

 ROV: Comanche 4	DIVE LOG Project: Sydney	Dive No:	Date:
		Wet Test 3	29/3/08

Vessel: SV Geosounder						Client: HMA3S				Wind:		Current:		Sea State:	
Location: Geraldton.						Scope: In Harbour Wet Test				Knot		Knot		m	
										5-10		0		0	
ROV Compensators						TMS Compensators									
Main Hydr.	%	VPS Comp	%	BRG Comp	%	JB/SR Comp	%	Drum Comp	%	UMB Comp	%				
HPP comp	%	UMB Comp	%	IHS comp	%	TJB Comp	%	Motor Comp	%	HPP Comp	%				
UTC Time		Events													
02:37		Pre dive checks complete.													
02:38		ROV off deck													
02:45		ROV @ Depth													
03:54		ROV in garage monitoring sonar, cameras and systems													
05:45		Still monitoring system functions.													
06:10		ROV returning to deck													
06:15		ROV on deck													
06:22		Post dive checks complete													
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 ROV: Comanche 4	<i>DIVE LOG</i> Project: Sydney	Dive No:	Date:
		Sea Trials 1	30/3/08

Vessel: SV Geosounder						Client: HMA3S				Wind:		Current:		Sea State:	
Location: Sydney Site						Scope: Test dive				Knot		Knot		m	
										16		0		0	
ROV Compensators						TMS Compensators									
Main Hydr.	%	VPS Comp	%	BRG Comp	%	JB/SR Comp	%	Drum Comp	%	UMB Comp	%				
HPP comp	%	UMB Comp	%	IHS comp	%	TJB Comp	%	Motor Comp	%	HPP Comp	%				
UTC Time		Events													
03:04		Pre dive checks complete. Bathy not working													
03:05		ROV off deck													
03:15		ROV @ Depth													
03:22		ROV exit TMS													
03:25		ROV Commence trim checks													
03:25		Temporary loss of main broadcast and top tilt cam													
03:28		Loss of sonar communication													
03:32		Reset topside sonar processor													
03:32		Unable to re-establish communication with sonar head													
03:38		Returning to TMS, vertical thrust down difficult													
03:44		Apparent loss of all thrusters													
03:45		LIMS alarm, loss of system power													
03:46		Reset power OK													
03:48		ROV in TMS													
03:52		Recover to deck													
04:00		ROV on deck													

 ROV: Comanche 4	<i>DIVE LOG</i> Project: Sydney	Dive No:	Date:
		Dive 1	03/04/08

Vessel: SV Geosounder						Client: HMA3S				Wind:		Current:		Sea State:	
Location: Sydney Wreck						Scope: Inspection				Knot		Knot		m	
										16		0		0	
ROV Compensators						TMS Compensators									
Main Hydr.	%	VPS Comp	%	BRG Comp	%	JB/SR Comp	%	Drum Comp	%	UMB Comp	%				
HPP comp	%	UMB Comp	%	IHS comp	%	TJB Comp	%	Motor Comp	%	HPP Comp	%				
UTC Time		Events													
09:20		Pre dive checks complete.													
11:25		ROV off deck													
11:40		ROV @ Depth 100m. Vessel moving into position.													
12:04		ROV exit TMS for function test													
12:11		ROV back in TMS. Continue to depth.													
12:35		Descent stopped due to broken level wind chain													
12:45		Level wind chain removed. Pawl key removed. Continue to depth													
13:00		ROV @ depth 500m.													
13:01		TMS pay in/out function not responding unable to leave TMS													
13:54		Continue descent,													
15:04		ROV at depth 2410													
15:10		Sydney found													
15:30		Moving ship down towards aft 15m taking video footage of port side of Sydney													
15:57		Vessel move 20m fwd													
16:09		Vessel move 15m fwd													
16:23		Vessel move 15m fwd													
16:34		Vessel move 15m fwd													
16:55		Vessel move 10m fwd													
17:20		Vessel move 5m fwd													
17:30		Video break. Complete video footage of port side. Raise Garage 30m above shipwreck													
19:30		Elec comp low level alarm. Recover ROV to deck													
20:54		ROV out of water													
21:00		ROV on deck													

Comments: <ul style="list-style-type: none"> Rear P&T camera problem during deck checks, still DNF during dive. 	Mob/Demob	
	Dive Time	9hrs 35 mins
	Standby	
	Scheduled Maint.	
	Corrective Maint.	
	Breakdown	

DCFsubsea
ROV: Comanche 4

Project: Sydney

Dive 2

04/04/08

Vessel: SV Geosounder						Client: HMA3S				Wind:		Current:		Sea State:	
Location: Sydney Wreck						Scope: Inspection				Knot		Knot		m	
										16		0		0	
ROV Compensators						TMS Compensators									
Main Hydr.	%	VPS Comp	%	BRG Comp	%	JB/SR Comp	%	Drum Comp	%	UMB Comp	%				
HPP comp	%	UMB Comp	%	IHS comp	%	TJB Comp	%	Motor Comp	%	HPP Comp	%				
UTC Time		Events													
06:05		Pre dive checks complete.													
06:50		ROV off deck													
08:05		ROV @ Depth No TMS nav returns, unit rated for 2000m...													
08:24		ROV exit garage													
08:28		Vessel reposition 30m south													
08:04		ROV on seabed 2480m as per survey readings													
08:53		ROV moving from seabed into bow of vessel													
08:55		ROV starting to see some debris													
08:56		ROV requesting Geosounder to move directly over bow of Sydney													
09:09		ROV standing by above seabed													
09:11		ROV moving in towards bow of wreck													
09:15		Wreck coming into view													
09:18		ROV confirming tether status													
09:23		ROV moving in towards wreck again.													
09:25		Wreck in view													
09:27		B turret in view from starboard side.													
09:28		ROV moving towards bow to starboard of ROV													
09:30		Turret A in view													
09:31		Moving Geosounder 10 m at 30degrees													
09:40		Discussing operations													
09:42		Moving vessel ahead to reposition TMS over port side of bow of wreck													
09:44		B turret coming into view													
09:47		ROV inspecting break at bow													
09:51		Moving vessel 15 m on 30 degrees													
09:52		ROV recording sonar image looking down the ship from the bow													
09:55		Sonar picture recorded by survey													
09:56		Requested vessel to move 20m at 30degrees.													
09:59		Vessel move complete													
10:02		Moving in towards wreck again													
10:05		Tether management													
10:15		Tether sorted out and ROV moving back into wreck													
10:16		Moving vessel 20 m on a heading of 90 degrees													
10:19		Vessel move complete													
10:20		ROV repositioning itself relative to wreck bow using sonar													
10:24		Visual of A turret													
10:27		Viewing turret A and bow broken section													
10:29		ROV followed break in bow to seabed													
10:30		ROV surveying break in bow section													
10:31		ROV surveying break in bow, stbd side													
10:32		Close inspection of A turret from above													
10:34		Closer inspection of A turret from above													
10:37		Tether management													
10:39		Close up of section of bow													
10:42		Looking at port side of bow section													
10:43		Metal rap around the a Turret looking from the front to aft of Sydney													
10:44		View of A turret barrel													

10:45	View of port side at bow break off point of bow
10:47	Following break in bow to seabed on port side
10:50	Continuing following break in bow down. towards seabed
10:53	Gapping holes in hull at seabed level
10:56	Close up of valve handle
10:58	Lateral left on ROV towards where bow would have been.
11:01	According to sonar the ROV has followed the break in bow to its end and looking down the port side
11:05	Repositioning vessel 15 m on 135 degrees to clear tether from around bow area.
11:07	Vessel move complete
11:08	Requested to keep an eye out for musical instruments on seabed or anywhere.
11:12	Moving ROV to continue inspecting STB break in bow
11:14	Inspecting items on seabed
11:18	Continue surveying seabed debris
11:22	Inspecting biological material on seabed
11:24	ROV confirming tether position and orientation
11:26	Moving vessel
11:28	Vessel move complete
11:29	ROV moving into wreck area again
11:37	Vessel move requested 10m 270 degrees
11:40	Vessel move completed
11:43	ROV at Stb side at edge of Bow near seabed and moving up
11:45	Vessel move initiated
11:46	Waiting for completion of ships move
12:20	Recommence video footage of port side
13:22	Moved vessel 20m bearing 320
13:45	Vessel lost position ROV returned to garage
13:50	Vessel regained position ROV returned to wreck
14:15	Moved vessel 20m bearing 320
14:56	Moved vessel 10m bearing 320
15:10	Moved vessel 10m bearing 320
15:15	Moved vessel 20m bearing 140
15:25	Moved vessel 20m bearing 140
15:35	Moved vessel 20m bearing 140
15:50	Moving to three unidentified objects off stern
15:55	Moved vessel 20m bearing 320
15:58	Moved vessel 20m bearing 320
16:00	Moved vessel 20m bearing 320
16:30	Heading to starboard side of Sydney starting at aft
16:46	Moved vessel 42m bearing 270
16:56	Moved vessel 30m bearing 320
17:49	ROV back in TMS for break
18:20	Vessel move to stern of shipwreck
19:09	Resume video survey of stbd side of Sydney
20:30	Video survey complete. ROV returning to TMS
20:36	ROV in garage. ROV returning to deck.
21:50	ROV on deck and secure

Comments: <ul style="list-style-type: none"> Rear P&T camera problem during deck checks, still DNF during dive. 	Mob/Demob	
	Dive Time	15 Hrs mins
	Standby	
	Scheduled Maint.	
	Corrective Maint.	
	Breakdown	

[illegible]

 ROV: Comanche 4	<i>DIVE LOG</i> Project: Sydney	Dive No:	Date:
		Dive 4	06/04/08

Vessel: SV Geosounder						Client: HMA3S			Wind:	Current:	Sea State:	
Location: ‘Battle Site’						Scope: Inspection			Knot	Knot	m	
										0	0	
ROV Compensators							TMS Compensators					
Main Hydr.	%	VPS Comp	%	BRG Comp	%	JB/SR Comp	%	Drum Comp	%	UMB Comp	%	
HPP comp	%	UMB Comp	%	IHS comp	%	TJB Comp	%	Motor Comp	%	HPP Comp	%	
UTC Time		Events										
		Pre dive checks complete. ROV 320v LIMS alarm										
07:55		Pre Dive Checks, LIMs cleared and seems OK										
09:10		ROV off deck										
09:19		ROV 320V LIMS Alarm										
10:42		TMS reached depth 2728m										
10:48		ROV leave TMS										
10:53		ROV on seabed 2786 m										
11:20		ROV lifting off seabed to about 4 m above seabed to commence sonar sweeps										
11:22		Starting South quadrant sonar sweep No definite objects noted 150 m range										
11:23		Starting East quadrant sonar sweep No definite objects noted 150 m range										
11:27		Starting North quadrant sonar sweep No definite objects noted 150 m range										
11:29		Starting West quadrant sonar sweep No definite objects noted 150 m and 200 m range										
11:35		ROV and vessel moving off on a heading of 280 looking for objects on sonar and visually.										
11:38		New instructions, ROV looking in a 180 degree direction										
11:45		Shift hand over										
12:00		Searching for debris in the Battle zone										
12:18		Found first contact, false alarm rock formation										
12:30		Found second contact, false alarm rock formation										
12:50		Found third contact, false alarm rock formation										
13:13		Found forth contact, false alarm rock formation										
13:35		Vessel move 500m due south										
14:20		Vessel continuing to move south encountering more rocks										
14:30		Video footage complete. ROV returning to garage.										
14:38		ROV in TMS. Recovering to deck										
16:11		ROV on deck secure										

Comments: •	Mob/Demob	
	Dive Time	7 Hrs 1 min
	Standby	
	Scheduled Maint.	
	Corrective Maint.	
	Breakdown	

DCFsubsea
ROV: Comanche 4

Project: Sydney

Dive 5

06/04/08

[illegible]

Comments: <ul style="list-style-type: none"> 	Mob/Demob	
	Dive Time	4 Hrs 10 mins
	Standby	
	Scheduled Maint.	
	Corrective Maint.	
	Breakdown	

04:01	Continuing to inspect gun
04:06	Inspecting foaxall gun mount
04:08	Further inspection of foaxal
04:09	Inspecting capstan and anchor chains
04:12	Inspecting stb forward gun from above
04:14	Inspecting smaller gun on stb fwd side of ship
04:16	Looking at bow from behind bow perspective
04:18	Port anchor being inspected
04:20	Counting rungs from anchor to mud line
04:22	Inspecting anchor chain on stb side
04:24	ROV returning to garage
04:28	ROV in garage
04:50	Begin in water transit to next location
05:30	Transit complete. Waiting on TMS to settle
05:46	ROV out of TMS
05:48	ROV with seabed in view
05:52	ROV landed on seabed 2583 m depth
05:53	Sonar scans to North Some targets of interest
05:56	Sonar scans to the East Quite large object at 49 m
05:57	Sonar scans to the West, numerous large objects on sonar
05:58	Sonar scans to the South , numerous large objects on sonar
06:01	ROV moving toward east to largest target from prior sonar sweeps
06:07	Target coming into view
06:08	Large mess of metal
06:19	Inspecting some sort of cylindrical object
06:25	Close visual inspection of some steel ships side
06:33	Close visual inspection of structure that look like they were windows
06:38	Object looks like it is 3 layers of decks
06:47	ROV relocate 50m @ 50°
07:04	Measuring the height of this structure, about 15 m high
07:14	ROV leaving this object
07:15	Start of survey of line 150m at 315 degrees
07:25	ROV returning to garage.
07:30	ROV in garage
07:54	Vessel begin transit to new location
08:43	Vessel on location. Waiting for TMS to settle
09:02	Lowering TMS 6 wraps
09:08	ROV out of Garage
09:15	ROV at wreckage
09:17	ROV on seabed 2602m
09:26	Starting to survey this large piece of debris
09:27	Start surveying western end of debris
09:34	Surveying wall of metal debris from mud line to upper most part.
09:52	Inspecting a grid type structure.
09:53	Inspecting large wall of metal sheeting.
09:55	Start inspecting south face of structure at mud line
09:58	Inspecting some numbering on structure
10:02	Surveying what we think is the bilge keel
10:03	Surveying ribs of ship, probably bottom of ship structure.
10:08	Completed survey to the end of this section
10:10	Looking at bottom of face on South East
10:11	Continuing to back to left following mud line
10:14	Back at following bilge keel and numbers
10:23	Inspecting anchor
10:27	Inspecting anchor from side view
10:30	Inspecting anchor from a steeper side view
10:33	Inspecting anchor hole area
10:35	Inspecting anchor from another side view
10:37	ROV measuring height of structure 2587 m so it stands 15 m from sea bed
10:39	ROV returning to TMS
10:44	ROV in TMS
10:46	Raise TMS 10 Wraps

 ROV: Comanche 4	<i>DIVE LOG</i> Project: Sydney	Dive No:	Date:
		Dive 7	07/04/08

Vessel: SV Geosounder						Client: HMA3S				Wind:		Current:		Sea State:	
Location: Sydney Wreck & Debris Field						Scope: Inspection				Knot		Knot		m	
										5		0		1	
ROV Compensators						TMS Compensators									
Main Hydr.	%	VPS Comp	%	BRG Comp	%	JB/SR Comp	%	Drum Comp	%	UMB Comp	%				
HPP comp	%	UMB Comp	%	IHS comp	%	TJB Comp	%	Motor Comp	%	HPP Comp	%				
UTC Time		Events													
14:15		Pre dive checks complete.													
14:28		ROV off deck													
15:40		ROV at depth 2430m													
15:42		ROV out of garage													
15:55		ROV taking video footage of Sydney debris field													
16.30		Found aft spotlight tower													
18.00		Back into tms for break													
18.40		Back to sea bottom at new location further north													
22.30		Back at the Sydney wreck													
23.44		Returning to tms													
23.51		In tms. Recovering to deck.													
01:06		ROV on deck													
01:20		Post dive checks complete, RH Vert thruster DNF													

Comments: •	Mob/Demob	
	Dive Time	11 hrs 5 mins
	Standby	
	Scheduled Maint.	
	Corrective Maint.	
	Breakdown	