Detailed Description of Release/Event

On Friday 14th of October 2011 at 14:10 the split hopper barge Heron experienced a hydraulic oil spillage from the hydraulic system of the hydraulic cylinder of the hold.

At the moment of the incident the Heron was being loaded by the BHD Simson, working in area E3b. Coordinates for the incident are 314348 E, 7371643 S.

During loading, the Heron suffered a malfunction of the hydraulic cylinder of the hold of the barge. This caused the barge to open and some oil from the hydraulic system to leak out. It is estimated a volume between 25 and 50 litres was spilled into the marine environment. The cause of the malfunction is still under investigation. In the mean while, the remaining hydraulic oil has been pumped from the hydraulic system into a storage container to prevent any unexpected leakage.

Immediately after the spillage, the oil spill contingency and response plan was executed oil booms were deployed from the Simson and the Heron to contain the oil in the water and absorbing oil pads were used to clean up the oil. Assistance was provided by several auxiliary vessels (Voe Jarl, PT May, Workboat 29, Timana, …) to contain and clean up the oil.

Harbour master was informed immediately. VODI Environmental officer, GPC and DERM were informed as soon as possible.

Because of the opening of the barge, some dredged material from zone E3b was released into the water again, within the dredging zone. The area has been surveyed.

REMARK: Hydraulic system of Heron is visually inspected on a daily basis by the crew and was inspected as recent as last week (5th of Oct 2011) by a third party.

Cause of Release/Event

Malfunction in hydraulic system for hydraulic cylinder of SHB Heron hold. Futher details not yet known

Resulting Effects of Release/Event

Between 25 and 50 litres of hydraulic oil leaked from the barge into the water

Oil absorbing booms were released to contain oil. Oil absorbing pads were used to clean up the oil. Auxiliary vessels provided assistance for deployment of booms and clean up operation.

Used pads were collected in double plastic bags and sealed. They will be disposed as outlined in the Oil spill prevention plan and Waste management plan. Replacements have been sent to the vessel.

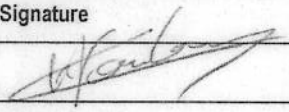
Risk ranking : 2 / M		
Refer to Matrix below	Risk Ranking	Due Date / Status
	Unlikely	Could happen but very rarely
	Environmental Nuisance	Resulting in permanent environmental damage

What are the concequences?	How likely is it to occur?			
	Very likely Could happen any time	Likely Could happen some time	Unlikely Could happen, but very rarely	Very unlikely Could happen, but probably never will
Environmental disaster Resulting in permanent Environmnetal damage	1/H	1/H	1/H	2/M
Environmental Nuisance Resulting in permanent Environmnetal damage	1/H	1/H	2/M	2/M
Environmental Harm No permanent damage. Temporary nuisance	1/H	2/M	2/M	3/L
No Impact Minor Spill Contained at site and cleaned up	2/M	2/M	3/L	3/L

Corrective Actions Taken to Mitigate Environmental Harm and/or Nuisance Caused by the Release/Event			
No	Action/s Taken	Responsible Person	Due Date / Status
1.	Execution of Oil Spill Response and Contingency Plan	Steven Dunn / Mark Muller	Successful

Proposed Actions to Prevent a Recurrence of the Release/Event			
No	Action/s Taken	Responsible Person	Due Date / Status
1.	Continue daily visual checks of hydraulic system	Vessel Master / Crane operator	Ongoing
2.	Install central depot with additional oil spill contingency materials on Intan or Remora pontoon	Superintendant pontoons / Environmental Officer	Ongoing
3.	Reinforce Oil Contingency Response Procedures	Environmental Officer	Ongoing
4.	Perform Toolboxes concerning Environmental Incident Procedures for Vessel Master and Superintendent	Environmental Officer	Ongoing

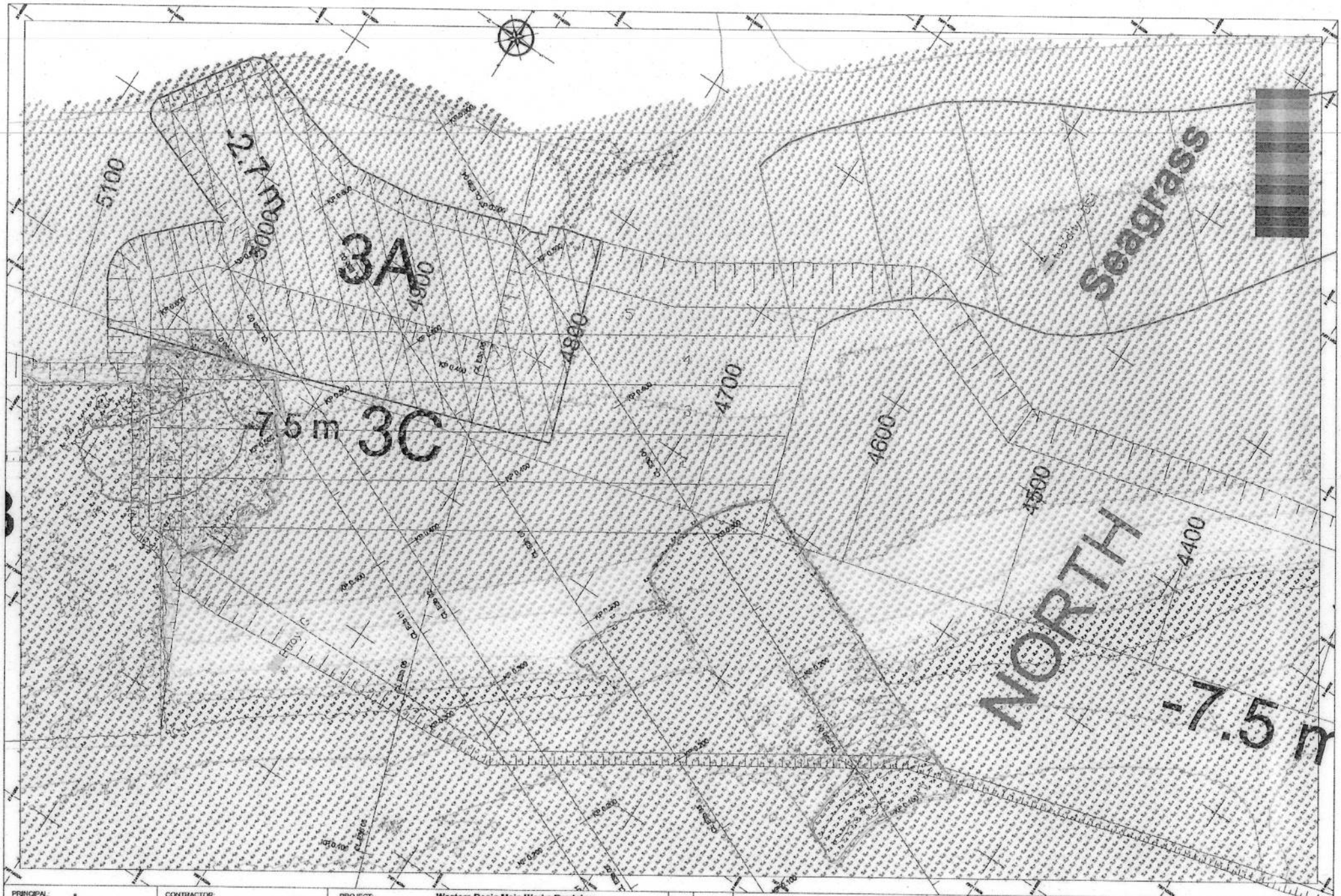
Results of Sampling (if applicable) Performed in Relation to the Release/Event
☐ *Photographs attached*

Environmental Officer / Supervisor to sign		
Environmental Officer / Supervisor	Signature	Date
K. Paridaens		14th of October 2011

Close out GPC Environmental Representative		
Environmental Officer / Supervisor	Signature	Date
M. Herzel		

Environmental Officer / Supervisor	Signature	Date
K. Pardeans		14th of October 2011

Environmental Officer / Supervisor	Signature	Date
M. Hensi		

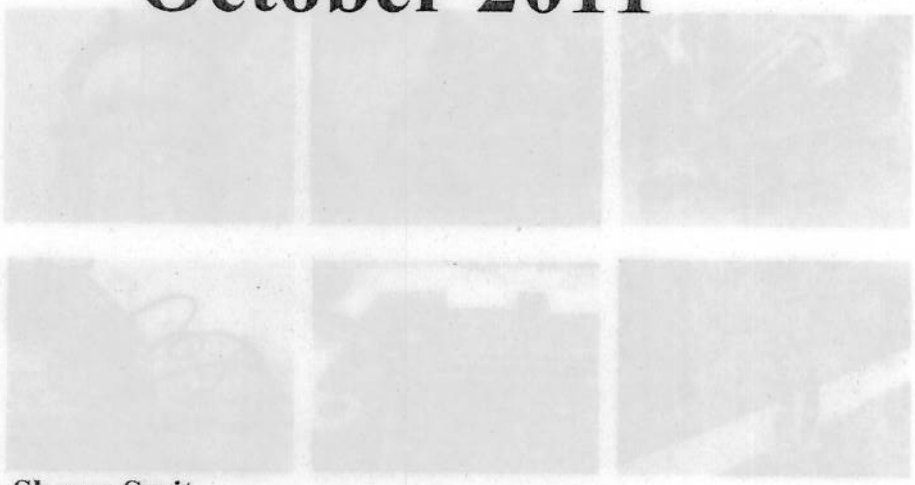


PRINCIPAL: Gladstone Ports Corporation	CONTRACTOR: VODI JV	PROJECT: Western Basin Main Works Dredging Contract number: CS110010	REV	DATE	DESCRIPTION	GPT	SURVEYOR	Levels in m related to LAT Datum: GDA 94 Projection: UTM 56 Survey date: 14/10/2011 16h00 hrs	SCALE: 1/1000 A1	
		TITLE: Progress Simson E3b- MOF D	00	14/10/2011	Progress survey Simson after dump	SR	SAT	DRAWING NR. 36.3144-14-WKS-317	REVISION 00	SHEET 1 / 1

НТРОИ

Smitty's Hydraulics
SH & DS Smit
ABN: 86 969 351 820
Mob: 0411 398 308
Email: smittyhyd@live.com.au

Report: Hydraulic Equipment and Hoses Vessel: Heron October 2011



Inspection By: Shawn Smit
Date of inspection: 5 October 2011
Report By: Shawn Smit
Date of Report: 5 October 2011

Background:

As part of their commitment to their environmental policy, VODI Joint Venture management requested Smitty's Hydraulics in conjunction with Hydraulic Solutions to conduct inspections of their vessels. The objective of the inspections was to try to reduce the risk of environmental exposure by identifying any oil leaks and schedule their repair as well as identifying any potential leaks such as damaged hoses, etc.

After an initial inspection to establish the condition of the equipment and to put in place a "base line", it was planned to establish a schedule of reinspections, depending on the outcomes of the risk assessments.

Inspection:

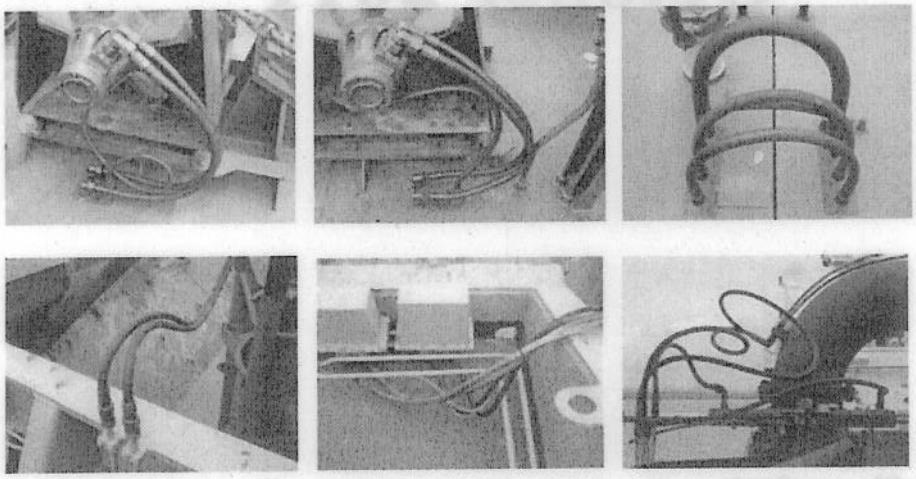
- The vessel inspected was Heron on the 5th October 2011.
- This vessel is in good condition.
- The vessel hydraulics has been maintained and needs to stay maintained.
- Slight hydraulic leaks on steering, will need to be monitored to insure leak does not increase.

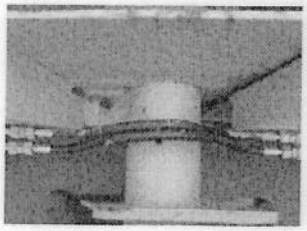
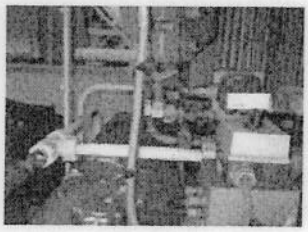
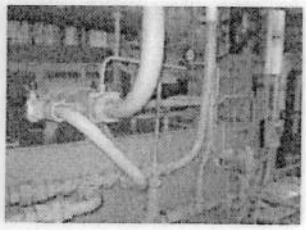
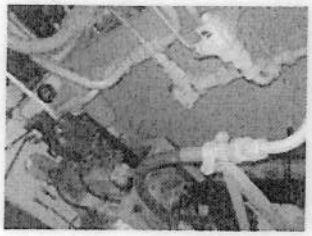
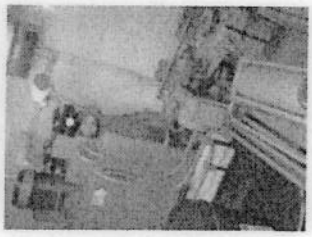
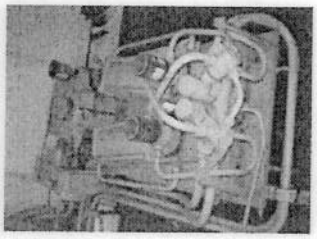
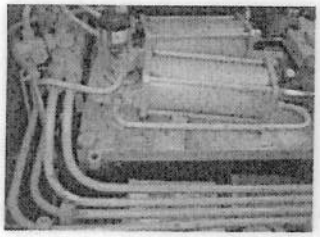
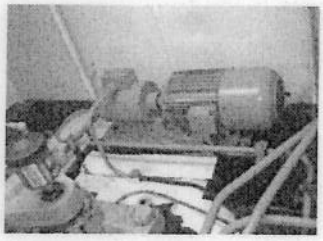
General Comments:

All components on the vessel are in good condition and the vessel has been maintained. Speaking to the crew on board has kept the vessel in good working order.

Recommendations.

- It is important that the existing hydraulic components be maintained.
- Visual inspection should be performed regularly to ensure hydraulic components stay in good working order.
- If leaking on steering ram increases to make arrangements to remove and repair.
- Small hydraulic leak on door ram needs to be monitored.



Inspection By: Shawn Smit
Date of inspection: 5 October 2011
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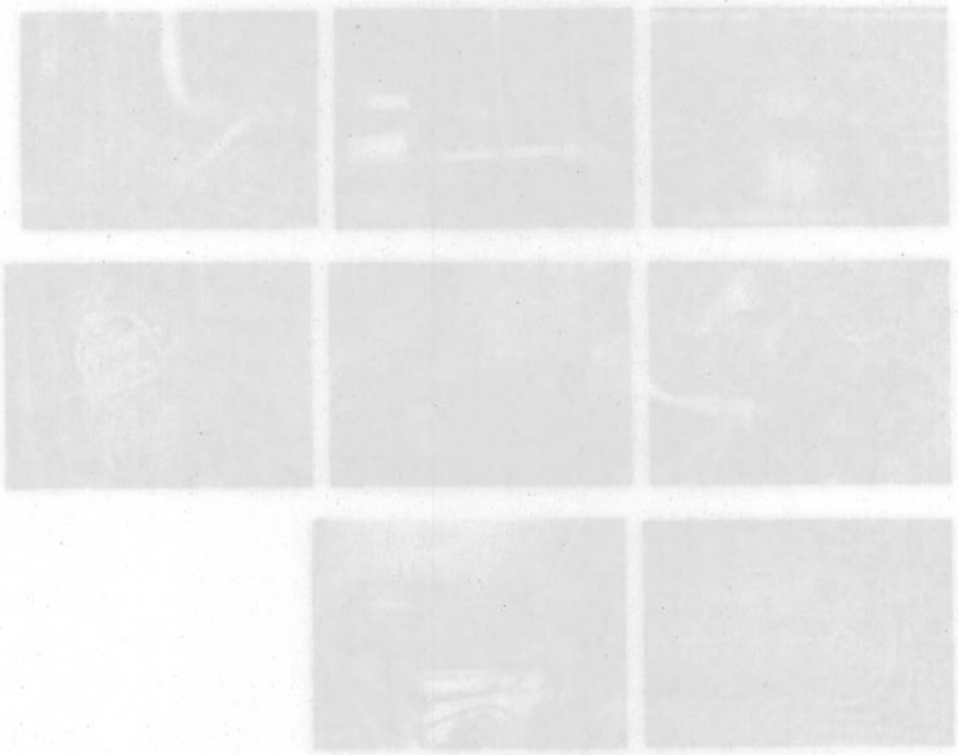


Inspection By: Shawn Smit
Date of inspection: 5 October 2011
Report By: Shawn Smit
Date of Report: 5 October 2011

Marine Pollution Report (POLREP)

Queensland Government
Maritime Safety Queensland

To: **Pollution Response Unit** Fax number: **(07) 3120 7420**

Urgent ☐ **Standard** ☐ **Information only** ☒

This form is used to record the initial details of a reported/sighted marine pollution spill. The form is faxed to the Pollution Response Unit on the fax number listed.

Date of incident: 14-Oct-11

Time of incident: 2:10 PM

POLREP ID number:

Incident investigation: Yes ☐ No ☐

Marine incident number:

Category:

Location of pollution

Lat: -23.755595 Long: 151.178346

Location: Port Curtis area, Gladstone

Pollution source Ship ☒ Land ☐ Unknown ☐

Ship type Recreational ☐ Commercial ☒ Fishing ☐ Trading ship ☐ Tanker ☐

Ship name: Heron

Ship registration: 15459 Z Rott 1978

Pollutant

Sheen ☐ Diesel ☐ Bilge ☐ HFO ☐ Other ☒ ▶ Hydraulic Oil

Extent

Size of the slick (length and width in meter): Contained near the ship and cleaned up

or Litre: Between 25 and 50

Report details

Has the discharge stopped? Yes ☒ No ☐ Unknown ☐

Weather conditions (tide and wind): Ebb tide, calm weather conditions

Photos taken ☐ Video taken ☐ Samples taken ☐ ▶ Sample taken by:

Original report source: Master of the vessel

Statutory agency: -

Combat agency: -

Initial response brief

Oil boom deployed

Oil absorband pads used to clean up

Assistance provided by auxiliary vessels

Harbour master informed by VHF

Sender details

Name: Kobe Paridaens

Position: Environemntal Officer VODI JV

Agency: -

Contact phone (mobile/office): 0487 301 533

Fax number: 07 4975 2299

Signature:

Date: 15-Oct-11

Time: 11:00 AM

Document & Forms Management
Form F3968 ES
Apr 2006

Marine Pollution Report (POLREP)

Queensland Government
Maritime Safety Queensland

To: Pollution Response Unit Fax number: (07) 3120 7420

Urgent ☐ **Standard** ☐ **Information only** ☒

This form is used to record the initial details of a reported/sighted marine pollution spill. The form is faxed to the Pollution Response Unit on the fax number listed.

POLREP ID number	
Incident investigation	Yes ☐ No ☐
Marine incident number	
Category	

Date of incident: 14-Oct-11
Time of incident: 2:10 PM

Location of pollution
Lat: -23.755996 Long: 151.178346

Location: Port Curtis area, Gladstone

Pollution source: Ship ☒ Land ☐ Unknown ☐

Ship type: Recreational ☐ Commercial ☒ Fishing ☐ Trading ship ☐ Tanker ☐

Ship name: Heron
Ship registration: 15469 Z Ref 1978

Pollutant

Sheen ☐ Diesel ☐ Bilge ☐ HFO ☐ Other ☒ ▶ Hydraulic Oil

Extent

Size of the slick (length and width in meter): Contained near the ship and cleaned up
or Litre: Between 25 and 50

Report details

Has the discharge stopped? Yes ☒ No ☐ Unknown ☐

Weather conditions (tide and wind): Ebb tide, calm weather conditions

Photos taken ☐ Video taken ☐ Samples taken ☐ ▶ Sample taken by

Original report source: Master of the vessel

Statutory agency: -
Combat agency: -

Initial response brief
Oil boom deployed
Oil absorbent pads used to clean up
Assistance provided by auxiliary vessels
Harbour master informed by VHF

Sender details

Name: Kobe Pantaleone
Position: Environmental Officer VODI JV

Agency: -
Contact phone (mobile/office): 0487 301 838
Fax number: 07 4975 2299

Signature:
Date: 15-Oct-11
Time: 11:00 AM

VODI JV
VAN OORD – DREDGING INTERNATIONAL JOINT VENTURE

PO Box 1399
Gladstone Qld, 4680

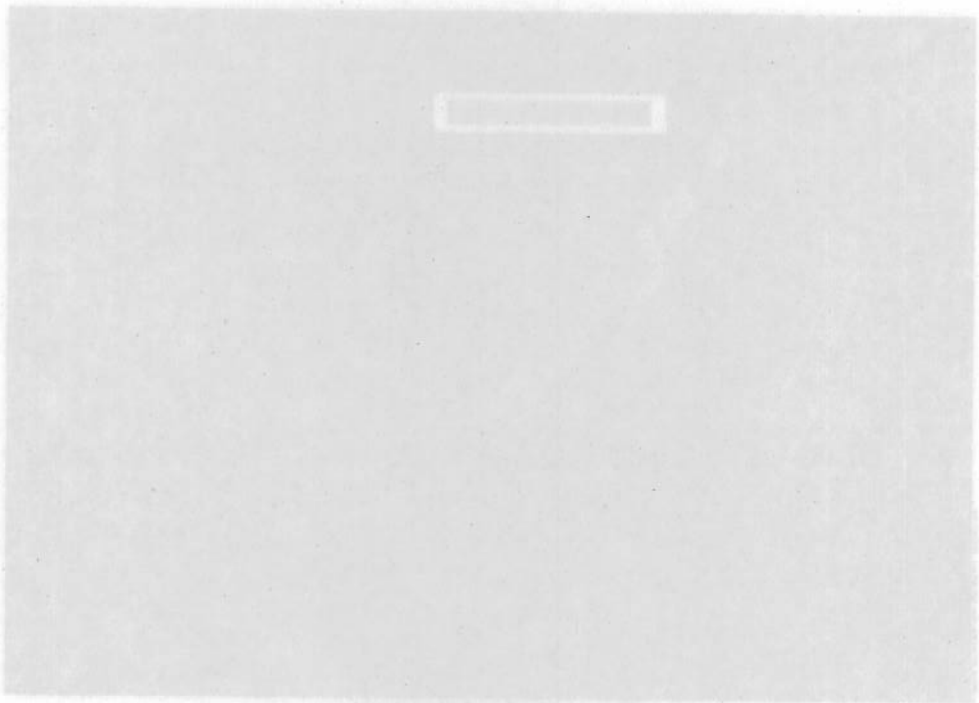
ENVIRONMENTAL INCIDENT REPORT

WESTERN BASIN DREDGING AND DISPOSAL PROJECT

Incident No. 010 Hydraulic Oil Spillage BHD Simson

27th of October 2011

Revision No. 1



Release/Event Details

Project:	Western Basin Dredging and Disposal Project		
Development Approval No.	SPDE01443011		
Registered Operator	VAN OORD – DREDGING INTERNATIONAL JOINT VENTURE		
Date of Release/Event:	14/10/2011	**Date of Notification:**	14/10/2011
Time of Release/Event:	19:25	**Time of Notification:**	19:50
VODI Project Contact:	Environmental Officer K. Paridaens		
	P: 0749752243	M: 0487301533	
	E: pko@vodi.com.au		
Location of Release/Event: *(pictorial reference on map below)*	East of North Passage Island		

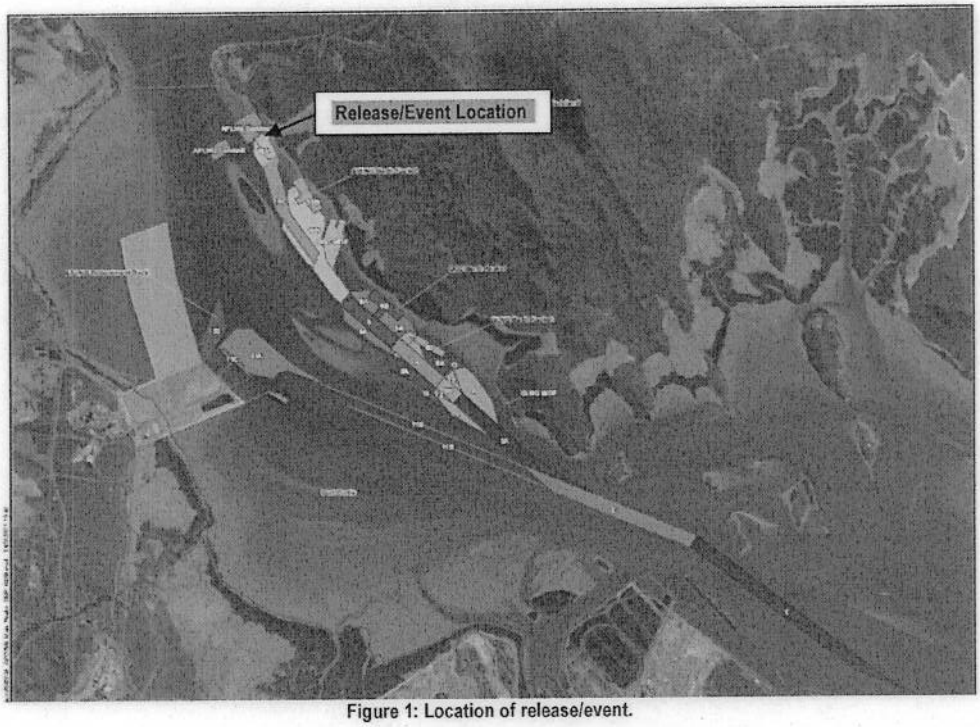


Figure 1: Location of release/event.

EPA's Pollution Hotline (1300 130 372) or local office (4971 6500) notified of release/event?	☒ Yes, date: 14/10/11 ☒ Gladstone Harbour Control Pollution Hotline was informed

Detailed Description of Release/Event

On Friday 14th of October 2011 at 19:25 the BHD Simson experienced a hydraulic oil spillage from its excavator.

At the moment of the incident the Simson was dredging in parcel 5, area E3b, loading the SHB Pieter Caland. Coordinates for the incident are 314348 E, 7371643 S.

The excavator of the Simson was bringing up dredged material from the bottom when a failure of the rubber housing of one of the hydraulic hoses on the boom occurred. As a result, hydraulic oil leaked from the boom into the water.

Immediately after the hose broke, the excavator was brought into an upright position, to collect any leaking oil in the bunded area of the excavator and the engine was shut down. The crane was not swung back onto the deck but rather the boom was kept above the bunded area of the excavator, to prevent spreading oil over a larger water surface.

Harbour master was informed immediately. VODI Environmental officer, GPC and DERM were informed as soon as possible.

During the event a total volume of 15 litres leaked from the hydraulic system, part of which was collected in the bunded area of the Excavator.

Immediately after the spillage, the oil spill contingency and response plan was executed. Oil booms were deployed from the Simson to contain the oil in the water and absorbing oil pads were used to clean up the oil. Assistance was provided by several auxiliary vessels (Voe Jarl, PT May, Workboat 29 and Timana) to contain and clean up the oil.

Additional Information

Simson crew perform daily inspections of hydraulic lines on excavator (see attached inspection sheet).

Cause of Release/Event

Failure of hydraulic hose of the boom. Rubber housing broke near the flange. Cause of failure is currently under investigation by third party experts.

Resulting Effects of Release/Event

Less than 15 litres of hydraulic oil was spilled in the water.

Oil absorbing booms were released to contain oil. Oil absorbing pads were used to clean up the oil. Auxiliary vessels provided assistance for deployment of booms and clean up operation.

Used pads were collected in double plastic bags and sealed. They have been disposed of as outlined in the Oil spill prevention plan and Waste management plan. Replacements have been sent to the vessel.

Risk ranking : 2 / M		
Refer to Matrix below	Risk Ranking	Due Date / Status
	Likely	Could happen some time
	Environmental Harm	No permanent damage / Temporary nuisance

What are the concequences?	How likely is it to occur?			
	Very likely Could happen any time	Likely Could happen some time	Unlikely Could happen, but very rarely	Very unlikely Could happen, but probably never will
Environmental disaster Resulting in permanent Environmnetal damage	1/H	1/H	1/H	2/M
Environmental Nuisance Resulting in permanent Environmnetal damage	1/H	1/H	2/M	2/M
Environmental Harm No permanent damage. Temporary nuisance	1/H	2/M	2/M	3/L
No Impact Minor Spill Contained at site and cleaned up	2/M	2/M	3/L	3/L

Corrective Actions Taken to Mitigate Environmental Harm and/or Nuisance Caused by the Release/Event			
No	Action/s Taken	Responsible Person	Due Date / Status
1.	Execution of Oil Spill Response and Contingency Plan	Andrew Baines / Franki Zielinski	Successful

Proposed Actions to Prevent a Recurrence of the Release/Event			
No	Action/s Taken	Responsible Person	Due Date / Status
1.	Hydraulic hose sent to Hydraulic Solutions for third party inspection.	Technical superintendant	Ongoing
2.	Revision of replacement schedule for boom hydraulic hoses based on third party inspection results (Currently replaced every 6 months)	Technical superintendant	Ongoing
3.	Continued visual checks of hydraulic system prior and during excavator operations	Vessel Master / Crane operator	Ongoing
4.	Install central depot with additional oil spill contingency materials on Intan or Remora pontoon	Superintendant pontoons / Environmental Officer	Ongoing
5.	Reinforce Oil Contingency Response Procedures	Environmental Officer	Ongoing
6.	Perform Toolboxes concerning Environmental Incident Procedures for Vessel Master and Superintendent	Environmental Officer	Ongoing

Results of Sampling (if applicable) Performed in Relation to the Release/Event
Broken hose has been collected for inspection by third party. ☒ *Photographs attached*

Environmental Officer / Supervisor to sign		
Environmental Officer / Supervisor	Signature	Date
K. Paridaens		27th of October 2011

Deputy Project Director to sign		
Deputy Project Director	Signature	Date
S. De Beenhouwer		27th of October 2011

Project Director to sign		
Project Director	Signature	Date
Herm Pol		27th of October 2011

Close out GPC Environmental Representative		
Environmental Officer / Supervisor	Signature	Date
M. Herzel		

ATTACHMENT A

ATTACHMENT B

Inspection Checklist Simson

Van Oord

Visited main equipment : Simson

Inspection by / Function / Signature	: JPBouman / Bosemsh / [signature]	Name responsible person on location: Paul Stone / Day shift / Night shift / Date inspection: Week 41

1. ENGINE ROOM							
Engines Visual inspection for leaks	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓
Hydraulic Pumps Visual inspection for leaks	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓
Thruster Rooms Visual inspection for leaks	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓
Sewage Treatment Plant	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓
2. EXCAVATOR CRANE							
Visual inspection Boom / Stick / Bucket Hydraulic lines / Hydraulic Hoses / Grease lines	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓
Visual inspection Upper Carriage / Pedestal	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓	Y Y ✓
3. SPUD WINCH ROOMS							
Spud Wire PS / Hydraulic Winch	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y
Spud Wire SB / Hydraulic Winch	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y
Spud Wire Fwd / Hydraulic Winch	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y
Spud Wire Carrier Hydraulic Winch	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y
4. GENERATOR ROOM							
Oil level Generator Engines	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y
Visual inspection for leaks	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y
Cooling system	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y
5. BRIDGE							
Navigational Lights and Day signs	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y
Radio standby on VHS	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y	Y Y

6. Are all outstanding actions of previous inspections executed?

Yes

7. General remarks:

8. Summary of actions	Action by	Follow up