Rig Move Warranty Survey

1) Coverage under this Policy for Rig Move activities fulfilling the criteria below is conditional upon:

- a) A Marine Warranty Surveyor (MWS) being appointed by the Assured from the following panel (name of MWS to be inserted below)
- b) For each rig move with the criteria below the specific Marine Warranty Scopes of Work (SOW) as stipulated in the table below shall apply:

Activity	Criteria	Scope of Work (SOW)
Jack-Up Rig Activities	Established Oil and Gas Field Area where Operator and/or Marine Warranty Survey Company is aware of any of the following: - previous incidence of punch-through within the field - existing jack-up footprint with different rig - Where there have been known problems (leg splaying etc.) - Or if Assured has reason to believe that a punch- through risk and/or shallow gas risk might exist - Or if in a field or area with no previous Jack-Up activity	SOW 1
Wet Tows of Jack-Up Rigs/Lift Barges/Semi-Submersible and Submersible (MODUs)/Drill Ships	Tows, where the original Tow Plan exceeds 24 hrs duration	SOW 2
Dry Tows / Heavy Lift Vehicle (HLV) Transportation of Jack- Up Rigs/Lift Barges/Semi- Submersible and Submersible MODUs	All activities where the original Tow Plan exceeds 72 hours duration.	SOW 3
Transits of Lift Barges/Semi- Submersible and Submersible MODUs and tender rigs under their own power other than in respect of self-propelled drill ships.	Exceeding 72 hrs duration where the original Transit Plan exceeds 72 hours duration	To be recommended by MWS on a risk assessed basis and agreed by Contract Leader(s)

c) Issuance of the Certificates of Approval (CoA's) by the MWS for each operation as required by the table above and specified in the referenced (SOW) contained herein.

- 2) It is the duty of the Assured to ensure compliance with all recommendations, requirements or restrictions of the MWS within the specified timescales. In the event of a breach of this duty, Underwriters shall not be liable for any loss, damage, liability or expense arising from or contributed to by such breach.
- 3) The Marine Warranty Survey shall be conducted in accordance with the Code of Practice (COP) and the (SOW) contained herein.
- 4) The cost of the Marine Warranty Survey shall be borne by the Assured.
- 5) Any expenses incurred to comply with the MWS's recommendations shall be solely at the expense of the Assured.
- 6) The MWS shall be free to consult with the Underwriters and provide them with any relevant information.
- 7) Underwriters shall be entitled to receive a copy of any recommendations and/or reports and/or Certificates of Approval directly from the MWS.

Joint Rig Committee Rig Move Marine Warranty Surveyor Code of Practice (COP)

This Code of Practice (CoP) establishes agreed standards for Marine Warranty Surveyors' (MWS) performance while conducting Marine Warranty Surveys for Rig Move Activities and specifies the main activities required to be performed.

It has the following objectives:

To:

- Clarify the role of the MWS.
- Define the function of the (SoW).
- Outline approval criteria for Marine Warranty Surveying activities.
- Establish minimum standards for MWS performance.
- Define lines of communication between Underwriters and the MWS.
- Specify the work required (in tabular format)

Nothing in this document shall relieve any party of any legal obligations existing in the absence of this document. The obligations for the MWS, the Assured and the Underwriters are outlined below:

1 Role of the Marine Warranty Surveyor (MWS)

1.1 The fundamental objective of the MWS is to make reasonable endeavours to ensure that the risks associated with the warranted operations to which a MWS is appointed are reduced to an acceptable level in accordance with best industry practice.

1.2 The MWS shall attend in a timely fashion and provide full information and clear recommendations to the Assured and the Towage or Transportation Contractor.

1.3 The Marine Warranty Surveyor Company shall only appoint personnel who are demonstrably competent, in terms of qualifications and experience, to perform the review/approval activity being undertaken in accordance with the (SoW).

1.4 Notwithstanding the requirements of the SoW, the MWS shall specify recommendations to be met in order to minimise the risk to the insured unit during all phases of the move or in transit and to comply with the terms of the warranty.

1.5 The MWS shall be satisfied, so far as possible, that the operations are conducted in accordance with:

- recognised codes of practice for design, operations and type of insured unit.
- best industry practice appropriate for the insured unit, equipment and vessels to conduct the operation.
- Unit's operating manual.
- acceptable levels of manning.

1.6 The MWS shall ensure that all requirements as per their Warranty Survey Company's relevant guidelines (if applicable) are complied with. In the event that exceptions are to be made, the Contract Leader(s) approval shall be sought prior to issuance of the Certificate of Approval by providing the Contract Leader(s) with the list of exceptions proposed and the potential implication of providing each exception. If the Marine Warranty Survey Company does not have their own guidelines, the MWS shall advise Contract Leader(s) of the guidelines that shall be employed for the purposes of this clause.

1.7 The MWS shall review and approve all procedures as detailed in the transportation contractor's manual and MODU operations manual (if applicable) and establish that the key procedures in the design are identified and complied with prior to issuance of the Certificate of Approval.

1.8 The MWS shall ensure that a voyage risk assessment is performed and necessary risk mitigation measures have been put in place. In any event, the MWS shall ensure that the latest version of the International Maritime Organisation (IMO) guidelines for Safe Ocean Towing are followed along with full compliance with the Marine Warranty Surveyor Company guidelines as applicable, to be determined by the MWS.

1.9 The MWS shall advise Contract Leader(s) where the MWS has identified a situation or circumstance that the MWS considers the SoW contained herein needs to be revised in order to reduce risks to an acceptable level.

1.10 The MWS shall perform a review of the relevant documentation in accordance with the requirements of Item 1.4 above relating to the proposed operations within the Marine Warranty SoW including, but not limited to:

- calculations;
- drawings;
- procedures;
- certificates;
- manuals;
- relevant reports;
- routing plans.

1.11 The MWS shall carry out suitability surveys of the insured unit, equipment and vessels to conduct the operation prior to each operation, including any required follow up "close out" inspections unless otherwise defined in the SoW contained herein, and shall:

- establish that the relevant items are suitable for the proposed operations;
- make known, in clear terms, in writing to the Assured the recommendations to be implemented prior to commencement of the proposed operations;
- review Meteorology and Oceanography (metocean) conditions and, where appropriate, incorporate requirements as to metocean conditions in the recommendations in the Certificate(s) of Approval;
- Agree the data acquisition, test and analysis plans (especially soil testing) for the proposed operations.
- observe and record the preparations for the proposed operations;
- attend and witness critical function tests or relevant assurance tests.

1.12 Subject to the MWS being satisfied that the objectives outlined under Items 1.1 above have been met, the MWS shall issue a Certificate of Approval. The Certificate of Approval shall clearly identify:

- the operation to be carried out;
- the vessel(s) to be used;
- any recommendations to be satisfied during the period of the proposed operations within the Marine Warranty SoW. Recommendations issued for the Assured's implementation should be targeted to reduce risk to Contract Leader(s) and worded in a clear and explicit manner should be capable of being objectively verified.
- 1.13 The MWS shall:
 - not provide any services to the Assured and/or Operator and/or Main Contractors (s) and/or Sub Contractor (s) that may interfere with the work of the MWS.
 - advise the Contract Leader(s) when a confidentiality agreement with the Assured is in place which would preclude the exchange of information or communication with the Contract Leader(s);
 - not provide any other services to the Assured and/or Operator and/or Main Contractor(s) and/or Sub Contractor(s) that could present a conflict of interest with the Marine Warranty Work.

1.14 The MWS shall immediately advise the Contract Leader(s), with a copy to the Assured:

- if any Certificate of Approval is withheld; or a Non Conformance Certificate issued;
- if the Assured fails to comply with any recommendations made by the MWS;
- of any proposed changes to relevant key personnel employed by the MWS.

1.15 All equipment and vessels associated with the rig move activities shall be fully operational and used within their safe working limits, which shall be agreed by the Marine Warranty Surveyor. The MWS shall review certifications and shall confirm that the vessel is fit for the purposes of the intended operation.

1.16 All vessels (including HLV's and transportation barges) shall be Classed and Class maintained for the duration of the operation in question. The Marine Warranty Surveyor shall agree all outstanding conditions of Class as not being material to the intended operations. The MWS shall approve limiting metocean criteria, and weather windows for all marine operations.

2 Role of the Assured

2.1 Once appointed on a particular Rig move operation, the MWS company shall not be changed without the prior agreement of the Contract leaders(s).

2.2 The Assured shall provide reasonable access and transportation facilities to the Warranty Surveyor to allow him to carry out the necessary work.

2.3 The Assured shall provide the MWS with a point of contact for the Contract Leader(s) and an appropriate point of contact in the Assured's organisation to assist with the resolution of queries.

2.4 The Assured shall provide the Contract Leader(s) with the contact details of the MWS within 14 working days following appointment of the same.

2.5 The Assured shall provide the MWS with the contact details of the Contract Leader(s) within 14 working days following appointment of the same.

2.6 The Assured shall ensure MWS participation at all relevant project management meetings, including marine operation Hazards and Operability Study/Hazard Identification Study (HAZOPs/HAZID), contingency planning and assurance/testing plans.

2.7 The Assured shall contract with the MWS directly (without the involvement of any contractor) unless required to enable compliance with the law in the jurisdiction or government regulations.

2.8 The Assured shall formally acknowledge receipt of all recommendations.

2.9 The assured shall maintain a record of his compliance with, and deviations from, such recommendations.

2.10 The Assured shall obtain written approval from the MWS for any such deviation(s).

3 Role of the Underwriters

3.1 The Panel of Marine Warranty Surveyors is to be agreed by the Contract Leader(s).

Other additions to the Panel shall be required to demonstrate their capability/ experience of similar projects to be agreed by the Contract Leader(s).

3.2 At the request of the MWS, the Contract Leader(s) shall make available:

- relevant applicable policy terms and conditions including, in particular, any •
- warranty provisions or conditions precedent; identity and contact details (including telephone, e-mail, fax and out of normal business hours numbers) of the nominated Contract Leader(s) to receive communications from the MWS.

Scope of Work (SOW) 1: Jack Up Rig Operations

	Activity	Review & Approve	Attend	Issue
	Activity	Procedures/Drawings/	Attenu	Certificate
		Design Calculations.		of Approval
	cation Approval	Х		Х
(I) Data	a Gathering (see note 1 below)			
-	Approve adequacy of Site Specific Soil			
	Sampling (soil core from each proposed			
	leg location, depth of core etc.)			
_	Review Geotechnical Analysis Review Geophysical Survey			
_	Data/Shallow Seismic			
	Survey/Bathymetric Study / Pipeline			
	information / charts for the area /			
	Piling records (if location is adjacent to			
	a platform)			
-	Review Spud can depressions			
-	Advise operator of potential impact of			
	spudcans in close proximity to platform			
(11) 1-++	piles			
	egrity Assessment (see note 2 below) Perform Independent Punch-through			
_	analysis based on site specific soil			
	sampling (as per the criteria in table 1			
	of the Code of Practice)			
_	Jackup integrity (including dynamic			
	response) during Storm and Operating			
	conditions.			
-	Air gap adequacy			
-	Check weights and Centre of Gravity			
	(COG) within operating manual allowable limits			
	Storm contingency procedures			
(B) Go	ing On Location/Jacking Up Operations	Х	Х	Х
	entering the 500m zone at the location	Χ	Л	X
	t final elevated air gap)			
_	Review Side Scan Sonar/Debris survey by			
	divers or Remote Operated Vehicle			
	(ROV)			
-	Review Pipeline clearances			
-	Confirmation of clear sea bed			
-	Approve Pre-Load and Jacking			
	Procedures (individual or simultaneous			
	leg pre-loading, air gap during pre- loading etc.)			
_	Periodic inspections for Scouring			
_	Approve leg penetration check proposals			
	prior to and after pre-loading			
-	Jack-up manoeuvring and positioning			
	within the 500m zone			
-	Adequacy of attending tugs &			
	confirmation of correct tow equipment			
-	Approve pre-jacking up preparations			
	(including jacking equipment full			

Activity	Review & Approve Procedures/Drawings/ Design Calculations.	Attend	lssue Certificate of Approval
 function testing) Confirm adequacy of communications throughout going on location operations Soft pin and elevate to pre-load condition Pre-load ops Cantilever/derrick skidding operations Jack-up to final elevation Derrick tie down procedures (as per US Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) document) 			
(C) Operational Integrity	Х		
 Derrick skidding operations Blow-Out Preventer (BOP) lifting operations Crane lifting operations Rig loading changes (variable loads) - confirm load distribution and Centre of Gravity (COG) within operating manual allowable limits 			
(D) Jacking Down Operations/Coming Off Location (from commencing jacking down to disengaging legs from the seabed and moving off under tow until outside the 500m zone)	Х	Х	Х
 Pre-jacking down readiness Weather/seastate conditions Jacking - down operations Mooring up operations Tow commencement 			

X denotes activity to be performed.

<u>Notes</u>

- (1) Data gathering shall be in accordance with The International Oil and Gas Producers Association (OGP) Guidelines for the conduct of Offshore Drilling Hazard Site Surveys (draft 0 dated 16 September 2010)
- (2) A written "Location Approval" and/or "Site Assessment" for each location that the MODU is to be sited upon to be issued.

Scope of Work (SOW) 2: Wet Tows of MODUs (Jack-Up Rigs / Lift Barges/Semi-Submersible and Submersible/ Drill Ships / Tender Rigs)

Activity	Review & Approve	Attend	Issue
Activity	Procedures/Drawings/	Attenu	Certificate of
	Design Calculations.		Approval
(A) General	5		
Review and agree meteorological criteria for	Х		
the tow.			
Review and agree limiting seastates for all	Х		
marine operations.			
Review and approve weather forecasting	Х		
procedures.			
Review and approve tow routes, weather	Х		
windows and safe havens.	X		
Review and approve criteria for tow	Х		
including bollard pull requirements.	Х	Х	Х
(B) Tug Suitability Survey	^	^	 to form part of
			the commence
			tow certificate
			of approval)
 – Tug (including manoeuvring tugs) 			
suitability survey and approval.			
 Change of tug shall require reissue of 			
certificate of approval.			
 Bollard pull test 			
 Redundancy of systems 			
 Crew competency 			
	X		
(C) Voyage Manual/Towmaster Instructions	Х		
 Pre-voyage Risk Assessment 			
 Route Planning (inc. safe havens and 			
refuelling)			
 Clearances - Underkeel, Overhead and Side 			
 Hazard identification 			
 Ability to withstand environmental 			
loading (wind, wave, current) -			
Marine Warranty Survey Company			
derived worst case - 10 year return			
period for the route.			
 Weather routing 			
 Confirm that the MODU has a valid 			
Class certification			
 Fuel requirements (contingency) 			
 Communications (Reporting 			
Protocols)			
– Manning			
 Navigational Aids (Navaids) 			
 Confirm seaworthiness and 			
watertightness for the tow			

(D) Contingend	cy Planning for Emergencies	Х		
 Heavy Ground Collisid Fire an Damag Water Structure 	arting uipment failure weather ling on d explosion e stability, ingress through valves ural failure uipment breakdown (critical			
(E) Tow Opera below)	tions (see notes 1 and 2	Х	Х	X Issue C of A for tow commencement
– Rig (Contra proced	1 5			
– Rig St move,	nd stability manual ability during all phases of ballasting arrangements (see			
	below)			
– Confirr /Stowi	uipment n adequacy of Sea fastenings ng of critical and major ble items (especially BOPs and pe).			
– Allowa length	ble leg bending moments/leg and estimate of fatigue life voyage (see note 3 below)			
– Confirr	n seaworthiness and ightness for tow			
– Pilotin	g arrangements as applicable p tugs and commence tow			

X denotes activity to be performed.

Notes

- (1) Based on surveyors review in accordance with this outlined SoW based on receipt of a good weather forecast and including recommendations on weather routing and the possible avoidance of certain sea states.
- (2) Confirm that the position of major moveable equipment and cargo(s) are in accordance with the trim and stability manual.
- (3) Make a determination of allowable leg length to be carried. For Mat units Marine Warranty Surveyor to oversee Ultrasonic (UT) inspection of legs in vicinity of Jack-Up holes and incorporate into technical assessment. For all braced units, MWS to review the results of testing of critical structural areas. Typically, this should include the areas of legs from just below the lower guides to 2 bays above the upper guides, with the legs in any proposed transport condition. The testing should also include the guide connections, the jack-house connections to the deck and connections of the spudcans to the leg chords.

Scope of Work (SOW) 3: Dry tows/HLV Transportation of Jack Up Rigs/ Lift Barge/ Semi-Submersible and Submersible MODUs

Activity	Review & Approve	Attend	Issue Certificate
	Procedures/Drawings/ Design Calculations.		of Approval
(A) General	Design ouroundrons.		
Review and agree meteorological criteria for	Х		
the transportation.			
Review and agree limiting sea states for all	Х		
marine operations.			
Review and approve weather forecasting	Х		
procedures.			
Review and approve routes, weather	Х		
windows and safe havens.			
(B) Tug Suitability Survey	X	X	X (to form part of the commence operations certificate of approval)
 Tug (including manoeuvring tugs) suitability survey and approval. Change of tug shall require reissue of certificate of approval. Bollard pull test Redundancy of systems Crew competency 			
(C) Transportation Vessel/ Loading & Unloading Equipment	Х	Х	Х
 Confirmation of suitability of Transportation Vessel. Confirmation that the Transportation Vessel and MODU have a valid Class certificate Verification of the adequacy and structural strength of the cribbing and seafastenings Confirmation good working order of all operational equipment and machinery required for loading and unloading operations (including contingency items) Seaworthiness and water-tight integrity 			
(D) Loading and Unloading Operations	Х	Х	X (for both loading and unloading operations)
 Confirmation that the insured unit(s) have been suitably sea fastened and that load-on draught has been achieved without excessive heel or trim Confirmation of suitability of loading 			

Activity	P	Review & Approve Procedures/Drawings/	Attend	Issue Certificate of Approval
		Design Calculations.		
and unloading areas in respec				
water depths, shelter etc.				
 Ensure MODU is accurately position 				
on cribbing and adequa	ately			
supported				
 Ensure sea-fastening has k carried out as per design and 	been that			
weld examination checks have t				
carried out				
 Ballasting and Deballasting plans 	and			
operations				
 Check MODU leg position is cor 				
for transportation and if appropri	iate,			
shimming or chocks are applied – Check final condition of vessel	and			
MODU (seaworthiness and w				
· · · · · · · · · · · · · · · · · · ·	ence			
stability				
- Ensure that the tank conditions				
offloading are close to that for w				
the rig was loaded (or differences have been taken	that			
account in the procedures)	into			
– Certificate of Approval	for			
loading/unloading to be issued	-			
receipt of good weather forecast				
(E) Voyage Manual/Towmaster Instruction	ons	Х		
- Pre-voyage Risk Assessment				
 Model testing as required 				
 Route Planning (inc. safe havens a 	and			
refuelling)	and			
 Clearances - Underkeel, Overhead 	d			
and Side				
 Hazard identification 	_			
 Ability to withstand environmental 	al			
loading (wind, wave, current) - Marine Warranty Survey Company	,			
derived worst case - 10 year return				
period for the route.				
 Weather routing 				
 Fuel requirements 				
 Communications (Reporting 				
Protocols)				
– Manning – Navaid				
(F) Contingency Planning for Emergenci	es	Х		
		~		
– Bunkering				
 Line parting 				
 Tug equipment failure Engine failure 				
 Engine failure Heavy weather 				
– Grounding				
– Collision				
L	1			

Activit	у	Review & Approve Procedures/Drawings/	Attend	Issue Certificate of Approval
		Design Calculations.		
_	Fire and explosion	Design carculations.		
_	Damage stability			
_	Water ingress through valves			
_	Structural failure			
_	Key equipment breakdown (critical			
	spares)			
(G) Vo	yage Commencement (see notes 1	Х	Х	Х
and 2		X	X	Issue C of A for
				tow
				commencement
_	Rig Operating manual & Tow			
	Transportation Contractor's manual			
	and basic design parameters			
_	Independent Verification of Rig and			
	Transportation Vessel stability during			
	all phases of move (Loadout, voyage			
	and discharge)			
-	Independent verification of			
	Transportation Vessel's motion			
	responses			
-	Independent derivation of the sea			
	fastening and cribbing loads			
-	Independent derivation and			
	assessment of leg bending moments			
	against the allowable			
-	Verification that the cribbing loads			
	and cribbing layouts are acceptable.			
	This includes a check on the strength			
	of the rig's bottom plating and			
	stiffening			
-	Independent verification that the sea			
	fastening design is adequate and that			
	the rig has sufficient capacity at the			
	points that the sea fastening loads			
	are being transferred			
_	Tow equipment Confirm adequacy of Sea			
-	1 5			
	fastening/Stowing of critical and major moveable items (especially			
	BOPs and Drill Pipe).			
	Allowable leg bending moments /leg			
	length and estimate of fatigue life			
	used in voyage (see note 3 below)			
	Confirm seaworthiness and water			
	tightness for the tow			
_	Piloting arrangements as applicable			
	Hook up tugs and commence tow			
L	HOOK up tugs and commence tow		l	<u> </u>

X denotes activity to be performed.

<u>Notes</u>

(1) Confirm that the position of vessel and cargo(s) are in accordance with the trim and stability manual.

- (2) Based on surveyors review in accordance with this outlined SoW based on receipt of a good weather forecast and including recommendations on weather routing and the possible avoidance of certain sea states.
- (3) Make a determination of allowable leg length to be carried. For Mat units Marine Warranty Surveyor to oversee UT inspection of legs in vicinity of Jack-Up holes and incorporate into technical assessment. For all braced units, MWS to review the results of testing of critical structural areas. Typically, this should include the areas of legs from just below the lower guides to 2 bays above the upper guides, with the legs in any proposed transport condition. The testing should also include the guide connections, the jack-house connections to the deck and connections of the spud-cans to the leg chords.