

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

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

4

City

			91f27a9b02fb
	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
3.5		Terminal operator, if different from owner	REPSOL PETROLEO,S.A.
3.6		Name of first point of contact for terminal operator	Jesus Novo Aparicio
3.7		Terminal operator full style contact address	
	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	30350
	7	Phone	+34968129398
	8	Fax	+34968129496
	9	Email	rpcartagenapuerto@repsol.com
	10	Website	www.repsol.energy
4		TDO Accountability	
7		TPQ Accountability	
4.1		Name and title of person completing this TPQ	Jesus Novo & José Vilas
		·	Jesus Novo & José Vilas
4.1	1	Name and title of person completing this TPQ	Jesus Novo & José Vilas Edificio Terminal Maritimo Repsol
4.1	1 2	Name and title of person completing this TPQ Full style contact details of person completing this TPQ	
4.1		Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1	Edificio Terminal Maritimo Repsol
4.1	2	Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1 Address Line 2	Edificio Terminal Maritimo Repsol Terminal de Graneles Líquídos (TGL)
4.1	2	Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1 Address Line 2 Address Line 3	Edificio Terminal Maritimo Repsol Terminal de Graneles Líquídos (TGL) Valle de Escombreras S/N
4.1	2 3 4	Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1 Address Line 2 Address Line 3 City	Edificio Terminal Maritimo Repsol Terminal de Graneles Líquídos (TGL) Valle de Escombreras S/N Cartagena
4.1	2 3 4 5	Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1 Address Line 2 Address Line 3 City County/State	Edificio Terminal Maritimo Repsol Terminal de Graneles Líquídos (TGL) Valle de Escombreras S/N Cartagena Murcia/Spain
4.1	2 3 4 5 6	Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1 Address Line 2 Address Line 3 City County/State Postcode/Zipcode	Edificio Terminal Maritimo Repsol Terminal de Graneles Líquídos (TGL) Valle de Escombreras S/N Cartagena Murcia/Spain 30350
4.1	2 3 4 5 6 7	Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1 Address Line 2 Address Line 3 City County/State Postcode/Zipcode Phone	Edificio Terminal Maritimo Repsol Terminal de Graneles Líquídos (TGL) Valle de Escombreras S/N Cartagena Murcia/Spain 30350 +34 968 129 398; +34 968 129 494
4.1	2 3 4 5 6 7 8	Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1 Address Line 2 Address Line 3 City County/State Postcode/Zipcode Phone Fax	Edificio Terminal Maritimo Repsol Terminal de Graneles Líquídos (TGL) Valle de Escombreras S/N Cartagena Murcia/Spain 30350 +34 968 129 398; +34 968 129 494 +34 968 129 496
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4.1 4.2	2 3 4 5 6 7 8	Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1 Address Line 2 Address Line 3 City County/State Postcode/Zipcode Phone Fax Email Port Facility Security Officer Details	Edificio Terminal Maritimo Repsol Terminal de Graneles Líquídos (TGL) Valle de Escombreras S/N Cartagena Murcia/Spain 30350 +34 968 129 398; +34 968 129 494 +34 968 129 496
4.1 4.2	2 3 4 5 6 7 8 9	Name and title of person completing this TPQ Full style contact details of person completing this TPQ Address Line 1 Address Line 2 Address Line 3 City County/State Postcode/Zipcode Phone Fax Email Port Facility Security Officer Details	Edificio Terminal Maritimo Repsol Terminal de Graneles Líquídos (TGL) Valle de Escombreras S/N Cartagena Murcia/Spain 30350 +34 968 129 398; +34 968 129 494 +34 968 129 496 jvilasg@repsol.com; jmnovoa@repsol.com
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Cartagena

Additional comments or information

6.3

	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

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

1 Berth General

1.1 Berth name or number
1.2 Berth type
1 Wharf or Quay

2 If 'Other' please specify

1.3 Terrestrial co-ordinates of manifold centreline

1 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 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 NOT APPLICABLE

2 Berth Approaches

1

2.1 Is pilotage compulsory?

1 Yes

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?

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 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	0.80 Meters
2	Percentage	7.40 Vessel static draft
3	Specify other UKC criterion where applicable	No any
2.11	Absolute maximum draught in berth approaches, if applicable	10.80
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	11.60 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	0.80 Meters
2	Percentage	7.40 Vessel static draft
3	Specify other UKC criterion where applicable	NIL
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	10.80
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?	

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1		No
2	Provide details	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	Berthing displacement TPQ NA Selector Minimum Maximum Alongside displacement TPQ NA Selector	No restrictions 0.00 0.00 No restrictions
2	Minimum Maximum	0.00
4.4 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	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	Minimum PBL aft of manifold TPQ NA Selector	No restrictions

		U2D//tc38/U8
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	Applicable
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 2		- CC	
5.3	1	Type of fenders installed at berth	Tura for dans
	1	If !Other! places specific	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	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	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 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 1 2	Are berthing aids provided? If 'Yes', state type of aids	No
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 1 2	Chain stopper requirements Applicable	No 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?	Yes

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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	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)	NOT 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 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	16 hard and defects	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?	
1	ache i di anno	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: +80°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	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	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 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	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	manoeuviability characteristics in ite:	No
2	If 'Yes', provide details	
9.12	Does the terminal provide its own ice navigator/advisor?	
1 2	If 'Yes', provide details of how the service may be requested	No
	Additional comments or information	No ice restrictions.
9.13	Additional comments of information	INO ICE LESCUICUOIIS.
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)
10.3		2.70
	Berth height above datum Porth heading	
10.4	Berth heading	140º(T) - 320º(T)

10.5	Width of the channel adjacent to the berth 150.00									
10.6	Position of mooring bollards and hooks									
		Hook/Bol Number a		'x' dist to Fende Face (m)	er	'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
		Α		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
		Е		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
10.7	Position of mooring	g buoys								
		Mooring Number	Buoy ID	'x' Distance to Target Line F & (m)	Α	'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 Lir (m)	Elevation of ne Fenders (m)			Fender Height		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	

								02b77fc38708
		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	Number	Point No.	Compre (metres		oad (tonnes)	
		CYLINDRI FENDER	CAL	1	0.40	2	250.00	
		CYLINDRI FENDER	CAL	2	0.45	3	300.00	
		CYLINDRI FENDER	CAL	3	0.52	3	25.00	
		CYLINDRI FENDER	CAL	4	0.60	3	40.00	
10.10	Fender friction coef	fficient (μ)				0.4	10	
10.11	State identity and h	orizontal pos	ition of load	ing arms				
		Loading Arm/Shore Connection ID Number		Horizontal e 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 Bud PLICABLE	oys NOT



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

1 Berth General

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	272250 N
	1 2	Latitude Longitude	373359 North 0005729 West
1.4	_	Berth users for liquid and gas cargoes	REPSOL PETROLEO
		bertin asers for inquite unite gas eargoes	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	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
2.3		Is a waiting anchorage available?	Approx. 2 Willes
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	14.10 Metres
	2	State datum used If 'Other' please specify datum	Chart Datum (CD)
2 E	3		31 December 2012
2.5		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	1	Is laden transit to and/or from the berth conducted using the tide?	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	0.90 Meters
2	Percentage	6.80 Vessel static draft
3	Specify other UKC criterion where applicable	No any
2.11	Absolute maximum draught in berth approaches, if applicable	13.20
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	14.10 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	0.90 Centimeters
2	Percentage	6.80 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	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

			110330320313
3.10	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	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 TPQ NA Selector	Applicable
1 2	Minimum	0.00
3	Maximum	3.60
3		3.00
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		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 Headlines2 Forward Breastlines2 Forward Back-Springs2 Sternlines2 After Breastlines2 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?	Yes

		110390320913
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	Is berth fitted with a vapour manifold connection?	
1		No
2	If 'Yes' state type and size of vapour connection State cargo types for which it is required to use vapour connection (if	
3	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	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	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.	Shore or Ship's gangway net rigged. If shore ganway is used, service fees are to be paid.
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?	N.
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	4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	V
	2	If 'Yes' provide full details of these restrictions	Yes No allowed at berth by REPSOL Proceedings. No Crude Oil operations are available at this pier.
7.5	1	Are there any berth specific requirements regarding tanker inerting procedures?	Yes
	1 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 2	Is there a temperature limit for cargo handled? If 'Yes', state temperature limits	No
7.7		Is it permitted for vessels to undertake double-banked operations alongside the	
	1 2	berth? If 'Yes', state limiting criteria	No
7.8	1 2	Is vessel required to pump water ashore or receive water on board for line clearance purposes? If 'Yes', provide operational details	No
7.9	1 2	Can the berth be used for Ship-to-Ship transfers using terminal facilities? Provide details	Yes 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	1 2	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks? If 'Yes', state restriction	Yes Reference ISGOTT
7.12	2 1 2	Are there any restrictions regarding Mercaptan content in Cargo Tanks? If 'Yes', state restriction	Yes Reference ISGOTT
7.13	1 2	Are there any restrictions on handling stores when a ship is moored alongside berth? If 'Yes', state restriction	Yes 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)
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

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?	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	Does the terminal have its own resources for conducting icebreaker escort	
1	If 'Yes' provide details and specify how they can be requested	No
2		
9.9	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	manocaviability 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	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 2	If 'Other' please specify other	Chart Datum (CD)
		2.70
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	

											13303203
		Hook/Bol Number a		'x' dist to F Face (m)	ender	'y' dist t Line (m	o Target)	Hei	ght (m)	SWL (tonnes	5)
		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	
10.7	Position of mooring	g buoys									
		Mooring Number	Buoy ID	'x' Distance Target Line (m)		'y' Dista Target I athwar	Line	Hei	ght (m)	Max. Allow (tonnes)	Load
		NIL		0.00		0.00		0.00)	0.00	
10.8	Fender Location										
		Fender ID Number	'x' Dist to Target Lin (m)	Elevatione Fenders	on of Fe s (m) W		Fender Height	(m)	Fender Contact Area (m2)		
		aa	-77.00	-1.35	2.	.30	2.70		6.21		
		bb	-60.00	-1.35	2.	.30	2.70		6.21		
		СС	-45.00	-1.35	2.	.30	2.70		6.21		
		dd	-28.00	-1.35	2.	.30	2.70		6.21		
		ee	-14.00	-1.35	2.	.30	2.70		6.21		
		ff	2.00	-1.35	2.	.30	2.70		6.21		
		gg	18.00	-1.35	2.	.30	2.70		6.21		
.0.9	Fender Reaction Da	ata									
		Fender Id	Number	Point No.		Compre (metres		Load	d (tonnes)		
		NO DATA		1		0.00		0.00)		
10.10	Fender friction coef	fficient (μ)					C	.20			
0.11	State identity and h	norizontal posi	ition of loa	ding arms							
		Loading Arm/Shore Connection ID Number		l Horizor te co-ordi Y	nate Ex	lax xcursion urge	Max Excursion Sway	on	Max Excursion Heave		
		660-K-3A	4.00	3.00	3.	.20	6.00		13.90		
		660-K-F13/2		3.00		.20	6.00		13.90		
.0.12	State loading arm o	perating limit	S								
		Loading Arm ID Number	Max Op Height	Min Op Height	Ex	lax xcursion urge	Max Excursion 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			NI	<u>L</u>



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

2.9

State details of any specific berthing and/or unberthing restrictions

1		Berth General	
1.1		Berth name or number	E016
1.2	1 2	Berth type If 'Other' please specify	Wharf or Quay
1.3	1 2	Terrestrial co-ordinates of manifold centreline Latitude Longitude	373349 North 0005737 West
1.4		Berth users for liquid and gas cargoes	REPSOL PETROLEO,S.A.; ILBOC; MASOL, RYLESA.
1.5	1 2	Has a structural survey of the berth been undertaken, including its underwater structure? If 'Yes', state date of last survey	No
1.6	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	NIL
2		Berth Approaches	
2.1	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
2.3	1 3	Is a waiting anchorage available? 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	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
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)	No

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?	

		20e2f9c53	3094
1		No	
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 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 160.00 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 TPQ NA Selector	Not applicable	

		20e2f9c53094
2		0.00
4.11	Bow to centre of manifold (BCM) TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
		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	Not applicable
2	Minimum	0.00
3	Maximum	0.00
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	Not applicable
2	Minimum	1.00
3	Maximum	0.00
4	Specify whether height is from the deck or the drip tray	DRIP TRAY
4.17	Manifold spacing	Amaliankla
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	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

HP and 57.10 MT. 11.00.m 11.00 m 162 HP and 46.00 MT. 11.00 m HP and 57.1 MT. 11.00 m HP and 52 MT. Lenght AILABLE Lenght 8.5 m. Lenght 9.0 m Lenght 9.0 m
Side To
Side To ent materials not to be or Shore Bollard
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I: H L E L L

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	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	Provide details	Insulation Flange between Hoses
6.5	State storage type for LPG	Not applicable
6.6	Describe any terminal-specific requirements for vessel manifolds	NOT APPLICABLE
6.7	Is berth fitted with a vapour manifold connection?	
1		No
	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	No

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	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		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?	
1 2	If 'Yes', state requirements including number of persons and their roles	No
2		
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?	v
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? If 'Yes', state temperature limits	No
7.7	1	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 clearance purposes?	
	1	cicurance purposes:	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 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
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.2		Are Diesel Oil bunkers available?	
	1	If Wash state how delivered (e.g. Ev. Dine, horge truck)	Yes
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	Ex-Pipe
8.3		Are Intermediate Oil bunkers available?	Ma
	1	If Voc' state how delivered to a Ev Dine harge truck	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. 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
9.2		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 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

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2	Specify details (e.g. N	Name/IMO Nr/GRT/Po	ower/Ice Class)			
9.10	Does the terminal have	ve ice-capable tugs an	nd support craft			
1					No	
2	Specify details (e.g. N	Name/IMO Nr/GRT/Po	ower/Ice Class)			
9.11	Does the terminal have		nts for the vessel spe	ed and		
1	manoeuvrability char	acteristics in ice?			No	
2	If 'Yes', provide deta	ils				
9.12	Does the terminal pro	ovide its own ice navig	gator/advisor?			
1					No	
2	If 'Yes', provide deta	ils of how the service	may be requested			
9.13	Additional comments	or information			NO ICING, MEDITERR	ANEAN WEATHER.
10	Supplementary In	formation				
		TOTTIGETOT!			Solid Wharf	
10.1	Berth transparency				Solid Whari	
10.2	Specify datum used for	or height and depth m	neasurements in this	section	Chart Datum (CD)	
2	If 'Other' please spec	cify other			Chart Datum (CD)	
10.3	Berth height above da				2.70	
10.4	Berth heading				057º(T) - 237º(T)	
10.5	Width of the channel	adjacent to the berth			200.00	
					200.00	
10.6	Position of mooring b	Hook/Bollard ID	'x' dist to Fender	'y' dist to Targe	t Hoight (m)	SWL (tonnes)
		Number and Type	Face (m)	Line (m)	t Height (III)	SWL (tollies)
		Α	-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 G	38.00 54.00	2.50 2.50	2.70 2.70	
		н	63.00	2.50	2.70	
		1	88.00	2.50	2.70	
10.7	Position of mooring b	uoys				
	o .	Mooring Buoy ID Number	'x' Distance to Target Line F & A	'y' Distance to Target Line	Height (m)	Max. Allow Load (tonnes)
		NIII	(m)	athwart (m)	0.00	0.00
		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 Da	ta					
		Fender Id	Number Po	oint No.	Compre (metres		ad (tonnes)
		CYLINDRI FENDER	CAL 1		0.40	25	0.00
		CYLINDRI FENDER	CAL 2		0.45	30	0.00
		CYLINDRI FENDER	CAL 3		0.52	32	5.00
		CYLINDRI FENDER	CAL 4		0.60	34	0.00
10.10	Fender friction coef	ficient (μ)				0.40	
10.11	State identity and h	orizontal posi	tion of loadir	ig arms			
		Loading Arm/Shore Connection ID Number		Horizontal co-ordinate Y	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
		HOSES	0.00	0.00	0.00	0.00	0.00
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
		HOSES	0.00	0.00	0.00	0.00	0.00
10.13	Additional commen	ts or informat	ion			PIER	DPERATIONS ARE CARRIED OUT AT THIS BY REPSOL PETROLEO EXCEPT IN VERY CIAL 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

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	Langitude	373403 North 0005755 West
2	Longitude	
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		Yes
2	If 'Yes', state date of last analysis	31 December 2012
1.7	Additional comments or information	NIL
2	Berth Approaches	
2.1	Is pilotage compulsory?	
1	If Week state if any weekle are everywheek	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?	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	21.00 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	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
	- 11	

Minimum parallel body length (PBL)

TPQ NA Selector

4.8

1

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

Applicable

		298ab2a017a0
2		74.00 Metres
4.9 1 2	Minimum PBL forward of manifold TPQ NA Selector	Not applicable
4.10 1 2	Minimum PBL aft of manifold TPQ NA Selector	Not applicable 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	Stern to centre of manifold (SCM) TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.13 1 2 3	Freeboard TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.14 1 2 3	Manifold height above water TPQ NA Selector Minimum Maximum	Applicable 5.10 Metres 23.00 Metres
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	Maximum air draft alongside TPQ NA Selector Vessells minimum derrick/grane Sefe Working Load (SWL)	Not applicable 0.00
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	

		250802801780
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 5: 210 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?	0
1	Ship/Tug	Tug's Lines
2	Comments	As Per Pilots Instructions
5.3	Type of fenders installed at berth	
1		Wooden Piles or Wooden Panel Fenders
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 Headlines2 Forward Breastlines2 Forward Back-Springs4 Sternlines2 After Breastlines2 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?	Wes
1 2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	Yes 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?	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		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	DOCKMASTER Laser Berthing System
5.15	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
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Oils/Condensates, Naphtha 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;
6.4	Are transfer connections fitted with insulation flanges?	

		230002001700
1		Yes
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 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	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	w.
1		Yes
2	Supply details	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		No
2	If 'yes' provide details	
6.11	Describe access arrangements between ship and shore.	Shore Gangway: Hydraulically Operated (Telescopic System) Service fees are to be paid.
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?	
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?	v
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

		230802801780
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?	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)	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 20ºC
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	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	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		No
2	If 'Yes', provide details	
9.12	Does the terminal provide its own ice navigator/advisor?	No
1 2	If 'Yes', provide details of how the service may be requested	No
9.13	Additional comments or information	NO ICING, MEDITERRANEAN WEATHER.
		,
10	Supplementary Information	
10.1	Berth transparency	Piled Jetty -Inside Inner Harbor-
10.2	Specify datum used for height and depth measurements in this section	Chart Datum (CD)
1 2	If 'Other' please specify other	Chart Datum (CD)
10.3	Berth height above datum	2.70
10.4	Berth heading	140º(T) - 320º(T)
10.5	Width of the channel adjacent to the berth	320.00
10.6	Position of mooring bollards and hooks	220.00
10.0	1 ostaon of mooning bondras and nooks	

											23	000200) <u> </u>
		Hook/Bo Number		'x' dist to Fend Face (m)	er	'y' dist t Line (m	o Target)	Heig	ght (m)	SW	'L (tonne	:s)	
		A(2)		-192.00		33.00		2.70)	100	0.00		
		B(2)		-142.00		33.00		2.70)	100	0.00		
		C(2)		-101.00		33.00		2.70)	100	0.00		
		D(2)		-63.00		2.00		6.50)	100	0.00		
		E(2)		-30.00		2.00		5.00)	100	0.00		
		F(2)		35.00		2.00		5.00)	100	0.00		
		G(2)		65.00		2.00		6.50)	100	0.00		
		H(2)		105.00		33.00		2.70)	100	0.00		
		I(2)		180.00		33.00		2.70)	100	0.00		
		J(2)		234.00		27.00		2.70)	100	0.00		
10.7	Position of mooring	g buoys											
		Mooring Number	Buoy ID	'x' Distance to Target Line F & (m)	ιA	'y' Dista Target L athwart	ine	Heig	ght (m)		x. Allow nnes)	Load	
		NIL		0.00		0.00		0.00)	0.0	0		
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)				
		aa	-60.00	0.55	5.0	0	6.50		32.50				
		bb	-30.00	-0.20	3.5	0	5.00		17.50				
		СС	35.00	-0.20	3.5	0	5.00		17.50				
		dd	65.00	0.55	5.0	0	6.50		32.50				
10.9	Fender Reaction Da	ata											
		Fender Id	d Number	Point No.		Compre (metres		Load	d (tonnes)				
		NO DATA	\	0		0.00		0.00)				
10.10	Fender friction coe	fficient (μ)					C	.40					
10.11	State identity and h	norizontal pos	ition of load	ding arms									
		Loading Arm/Shore Connection ID Number		l Horizontal te co-ordinate Y	Ma Exc Sur	cursion	Max Excursion 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

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



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

_	Bertin General	
1.1	Berth name or number	E012
1.2	Berth type	
1		Wharf or Quay
2	If 'Other' please specify	
1.3	Terrestrial co-ordinates of manifold centreline	
1 2	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
1.5	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	under cakeri:	No
2	If 'Yes', state date of last analysis	
1.7	Additional comments or information	Berth used for LPG cargoes.
2	Berth Approaches	
2.1	Is pilotage compulsory?	
1	If IV-el abobe if any consoler an account of	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?	Yes
3	If 'Yes', state distance from waiting anchorage to berth	Approx. 3 Miles
2.4	Controlling depth of water for transit to and from berth	
1		8.60 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 March 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	
	L Value	0.60 Meters
	2 Percentage	7.50 Vessel static draft
	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	
	L Vertical clearance	0.00 Metres
:	2 State datum used	Chart Datum (CD)
:	If 'Other' specify other datum used	
	Further details	NOT APPLICABLE
2.13	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
2.14	Additional comments or information	8.12 Vertical Clearance of any Bridges/Power Cables/Vertical Obstructions NOT APPLICABLE
3	Water Depth Alongside	
:	Minimum controlled water depth alongside berth at chart datum Water depth State datum used If 'Other' specify datum	8.60 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	Minimum static under keel clearance (UKC) alongside berth	
	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	
	L From	1025.00
	2 To	1028.00
	B Further details	As Ordinary Survey Practice
3.6	Type of bottom alongside berth	
	L	Mud
	2 If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	8.00
3.,		- 5.55

		244062001002
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	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	

		2a46826c1cc2
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
	0 1 1 (00)	
4.11	Bow to centre of manifold (BCM)	Net coeffeelds
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	A 15 11
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	
4.18	TPQ NA Selector	Not applicable
2	4.0.000001	0.00
		5.55
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. 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	Follow Pilot Instructions
5.3	Type of fenders installed at berth	Cell Type
2	If 'Other' please specify	
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 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 2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	No
5.9	Are there any restrictions using synthetic mooring ropes?	
1 2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the	No Mooring Lines of different materials not to be
	mooring pattern	used on the same Hook or Shore Bollard
5.10	Are there any restrictions on using high modulus synthetic mooring ropes?	
1	If head provide details	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		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	NOT APPLICABLE
6.7	Is berth fitted with a vapour manifold connection?	
1		No
2	If 'Yes' state type and size of vapour connection	Not Applicable
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	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?	
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?	
1		No
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	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
7.6	Is there a temperature limit for cargo handled?	

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

											2a46826c1cc2
1									No		
2	If 'Yes', provide de	tails									
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 commen	nts or informa	tion					I	No ici	ng expeted, Me	diterranean wheather.
10	Supplementary	Informatio	n								
10.1	Berth transparency							:	Solid Wharf		
10.2	Specify datum used	I for height ar	nd depth m	neasu	ırements in t	:his s	ection				
1			·						Chart	Datum (CD)	
2	If 'Other' please sp	ecify other									
10.3	Berth height above	datum						:	2.70		
10.4	Berth heading)57º(T) - 237º(T)	
10.5	Width of the chann	el adjacent to	the berth					:	260.0	0	
10.6	Position of mooring	g bollards and	hooks								
		Hook/Bo Number	llard ID and Type		dist to Fende e (m)	r	'y' dist to Line (m)		: Hei	ght (m)	SWL (tonnes)
		A(2)		3.50	0		-95.00		2.70)	100.00
		В		3.50	0		-65.00		2.70)	100.00
		С		3.50	0		-40.00		2.70)	100.00
		D		3.50	0		-6.00		2.70)	100.00
		Е		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	0		95.00		2.70)	100.00
10.7	Position of mooring	•									
		Mooring Number	Buoy ID		Distance to get Line F &	Α	'y' Dista Target L athwart	ine	Hei	ght (m)	Max. Allow Load (tonnes)
		NIL		0.0	0		0.00		0.00)	0.00
10.8	Fender Location										
		Fender ID Number	'x' Dist to Target Lir (m)		Elevation of Fenders (m)			Fender Height		Fender Contact Area (m2)	
		aa	-98.00	-	-1.35	2.00)	2.70		5.40	
		bb	-75.00	-	-1.35	2.00)	2.70		5.40	
		СС	-51.00	-	-1.35	2.00)	2.70		5.40	
		dd	-31.00	-	-1.35	2.00)	2.70		5.40	
		ee	-11.00		-1.35	2.00		2.70		5.40	
		ff	9.00		-1.35	2.00		2.70		5.40	
		gg	27.00	-	-1.35	2.00)	2.70		5.40	

		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	ta						
		Fender Id	Number F	oint No.	Compre (metres		Load (t	connes)
		CELL FENI	DER 1		0.40		250.00	
		CELL FENI	DER 2		0.45		300.00	
		CELL FENI	DER 3		0.52		325.00	
		CELL FENI	DER 4		0.60		340.00	
10.10	Fender friction coef	ficient (μ)				(0.40	
10.11	State identity and h	orizontal posi	ition of loadi	ng arms				
		Loading Arm/Shore Connection ID Number		Horizontal co-ordinate Y	Max Excursion Surge	Max Excursi Sway	ion Ex	lax kcursion eave
		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 Excursi Sway	ion Ex	lax xcursion eave
		Nº1	7.90	2.50	2.50	2.60	5.	40
10.13	Additional commen	ts or informa	tion			(-	ier REPSOL PETROLEO S.A ship's are d by REPSOL BUTANO S.A. personnel alations.



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

1.1	Berth name or number	E020
1.2	Berth type	
1		Jetty - Finger Jetty
2	If 'Other' please specify	
1.3	Terrestrial co-ordinates of manifold centreline	
1	Latitude	373406 North
2	Longitude	0005814 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 December 2008
1.6	Has an engineering (mooring and fendering) analysis of berth been undertaken?	
1		Yes
2	If 'Yes', state date of last analysis	31 December 2008
1.7	Additional comments or information	E020 New Construction dated 2008
2	Berth Approaches	
2.1	Is pilotage compulsory?	
1		Yes
7		
2	If 'Yes', state if any vessels are exempted	No vessels exempted
2.2	If 'Yes', state if any vessels are exempted State distance from pilot station(s) to berth	No vessels exempted Approx. 1 Mile
		· ·
2.2 2.3 1	State distance from pilot station(s) to berth Is a waiting anchorage available?	Approx. 1 Mile Yes
2.2 2.3 1 3	State distance from pilot station(s) to berth Is a waiting anchorage available? If 'Yes', state distance from waiting anchorage to berth	Approx. 1 Mile
2.2 2.3 1 3	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	Approx. 1 Mile Yes From 3 to 6 Miles
2.2 2.3 1 3 2.4	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	Approx. 1 Mile Yes From 3 to 6 Miles 26.20 Metres
2.2 2.3 1 3	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	Approx. 1 Mile Yes From 3 to 6 Miles
2.2 2.3 1 3 2.4 1 2	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	Approx. 1 Mile Yes From 3 to 6 Miles 26.20 Metres
2.2 2.3 1 3 2.4 1 2 3	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	Approx. 1 Mile Yes From 3 to 6 Miles 26.20 Metres Chart Datum (CD)
2.2 2.3 1 3 2.4 1 2 3	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	Approx. 1 Mile Yes From 3 to 6 Miles 26.20 Metres Chart Datum (CD) 31 December 2012
2.2 2.3 1 3 2.4 1 2 3 2.5 2.6	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	Approx. 1 Mile Yes From 3 to 6 Miles 26.20 Metres Chart Datum (CD) 31 December 2012 31 December 2017
2.2 2.3 1 3 2.4 1 2 3 2.5 2.6 2.7	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	Approx. 1 Mile Yes From 3 to 6 Miles 26.20 Metres Chart Datum (CD) 31 December 2012 31 December 2017

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	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	26.20 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	2.21 Meters
2	Percentage	9.20 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 To 1028.00 3 Further details As Ordinary Survey Practice 3.6 Type of bottom alongside berth	
, ,	
3.6 Type of bottom alongside berth	
1 Mud	
2 If 'Other' please specify	
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 Does the berth location experience water-level anomalies?	
1 No	
2 Provide details	
3.11 Additional comments or information NIL	
4 Limiting Vessel Dimensions	
4.1 Summer deadweight	
1 TPQ NA Selector Applicable	
2 Minimum 60000.00 Metric Tonnes	
3 Maximum 315000.00 Metric Tonnes	
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 340.00 Metres	
4.7 Beam	
1 TPQ NA Selector Not applicable	

		93bc937b73b8
2	Minimum	0.00
3	Maximum	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 1 2	Minimum PBL aft of manifold TPQ NA Selector	Not applicable 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	Stern to centre of manifold (SCM) TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.13 1 2 3	Freeboard TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
4.14 1 2 3	Manifold height above water TPQ NA Selector Minimum Maximum	Applicable 6.00 Metres 27.10 Metres
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 1.50 3.50

		930093/0/308
4.18	Maximum air draft alongside TPQ NA Selector	Not applicable
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	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 8.5 m AMARRE 5: 210 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 2	Ship/Tug Comments	Tug's Lines As Per Pilot 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	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	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?	
2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	Yes 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?	Yes
2	If 'yes'; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	
5.10 1 2	Are there any restrictions on using high modulus synthetic mooring ropes? If 'yes' provide details	No
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? 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 1 2 5.15 1	Are berthing aids provided? If 'Yes', state type of aids State allowable speed of approach if applicable	Yes MARIMATECH Laser Berthing System 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 1 2	Chain stopper requirements Applicable	NO NOT APPLICABLE
5.19	Largest ship handled at berth to date	DS CROWN, IMO Nº 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 State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Crude Oils/Condensates, Black Petroleum Products 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	Are transfer connections fitted with insulation flanges?	
1		Yes
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 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	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	
1		Yes
2	Supply details	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		No
2	If 'yes' provide details	
6.11	Describe access arrangements between ship and shore.	 Shore Gangway: Hydraulically Operated (Telescopic System)
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?	

	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?	
	2	If 'Yes', state limiting criteria	No
7.8	1	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	No
	2	If 'Yes', provide operational details	
7.9	1	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	1	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	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	is itesti water available.	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,	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 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 2	Does the terminal have its own resources for conducting icebreaker escort If 'Yes' provide details and specify how they can be requested	No
9.9	Are there icebreakers available to operate in the terminal area Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	No
9.10	Does the terminal have ice-capable tugs and support craft Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	No
9.11 1 2	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? If 'Yes', provide details	No
9.12 1 2	Does the terminal provide its own ice navigator/advisor? If 'Yes', provide details of how the service may be requested	No
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	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	g bollards and	hooks						
		Hook/Bol Number a		'x' dist to Fende Face (m)	er 'y' dis Line (t to Target m)	Heig	tht (m)	SWL (tonnes)
		GER Nº 1	(3)	-220.00	32.00		3.50)	100.00
		GER Nº2 ((2)	-174.00	32.00		3.50)	150.00
		GER № 3	(2)	-124.00	32.00		3.50	1	150.00
		GER Nº 7	(2)	-11.00	6.00		3.50	1	150.00
		GER Nº 8	(2)	-11.00	3.00		3.50	ı	150.00
		GER Nº 9	(2)	11.00	6.00		3.50	1	150.00
		GER Nº 10	0 (2)	11.00	3.00		3.50	1	150.00
		GER Nº 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	1	100.00
.0.7	Position of mooring	g buoys							
		Mooring Number	•	'x' Distance to Target Line F & (m)	A Targe	tance to t Line art (m)	Heig	tht (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 Line (m)	Elevation of Fenders (m)		Fender Height		Fender Contact Area (m2)	
		aa	-68.00	-1.50	4.00	4.00		16.00	
		bb	-21.00	-1.50	4.00	4.00		16.00	
		СС	0.00	-1.50	4.00	4.00		16.00	
		dd	21.00	-1.50	4.00	4.00		16.00	
		ff	68.00	-1.50	4.00	4.00		16.00	
.0.9	Fender Reaction Da	ata							
			Number	Point No.	Comp (metr	ression es)	Load	d (tonnes)	
		NO DATA		0	0.00	·	0.00)	
.0.10	Fender friction coe	fficient (μ)				C	0.40		
.0.11	State identity and h	norizontal posi	ition of load	ling arms					
		Loading Arm/Shore Connection ID Number		Horizontal e co-ordinate Y	Max Excursion Surge	Max Excursion Sway	on	Max Excursion Heave	
		660-K-F20/1	7.75	4.00	4.60	4.60		12.80	
		660-K-F20/2	4.75	4.00	4.60	4.60		12.80	
		660-K-F20/3	1.75	4.00	4.60	4.60		12.80	
		660-K-F20/4	-1.75	4.00	4.60	4.60		12.80	
		660-K-F20/5	-4.75	4.00	4.60	4.60		12.80	

660-K-F20/6 -7.75

4.00

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 comments or information

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

2.9

State details of any specific berthing and/or unberthing restrictions

1		Berth General	
1.1		Berth name or number	E014
1.2	1 2	Berth type If 'Other' please specify	Wharf or Quay
1.3	1 2	Terrestrial co-ordinates of manifold centreline Latitude Longitude Berth users for liquid and gas cargoes	373358 North 0005731 West REPSOL PETROLEO REPSOL BUTANO
1.5	1 2	Has a structural survey of the berth been undertaken, including its underwater structure? If 'Yes', state date of last survey	No
1.6	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	NIL
2		Berth Approaches	
2.1	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
2.3	1	Is a waiting anchorage available? 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	11.10 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)	NOT ADDITION IS

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	
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

			ca5af441968c
3.10	1	Does the berth location experience water-level anomalies?	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	No restrictions
	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	230.00 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	4.1 50,000	0.00
	_		
4.9	1	Minimum PBL forward of manifold TPO NA Sologtor	Not applicable
	1 2	TPQ NA Selector	Not applicable 0.00
	_		0.00

4.10	Minimum PBL aft of manifold	
1 2	TPQ NA Selector	Not applicable 0.00
4.11	Bow to centre of manifold (BCM)	Net conflictle
1 2	TPQ NA Selector Minimum	Not applicable 0.00
3	Maximum	0.00
		0.00
4.12	Stern to centre of manifold (SCM) 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)	Amalica III
1	TPQ NA Selector	Applicable 1.50 Metric Tonnes
2		
4.20	Additional comments or information	NIL

5 Mooring and Berthing Information

		- -	
5.11		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 AMARRE 6: 210HP and Lenght 9.0 m
5.2)	Are ship's or tug's lines used?	
٥.2	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	l.	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 Headlines2 Forward Breastlines2 Forward Back-Springs2 Sternlines2 After Breastlines2 After Back-Springs
5.7	,	Describe any additional mooring requirements	None
5.8	3	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	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
5.1	.0	Are there any restrictions on using high modulus synthetic mooring ropes?	
			Na
	1		No

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		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	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	List grades handled at berth	Base Oils and Finished Lubricants, Biodiesel/Biosiesel Blends, Black Petroleum Products, Commercial LPG, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha, Vegetable Oils
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	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		Yes
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	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	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? 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

		Cd3d144190oC
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	
4	clearance purposes?	N.
1	If West provide exerctional details	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
7.40		
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?	
1.12	Are there any restrictions regarding intercaptan content in Cargo Tanks:	Yes
2	If 'Yes', state restriction	Reference ISGOTT
		Reference 190011
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?	

		003011125000
1 2		Yes 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	, , , , , , , , , , , , , , , , , , , ,	Ex-Pipe (tank cleaning slops) or ex-barge.
3		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	No
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)	No
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice? If 'Yes', provide details	No
9.12 1 2	Does the terminal provide its own ice navigator/advisor? If 'Yes', provide details of how the service may be requested	No
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	

										Casar	4413000
		Hook/Bo Number		'x' dist to Fend Face (m)	ler	'y' dist t Line (m	o Target)	Hei	ght (m)	SWL (tonnes)	
		A(4)		-188.00		21.00		2.70)	100.00	
		B(4)		-148.00		21.00		2.70)	60.00	
		С		-68.00		1.50		2.70)	60.00	
		D(2)		-68.00		12.00		2.70)	60.00	
		E		-30.00		1.50		2.70)	60.00	
		F		-10.00		1.50		2.70)	60.00	
		G		30.00		1.50		2.70)	60.00	
		Н		47.00		1.50		2.70)	60.00	
		I		65.00		1.50		2.70)	60.00	
		J(2)		100.00		14.00		2.70)	100.00	
		K(2)		135.00		8.00		2.70)	100.00	
10.7	Position of mooring	g buoys									
		Mooring Number	Buoy ID	'x' Distance to Target Line F & (m)	ķΑ	'y' Dista Target l athwart	ine	Hei	ght (m)	Max. Allow Loa (tonnes)	d
		NIL		0.00		0.00		0.00)	0.00	
10.8	Fender Location										
		Fender ID Number	'x' Dist to Target Lin (m)	Elevation o ne Fenders (m			Fender Height	(m)	Fender Contact Area (m2)		
		aa	-32.00	-1.35	2.3	0	2.70		6.21		
		bb	-12.00	-1.35	2.3	0	2.70		6.21		
		СС	1.00	-1.35	2.3	0	2.70		6.21		
		dd	16.00	-1.35	2.3	0	2.70		6.21		
		ee	31.00	-1.35	2.3	0	2.70		6.21		
		ff	46.00	-1.35	2.3	0	2.70		6.21		
		gg	65.00	-1.35	2.3	0	2.70		6.21		
10.9	Fender Reaction Da	ita									
		Fender Id	l Number	Point No.		Compre (metres		Loa	d (tonnes)		
		NO DATA		1		0.00		0.00)		
10.10	Fender friction coef	fficient (μ)					C	.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	Ma Exc Sur	cursion	Max Excursion Sway	on	Max Excursion Heave		
		660-K-2A	-3.00	6.00	3.2	.0	6.00		13.90		
		660-K-2B	0.00	6.00	3.2	.0	6.00		13.90		
		660-K-2C	3.00	6.00	3.2	.0	6.00		13.90		

10.12 State loading arm operating limits

		Loading Arm ID Number	Max Op Height	Min Op Height	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	ntion			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 1 2	Berth type If 'Other' please specify	Wharf or Quay
1.3 1 2	Terrestrial co-ordinates of manifold centreline Latitude Longitude	373352 North 0005731 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	No
1.6	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	NIL
2	Berth Approaches	
2.1 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
2.3 1 3	Is a waiting anchorage available? 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	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
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)	No
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	Chart Batain (CB)
	Date of latest survey from which alongside depth has been determined	31 March 2012
3.2		
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?	

٠,	EI SOLT ETHOLEO, S.A CANTAGENA, E015	ef0b2683f9c5
1 2	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	Not applicable 0.00 0.00
4.2 1 2 3	Berthing displacement TPQ NA Selector Minimum Maximum	Not applicable 0.00 0.00
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	Not applicable 0.00 0.00
4.6 1 2 3	Length over all (LOA) TPQ NA Selector Minimum Maximum	Applicable 0.00 Metres 160.00 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 TPQ NA Selector	Not applicable

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2		0.00
4.11	Bow to centre of manifold (BCM)	Nationalizable
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	2.00
3	Maximum	13.00
		20,00
4.15	Manifold to shipside rail distance	Niek en elles bie
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	The two decicles	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: 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 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	1	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 by WOODFIELD)			
6.2	List grades handled at berth	Base Oils and Finished Lubricants, 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).	BASE OIL SN-80, 100, 150, 500, BS, MES, GASOLINE, NAFTA, GOC, JET A-1, ETBE.			
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			
2	Provide details	Insulation flange is located at the loading arm and tested at 6 months basis.			
6.5	State storage type for LPG	Not applicable			
6.6	Describe any terminal-specific requirements for vessel manifolds	NOT APPLICABLE			
6.7	Is berth fitted with a vapour manifold connection?				
1		No			
2	If 'Yes' state type and size of vapour connection				

		0.002000.000
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	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	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
6.13	Additional comments or information Berth Operations	NIL
		NIL Primary Dedicated VHF CH17 Backup by Voice
7	Berth Operations What is the primary and backup communication system between ship and	Primary Dedicated VHF CH17
7 7.1 7.2	Berth Operations 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?	Primary Dedicated VHF CH17 Backup by Voice
7 7.1 7.2 1 2	Berth Operations 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 roles Specify weather/environmental restrictions for stopping cargo operations,	Primary Dedicated VHF CH17 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.
7 7.1 7.2 1 2 7.3 7.4	Berth Operations 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 roles Specify 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? If 'Yes' provide full details of these restrictions	Primary Dedicated VHF CH17 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
7 7.1 7.2 1 2 7.3 7.4	Berth Operations 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 roles Specify 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?	Primary Dedicated VHF CH17 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

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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
7.11	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

0.3		Are Intermediate Oil hunkers susilable?		
8.3	1	Are Intermediate Oil bunkers available?	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)	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	
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 a	vailable to operate	in the terminal area		No		
2							
9.10	Does the terminal have	ice-capable tugs an					
1			No				
2	Specify details (e.g. Na	me/IMO Nr/GRT/Po					
9.11	Does the terminal have manoeuvrability charac						
1	a		No				
2	If 'Yes', provide details						
9.12	Does the terminal provi	ide its own ice navig	gator/advisor?				
1					No		
2	If 'Yes', provide details	of how the service	may be requested				
9.13	Additional comments o	r information			NO ICING, MEDITERF	RANEAN WEATHER.	
10	Supplementary Info	ormation					
10.1	Berth transparency				Solid Wharf		
10.2	Specify datum used for	height and depth m	neasurements in this	section	Chart Datum (CD)		
2	If 'Other' please specif	y other					
10.3	Berth height above date	um			2.70		
10.4	Berth heading				057º(T) - 237º(T)		
10.5	Width of the channel ac	djacent to the berth			200.00		
10.6	Position of mooring bollards 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	-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 bud	oys					
		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	
10.0							

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	85.00	-1.50	2.00	1.80	1.80
		2	60.00	-1.50	2.00	1.80	1.80
		3	48.00	-1.50	2.00	1.80	1.80
		4	37.00	-1.50	2.00	1.80	1.80
		5	24.00	-1.50	2.00	1.80	1.80
		6	10.00	-1.50	2.00	1.80	1.80
		7	-2.00	-1.50	2.00	1.80	1.80
		8	-14.00	-1.50	2.00	1.80	1.80
		9	-28.00	-1.50	2.00	1.80	1.80
		10	-40.00	-1.50	2.00	1.80	1.80
		11	-52.00	-1.50	2.00	1.80	1.80
		12	-65.00	-1.50	2.00	1.80	1.80
		13	-77.00	-1.50	2.00	1.80	1.80
10.9	Fender Reaction Da	ta					
		Fender Id	Number Po	oint No.	Compre (metres		d (tonnes)
		CYLINDRIG FENDER	CAL 1		0.40	250	.00
		CYLINDRIG FENDER	CAL 2		0.45	300	.00
		CYLINDRIG FENDER	CAL 3		0.52	325	.00
		CYLINDRIO FENDER	CAL 4		0.60	340	.00
10.10	Fender friction coef	ficient (μ)				0.40	
10.11	1 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 limit	S				
		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	tion			NIL	