



Verification Procedure & Results

Test Procedure Document No.:	Test Procedure Rev.:			
3167-00105	1-01			
Test Plan Document #	Test Plan Rev.:	Test End Date:		
3167-00000	1-01			
Test Conductor (Print Name)	Signature	Design Engineer (Print Name)	Approval Signature	Date
Test Director (Print Name)	Signature	System Engineer (Print Name)	Approval Signature	Date
Witnessed by (Print name)	Signature	QA/QC Engineer (Print Name)	Approval Signature	Date
DOORS Verification Procedure ID	DOORS Verification Event ID	Test Results Reviewed	QA:	Date
Ver-CG-268	CG-VE-3092		Test Dir.	Date

Test Case Name:		Test Plan Document #	Test Plan Rev.:	Test End Date:
Straight Line Proof Load of Load Cage & Spheres		3167-00000	1-01	
Test Conductor (Print Name)	Signature	Design Engineer (Print Name)	Approval Signature	Date
		Taylor Semingson	<i>[Signature]</i>	2013-07-01
Test Director (Print Name)	Signature	System Engineer (Print Name)	Approval Signature	Date
		Sheri N. White	<i>[Signature]</i>	2013-06-28
Witnessed by (Print name)	Signature	QA/QC Engineer (Print Name)	Approval Signature	Date
		Gary Cook (I&T Lead)	<i>[Signature]</i>	2013-06-28
DOORS Verification Procedure ID	DOORS Verification Event ID	Test Results Reviewed	QA:	Date
Ver-CG-268	CG-VE-3092		Test Dir.	Date

Test Description
 This test will be performed to ensure that mooring riser components meet the requirements for straight line proof load.

- Requirements Addressed**
- L4-CG-MO-RQ-288 Instrument Frames on Global subsurface moorings shall be designed to sustain a straight line proof load of 6,000 lbs.
 - L4-CG-MO-RQ-289 Sub-surface spheres shall be designed to sustain a straight line proof load of 6,000 lbs.
 - L4-CG-MO-RQ-267 Universal joints shall be designed to sustain a straight line proof load of 10,000 lbs.
 - L4-CG-MO-RQ-290 Mooring Riser weldments shall be designed to sustain a straight line proof load of 6,000 lbs.
 - L4-CG-MO-RQ-280 Dualing brackets shall be designed to sustain a straight line proof load of 10,000 lbs.

- Test Environment**
- Main controller is located in load cage at burn-in site.
 - SGSP and WFPs are located at the burn-in site.
 - Inductive bypass cables are connected through cages and inductive instruments, all located at burn-in site.
 - Test conduct will be in accordance with Scripps EH&S policies located at: <http://blink.ucsd.edu/Blink/External/Topics/1,1105,7,00.html>

- Test Setup**
- Pre conditions
- 64" sphere weldments assembled with Adapter Style B to Inductive on either end but without instruments
 - 51" HMB sphere
 - Instrument frames
 - Dualing bracket assembled with two acoustic releases and drop chain
 - Universal joint assembled with Adapter Style B to Inductive on either end

Hardware preparations

- Lifting device, eg. forklift, with appropriate WLL
- 10 ton dynamometer with logging functionality
- 4,000lbs weight, anchor modules or similar, for 64" sphere
- 4,200lbs weight, anchor modules or similar, for 51" sphere
- 10,000lbs weight, anchor modules or similar, for dualing bracket and instrument frame
- Lifting slings and hardware with appropriate WLL
- 64" spheres weldment assembly on site
- 51" HMB spheres on site
- Instrument Frames on site
- Dualing Bracket on site
- Universal Joint on site

Test Artifacts

Test Artifacts consist of the Pass/Fail results for steps contained within this procedure.

Test Procedure 3167-00105 Rev 1-01				Test Results		
Step#	Instructions	Expected Results	Requirement ID	Observed Results	Pass/Fail	Notes
1	Attach instrument frame arbor eye to lifting device using appropriate slings and shackles with 10 ton dynamometer in between, turned on in logging mode					
2	Attach instrument frame arbor eye opposite the end attached in Step 1 to 6000lbs weight using appropriate slings and shackles					
3	Lift and hold the instrument frame and weight assembly off the ground for 1 minute	Verify that the instrument frame can sustain a 6,000lbs load for the test duration. Record maximum load from dynamometer.	L4-CG-MO-RQ-288			
4	Attach the top 64in sphere Adapter Style B to Inductive eye to lifting device using appropriate slings and shackles with 10 ton dynamometer in between, turned on in logging mode					
5	Attach the bottom 64in sphere Adapter Style B to Inductive eye opposite the end attached in the previous step to 6000lbs weight using appropriate slings and shackles					
6	Lift and hold the 64in sphere weldment and weight assembly off ground for 1 minute	Verify that the top weldments for the 64in sphere can sustain a 6,000lbs load for the test duration. Record maximum load from dynamometer.	L4-CG-MO-RQ-290			
7	Rotate the sphere 180degrees so that the top weldments are now on the bottom and repeat the previous 2 steps leaving the 10 ton dynamometer on top.	Verify that the bottom weldments for the 64in sphere can sustain a 6,000lbs load for the test duration. Record maximum load from dynamometer.	L4-CG-MO-RQ-290			
8	Attach the top 51in HMB sphere arbor eye to lifting device using appropriate slings and shackles with 10 ton dynamometer in between, turned on in logging mode					