIL	
8	Available Services		
8.1	Are Fuel Oil bunkers available?		
1		No	
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)		
8.2	Are Diesel Oil bunkers available?	No.	
1 2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Yes Ex-Pipe	
Z	in tes, state now delivered (e.g. LX-ripe, Daige, lluck)	LAT INC	

IMO: 165e912d-2e32-4b23-9948ef0b2683f9c5

8.3	Are Intermediate Oil bunkers available?						
1		No					
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)						
8.4	Is fresh water available?						
1 2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Yes Ex-Pipe, operated by Port Authority via Agent.					
		(No Operated by REPSOL PETROLEO,S.A.)					
8.5	Are slop reception facilities available?						
1	If Was' state how received (e.g. Ev. Dine, herge, truck)	Yes					
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck) State capacity of slop reception facilities (if applicable)	Ex-Pipe (tank cleaning slops) or ex-barge 0.00 Cubic metres					
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents,	No Allowed: Chemicals, Detergents and					
	cleaning agents)	Cleaning Agents					
8.6	Are dirty ballast reception facilities available?						
1		Yes					
2	If 'Yes', state how received	Ex-pipe only in emergency. Repsol Terminal operates SBT tankers only.					
3	State capacity of dirty ballast receiption facilities	0					
8.7	Are engine room sludge and bilge reception facilities available?						
1		Yes					
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	Barge: No Operated by REPSOL PETROLEO,S.A.					
8.8	Are garbage reception facilities available at the berth.						
1		Yes					
2	If 'Yes', provide details	Containers and Barge					
8.9	Additional comments or information	NIL					
9	Berth Low Temperature Impact						
9.1	What is the typical range of temperatures the terminal operates in during a winter season?	-2 TO 20					
9.2	Which months of the year can ice be expected?	NO ONE					
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	NOT APPLICABLE					
9.4	State any limitations for cargo operations in sub-zero temperatures	NOT APPLICABLE					
9.5	State the minimum allowable ambient temperature for safe cargo operations	NOT APPLICABLE					
9.6	State the minimum temperature of cargoes handled	NOT APPLICABLE					
9.7	State the minimum temperature for the emergency shut-down system to operate safely	NOT APPLICABLE					
9.8	Does the terminal have its own resources for conducting icebreaker escort						
1 2	If 'Yes' provide details and specify how they can be requested	No					

9.9	Are there icebreakers available to operate in the terminal area							
1 2								
9.10	Does the terminal have ice-capable tugs and support craft							
1	No							
2	Specify details (e.g. N	lame/IMO Nr/GRT/Po						
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?							
1	manoeuvrability chara		No					
2	If 'Yes', provide detai	ls						
9.12	Does the terminal pro	vide its own ice navi	gator/advisor?					
1					No			
2	lf 'Yes', provide detai	Is of how the service	may be requested					
9.13	Additional comments	or information			NO ICING, MEDITERR	ANEAN WEATHER.		
10	Supplementary In	formation						
10.1	Berth transparency				Solid Wharf			
10.2	Specify datum used fo	or height and depth m	neasurements in this	section				
1		· · · · ·			Chart Datum (CD)			
2	If 'Other' please spec							
10.3	Berth height above da	itum			2.70			
10.4	Berth heading				057º(T) - 237º(T)			
10.5	Width of the channel				200.00			
10.6	Position of mooring be							
		Hook/Bollard ID Number and Type	'x' dist to Fender Face (m)	'y' dist to Targe Line (m)	et Height (m)	SWL (tonnes)		
		А	-94.00	2.50	2.70			
		В	-69.00	2.50	2.70			
		С	44.00	2.50	2.70			
		D	19.00	2.50	2.70			
		E	6.00	2.50	2.70			
		F	31.00	2.50	2.70			
		G	56.00	2.50	2.70			
		Н	81.00	2.50	2.70			
10.7	Position of mooring b	-						
		Mooring Buoy ID Number	'x' Distance to Target Line F & A (m)	'y' Distance to Target Line athwart (m)	Height (m)	Max. Allow Load (tonnes)		
		NIL	0.00	0.00	0.00	0.00		
10.8	Fender Location							

10.9 Fender Reaction Data

 ender Id Number	Point No.	Compression (metres)	Load (tonnes)
CYLINDRICAL ENDER	1	0.40	250.00
Cylindrical Ender	2	0.45	300.00
Cylindrical Ender	3	0.52	325.00
CYLINDRICAL ENDER	4	0.60	340.00

0.40

10.10 Fender friction coefficient (μ)

10.11 State identity and horizontal position of loading arms

		Loading Arm/Shore Connection ID Number		Horizontal co-ordinate Y	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
		660-K-F15/A	-1.75	4.50	4.50	4.60	13.90
		660-K-F15/B	1.75	4.50	4.50	4.60	13.90
10.12	State loading arm o	perating limits	5				
		Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
		660-K-F15/A	13.00	2.00	4.50	4.60	13.90
		660-K-F15/B	13.00	2.00	4.50	4.60	13.90
10.13	Additional commen	ts or informat	ion			NIL	