Stolthaven Australasia Pty Ltd
18-Dec-2014

Annual Review

Stolthaven Bulk Fuel Storage Facility

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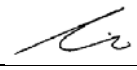
B	18-Dec-2014	Final	Simon Murphy Project Manager	

Table of Contents

List of Tables

List of Figures

1.0 Introduction

This Annual Review has been prepared by AECOM Australia Pty Ltd (AECOM) on behalf of Stolthaven Australia Pty Ltd (Stolthaven) to assess the environmental performance of the fuel import, storage and dispatch facility (The Site) on industrial land managed by the Port of Newcastle (PON), Newcastle, New South Wales. The Site is operated under Project Approval MP08_0130 (Project Approval). In accordance with Schedule 5 Condition 9 of the Project Approval this Annual Review has been prepared to assess the environmental performance of the Site to the satisfaction of the Director-General. The current reporting period is from 18 November 2013 to 17 November 2014.

This Annual Review provides:

- An overview of the Site;
- A description of the operations carried over the past calendar year (2014) which represents the reporting period;
- Analysis of the environmental monitoring results for the reporting period and a comparison of these results with relevant performance criteria and previous data;
- The identification of trends in monitoring data over the life of the Site; and
- A summary of recommendations to improve the environmental performance of the Site.

Construction of the Bulk Fuel Storage facility was largely completed in December 2013, with operations commencing in the same month. Monitoring data for the environmental parameters assessed in this report therefore are only available for the past 12 months. Any trends identified in monitoring data will therefore be considered in regard to the fact that data sets are currently small. As monitoring continues over the life of the Site, the reliability of any trends identified in monitoring data will increase with larger data sets available.

1.1 Site Location and Description

The Site is located on part of the former BHP Steelworks Site, approximately 5 km north-west of Newcastle CBD. The land on which the Site is located is leased from the PON and is currently subject to concept approval submission 09_0095 by PON (Mayfield Concept Approval Submission).The Site is situated opposite industries on Kooragang Island and the topography is essentially flat near the western bank of the Hunter River to the north and adjoining industry to the west as indicated in **Figure 1**. The Site is located within the Port of Newcastle, and the area surrounding the Site is characterised by a mixture of port related activities, industrial uses and residential and commercial areas.

The storage terminal consists of:

- Ship unloading facilities at the Mayfield Berth 4 (M4) wharf facility;
- A delivery pipeline from M4 to the terminal;
- Seven storage tanks from 460m^3 to 16,350m^3 as summarised in **Table 1**;
- A 4 bay automated truck loading and unloading facility;
- Pumping capacity for bulk tanker (truck loading);
- Appropriate drainage and spill containment systems; and
- Fire protection systems.

The approved terminal layout is provided in **Figure 2**.

Table 1 Schedule of Fuels Storage Tanks

Tank ID No.	Design Product	Tank Diameter	Shell Height (m)	Usable Volume (m^3)
1	Diesel	36.6	17.1	16,350
2	Diesel	36.6	17.1	16,350
3	Diesel	36.6	17.1	16,350
4	Biodiesel	7.6	12	460
5	Diesel	36.6	17.1	16,350
6	Diesel	36.6	17.1	16,350
7	Biodiesel	18	17	3,970

1.2 Site History

The Site is located on part of the former BHP Steelworks Site. BHP was located on the site from 1915 to 1999. In 2002, ownership of that part of the former Steelworks Site known as the Closure Area Site was transferred to the State Government. In March 2007, the Hunter Development Corporation (HDC) (formerly the Regional Land Management Corporation Pty Ltd) was created by the Government to manage the day-to-day activities of former BHP and other Crown lands in the Lower Hunter Region, including remedial and redevelopment works for the Closure Area Site (SKM 2004).

On 14 June 2001, under former Section 21 of the *Contaminated Land Management Act 1997* (CLM Act), the Environment Protection Authority (EPA) declared the Closure Area Site to be a remediation site. A Remediation Action Plan (RAP) was prepared by SKM in 2004 to address contamination issues associated with soils and groundwater. A Voluntary Remediation Agreement (VRA No 26025) for the remediation of the Site was issued by the EPA on 30 August 2005. HDC undertook to fulfil these remediation commitments.

In March 2008, a Contaminated Site Management Plan (CSMP) for the Closure Area of Former Steelworks Site Mayfield was prepared by HDC. The CSMP provided a common framework to be applied across the whole of the site for the design, implementation, completion, use and maintenance of remediation and project works. In mid-2008, HDC completed Stage 1 of the remediation works. Stage 2 of the remediation works were subsequently completed in 2013.

Following a handover in ownership to the Newcastle Port Corporation (NPC), now PON, a Concept Plan application for the future strategic development of the former BHP site was approved by the Minister for Planning in July 2012. The Concept Plan approval made provision for the future development of part of the former BHP site for bulk liquid related industries.

Stolthaven was the first, and continues to remain the only operation currently active on the former BHP site, having received initial approval for their Site in June 2012. PON also operates M4 within the Concept Plan area which is a general purposes berth which is currently used by Stolthaven for the import of fuels.

1.2.1 Mayfield Concept Plan

Concept Plan (MP09_0096) was approved by the Minister under Section 75M of the EP&A Act on 16 July 2012 to enable development of the former BHP Steelworks site (known as the Closure Area or Concept Plan area), a 90-hectare portside portion of land on the South Arm of the Hunter River within which the Site sits. The Concept Plan area is to be developed progressively in stages to accommodate anticipated future trade needs over a 20-25 year timeframe.

1.3 Operations and Approval

The Site operates in accordance with Project Approval 08_130 issued on 8 June 2012 under Part 3A (repealed) of the EP&A Act. Site operations are described below in sequence of approval history.

1.3.1 Project Approval

Project Approval 08_0130 was approved by the Minister for Planning on 8 June 2012 under Part 3A (repealed) of the EP&A Act. In summary the original project comprised the following elements:

- Use of an existing ship berthing facility via M4 to deliver fuels from bulk tankers. Fuel to be pumped along a 300 mm diameter steel pipeline from Mayfield M4 to the Facility;
- Storage of bulk fuels in above ground tanks (3 x 18ML diesel and 3ML biodiesel) with a total permitted annual throughout of 300 ML combined;
- Distribution of fuels by road tankers; and
- Ancillary components including site office, car parking and truck loading gantry.

Construction of the Facility as approved under the original Project Approval (08_0130) was completed in late 2013, with the first shipment of fuels commencing 19 November 2013.

Subsequent modification to the Project Approval that occurred during the reporting period as detailed in **Section 2.2**.

1.3.2 Licence

The Site operates under Environment Protection Licence (EPL) 20193 which is administered by the NSW EPA under the *Protection of the Environment Operations Act* 1997 (POEO Act). EPL 20193 permits the scheduled activities of Chemical Storage and Shipping in Bulk on the site.

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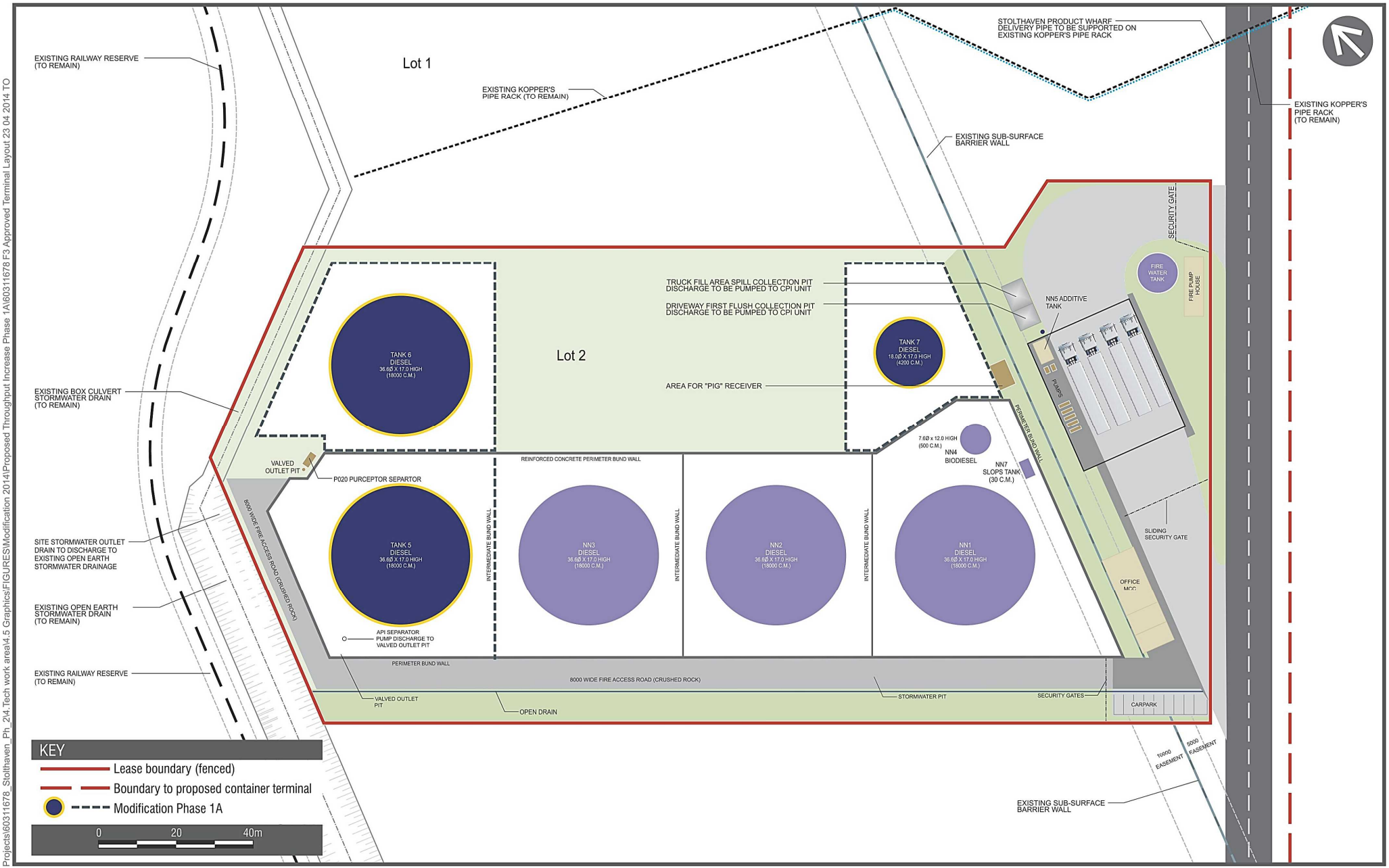
SITE LOCATION

Bulk Fuel Storage Facility,

FIGURE 1



Projects\60311678_Stolthaven_Ph_2\4 Tech work area\4.5 Graphics\FIGURES\Modification 2014\Proposed Throughput Increase Phase 1A\60311678 F3 Approved Terminal Layout 23 04 2014 TO

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APPROVED TERMINAL LAYOUT

Bulk Fuel Storage Facility,

FIGURE 2

2.0 Site Operations

2.1 Description of Operations

Operations undertaken at the Site include the receipt, storage and dispatch of bulk diesel and biodiesel loading, as well as bulk tanker loading at the Newcastle Mayfield Terminal. The terminal operates 24 hours a day, seven days a week. The site is partially automated and manned with Stolthaven personnel undertaking daily inspections of the site. Primary site operations include:

- The bulk storage of diesel and biodiesel at the site in the storage tanks listed in **Table 1**;
- The bulk transfer of diesel fuel from berthed ships to the site's above ground storage tanks; and
- The filling of road tankers with diesel and biodiesel products for transfer to customers.

2.2 Major Operational Changes in 2014

Following Project Approval 08_0130 on 8 June 2012, Stolthaven made 3 modifications to the Project Approval and have subsequently altered operations to reflect these modifications as summarised below.

Modification 1 – Stage 1A

A subsequent modification to 08_0103 (MOD 1) was sought, and approved by the Department of Planning & Environment (DP&E) under delegation on the 26 July 2013. MOD 1 included the following elements:

- 2 x 18ML diesel tanks;
- 1 x 4.2ML biodiesel tanks; and
- Increased throughput by 100ML per year, to a total facility throughput of 400ML per year.

MOD 1 was constructed and in operation during 2014.

Modification 2 – Amend Condition

For clarity, Modification 2 to the Project Approval sought the amendment of wording of Condition 4, Schedule 4. Modification 2 was a 'paper amendment' and has no impact on the design or operation of the facility.

Modification 3 – Throughput Increase

Modification No. 3 sought approval to increase annual throughput from the 400ML pa approved in MOD2, to a new upper limit of 500ML pa throughput. MOD 3 did not include any constructed elements such as new tanks or gantries and therefore did not require construction lead in time prior to being enacted. The MOD 3 throughput increase was approved and enacted mid-2014.

3.0 Ground Water

3.1 Groundwater Monitoring

Groundwater quality at the Site is managed in accordance with a groundwater monitoring program, adherence to the Site's Groundwater Management Plan and the conditions of EPL 20193. Groundwater beneath the site discharges into the Hunter River via groundwater migration.

Four groundwater monitoring wells were installed by Stolthaven in October 2013 (identified as Monitoring Points 1-4 in the EPL) and are subsequently identified as MW01, MW02, MW03 and MW04 in this report. The groundwater monitoring program consists of the quarterly collection of data and samples from the groundwater wells. Monitoring events are scheduled so that groundwater conditions beneath the Site are investigated during both wet and dry seasons. The schedule of groundwater monitoring wells is provided in **Table 2**.

Table 2 Schedule of Groundwater Monitoring Points at the Site

EPA Identification Number	Type of Monitoring Point
1	Groundwater
2	Groundwater
3	Groundwater
4	Groundwater

Background monitoring was conducted through October to November 2013 to assess the condition of groundwater entering and leaving the site (particularly for the presence of petroleum hydrocarbons) in order to establish baseline groundwater quality within the Site before the commencement of fuel storage and use. The results of background monitoring are included alongside groundwater monitoring results for the reporting period in **Section 3.2**.

Groundwater monitoring results are assessed against the site's Groundwater Assessment Criteria (GAC) as part of the Site's Groundwater Management Plan, as well as against the background concentrations established in 2013. The thresholds that form the GAC are sourced from the ANZECC (2000) *Australia New Zealand Water Quality Guidelines for Fresh and Marine Waters,* 95% Species Protection for Marine Waters Criterion. Where trigger values have not been published, ANZECC (2000) low reliability trigger values were adopted. There are no groundwater quality requirements under the Site's EPL. The GAC is set out in **Table 3**.

Samples are analysed for pollutants by a NATA accredited laboratory. Indicators of potential adverse groundwater quality impact will include (but are not limited to) the following:

- Evidence of non-aqueous phase liquid (NAPL) (e.g. a separate fuel layer) on the groundwater table;
- Changes in clarity, colour and odour of groundwater; and
- Increases in concentrations of dissolved phase impact.

Table 3 Groundwater Assessment Criteria

Compound	Units	ANZECC (2000) 95% Low Reliability Values	ANZECC (2000) 95% Trigger Values	EPL Concentration Limit
BTEX				
Benzene	(µg/L)	-	700	-
Ethylbenzene	(µg/L)	80	-	-
Toluene	(µg/L)	180	-	-
o-xylene	(µg/L)	350	-	-

Compound	Units	ANZECC (2000) 95% Low Reliability Values	ANZECC (2000) 95% Trigger Values	EPL Concentration Limit
p-xylene	(µg/L)	200	-	-
m-xylene	(µg/L)	80	-	-
Total Xylene	(µg/L)	-	-	-
Total Recoverable Hydrocarbons				
C6-C10	(µg/L)	-	-	
C6-C10 - BTEX	(µg/L)	-	-	
>C10-C16 Fraction	(µg/L)	-	-	
>C16-C34 Fraction	(µg/L)	-	-	
>C34-C40 Fraction	(µg/L)	-	-	
>C10-C16 Fraction – Naphthalene	(µg/L)	-	-	

3.2 Groundwater Monitoring Results

Groundwater monitoring results are presented in **Table 4** to **Table 7** with commentary on the analysis provided below.

3.2.1 MW01

Table 4 Groundwater Monitoring Results for MW01

Analyte	Laboratory Limit of Reporting	25/02/14	23/05/14	11/08/14	07/11/14	Background Range	GAC
pH							
pH	0.01	9.01	9.46	9.51	9.41	9.05 – 9.79	
BTEX (µg/L)							
Benzene	1	<1	<1	<1	<1	<1	700
Ethylbenzene	2	<2	<2	<2	<2	<2	80
Toluene	2	<2	<2	<2	<2	<2	180
Xylene (o)	2	<2	<2	<2	<2	<2	350
Xylene (m&p)	2	<2			<2		80
Total Recoverable Hydrocarbons (µg/L)							
C6-C10	20	<20	<20	<20	<20	<20	
C6-C10 minus BTEX (F1)	20	<100	<100	<100	<20	<20	

Analyte	Laboratory Limit of Reporting	25/02/14	23/05/14	11/08/14	07/11/14	Background Range	GAC
>C10-C16 Fraction	100	<100	<100	<100	<100	<100	
>C16-C34 Fraction	100	<100	<100	<100	<100	<100	
>C34-C40 Fraction	100	<100	<100	<100	<100	<100	
>C10-C16 Fraction – Naphthalene	100	<100	<100	<100	<100	<100	

3.2.2 MW02

Table 5 Groundwater Monitoring Results for MW02

Analyte	Laboratory Limit of Reporting	25/02/14	23/05/14	11/08/14	07/11/14	Background Range	
pH							
pH	0.01	7.73	7.76	7.91	7.85	8.06 – 8.68	
BTEX (µg/L)							
Benzene	1	2	2	1	1	<1 -5	700
Ethylbenzene	2	<2	<2	<2	<2	<2	80
Toluene	2	<2	<2	<2	<2	<2	180
Xylene (o)	2	<2	<2	<2	<2	<2	350
Xylene (m&p)	2	<2			<2		80
Total Recoverable Hydrocarbons (µg/L)							
C6-C10	20	<20	<20	<20	<20	<20	
C6-C10 minus BTEX (F1)	20	<100	<100	<100	<20	<20	
>C10-C16 Fraction	100	<100	<100	<100	<100	<100	
>C16-C34 Fraction	100	<100	<100	<100	<100	<100 - 380	
>C34-C40 Fraction	100	<100	<100	<100	<100	<100	
>C10-C16 Fraction – Naphthalene	100	<100	<100	<100	<100	<100	

3.2.3 MW03

Table 6 Groundwater Monitoring Results for MW03

Analyte	Laboratory Limit of Reporting	25/02/14	23/05/14	11/08/14	07/11/14	Background Range	
pH							
pH	0.01	7.47	7.73	8.02	8.43	7 - 7.35	
BTEX (µg/L)							
Benzene	1	<1	<1	<1	<1	<1	700
Ethylbenzene	2	<2	<2	<2	<2	<2	80
Toluene	2	<2	<2	<2	<2	<2	180
Xylene (o)	2	<2	<2	<2	<2	<2	350
Xylene (m&p)	2	<2			<2		80
Total Recoverable Hydrocarbons (µg/L)							
C6-C10	20	<20	<20	<20	<20	<20	
C6-C10 minus BTEX (F1)	20	<100	<100	<100	<20	<20	
>C10-C16 Fraction	100	<100	<100	<100	<100	<100	
>C16-C34 Fraction	100	<100	<100	<100	<100	<100 - 180	
>C34-C40 Fraction	100	<100	<100	<100	<100	<100	
>C10-C16 Fraction – Naphthalene	100	<100	<100	<100	<100	<100	

3.2.4 MW04

Table 7 Groundwater Monitoring Results for MW04

Analyte	Laboratory Limit of Reporting	25/02/14	23/05/14	11/08/14	07/11/14	Background Range	
pH							
pH	0.01	8.81	8.37	8.74	8.63	9.21 – 9.61	
BTEX (µg/L)							
Benzene	1	<1	<1	<1	<1	<1	700
Ethylbenzene	2	<2	<2	<2	<2	<2	80
Toluene	2	<2	<2	<2	<2	<2	180

Analyte	Laboratory Limit of Reporting	25/02/14	23/05/14	11/08/14	07/11/14	Background Range	
Xylene (o)	2	<2	<2	<2	<2	<2	350
Xylene (m&p)	2	<2			<2		80
Total Recoverable Hydrocarbons (µg/L)							
C6-C10	20	<20	<20	<20	<20	<20	
C6-C10 minus BTEX (F1)	20	<100	<100	<100	<20	<20	
>C10-C16 Fraction	100	<100	<100	<100	<100	<100	
>C16-C34 Fraction	100	<100	<100	<100	<100	<100	
>C34-C40 Fraction	100	<100	<100	<100	<100	<100	
>C10-C16 Fraction – Naphthalene	100	<100	<100	<100	<100	<100	

3.3 Analysis of Results

A statistical trend analysis was undertaken for analytes at selected monitoring locations to determine if any trends were apparent in the dataset. An upper confidence level of 95% was set in order to determine if any trends identified were statistically significant.

Published guidance states that a minimum of six data points are required to perform statistical trend analysis, with greater sample sizes resulting in greater confidence in any trends that are identified. As of this Annual Review, seven data points are available for trend analysis with monitoring at the Site having commenced in October 2013. While this dataset meets the minimum sample size requirement for analysis to be undertaken, significant trends in the data are generally not apparent at this stage.

A larger sample size (using data that will be gathered over future monitoring events) will give greater confidence to any trends identified below.

3.3.1 MW01

pH levels recorded at MW01 for this reporting period ranged from 9.01 to 9.79, remaining within background levels recorded at the site. There was insufficient statistical evidence to confirm a significant trend in the data which is presented in **Figure 3**. At this preliminary stage it does not appear that site operations are have a significant impact on pH levels at MW01.

Total Recoverable Hydrocarbons (TRH) concentrations were below Laboratory limits of reporting (LOR) at MW01 and were consistent with background levels established for the site. BTEX concentrations were also below the LOR at MW01 and while no statistically significant trend is apparent at this stage, it appears BTEX concentrations are stable below the LOR at MW01.

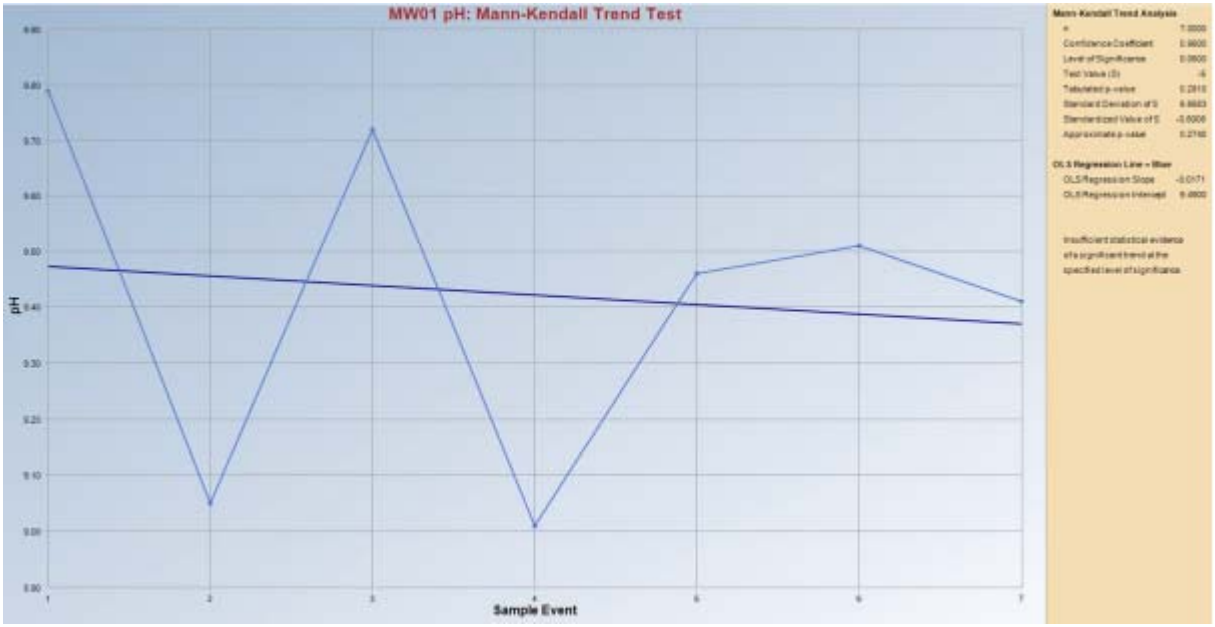

Figure 3 Statistical trend analysis for pH levels at MW01

3.3.2 MW02

pH levels recorded at MW02 for this reporting period ranged from 7.73 to 7.91 and were below background levels recorded at the site. While **Figure 4** below shows a general decrease in pH over time, there was insufficient statistical evidence to confirm this as a significant trend in the data at this stage.

TRH concentrations at MW02 were below the LOR for this GME and are typical of concentrations recorded during background monitoring. TRH fractions have not been recorded at MW02 since records began, apart from one recorded low concentration in the >C16-C34 fraction (380µg/L) in October 2013. Overall, TRH concentrations appear to be stable at below LOR since October 2013.

A value of 1µg/L of Benzene was recorded at MW02 during the August and November sampling events while a value of 2µg/L was recorded during the February and May events. These results were slightly below or equal to the lower range of 2 to 5µg/L recorded during background monitoring. Although Benzene has been recorded consistently at above LOR concentrations at MW02, statistical analysis indicates there is insufficient evidence to identify a statistically significant trend at the 95% confidence level. Data is presented as **Figure 5** below.

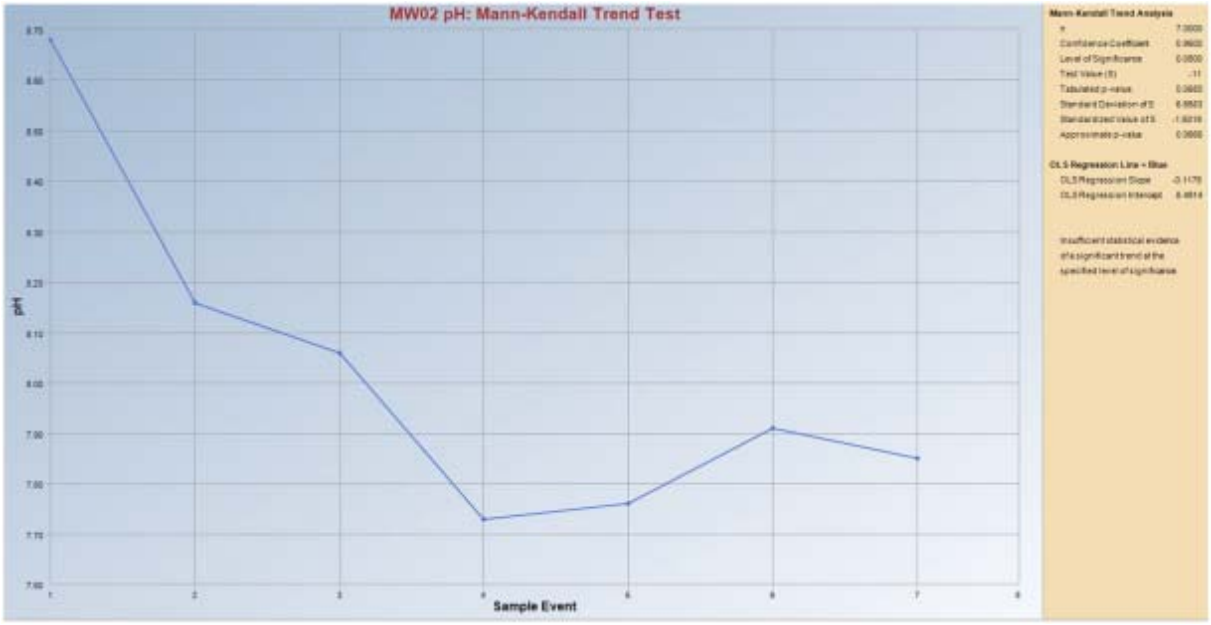

Figure 4 Statistical trend analysis for pH levels at MW02

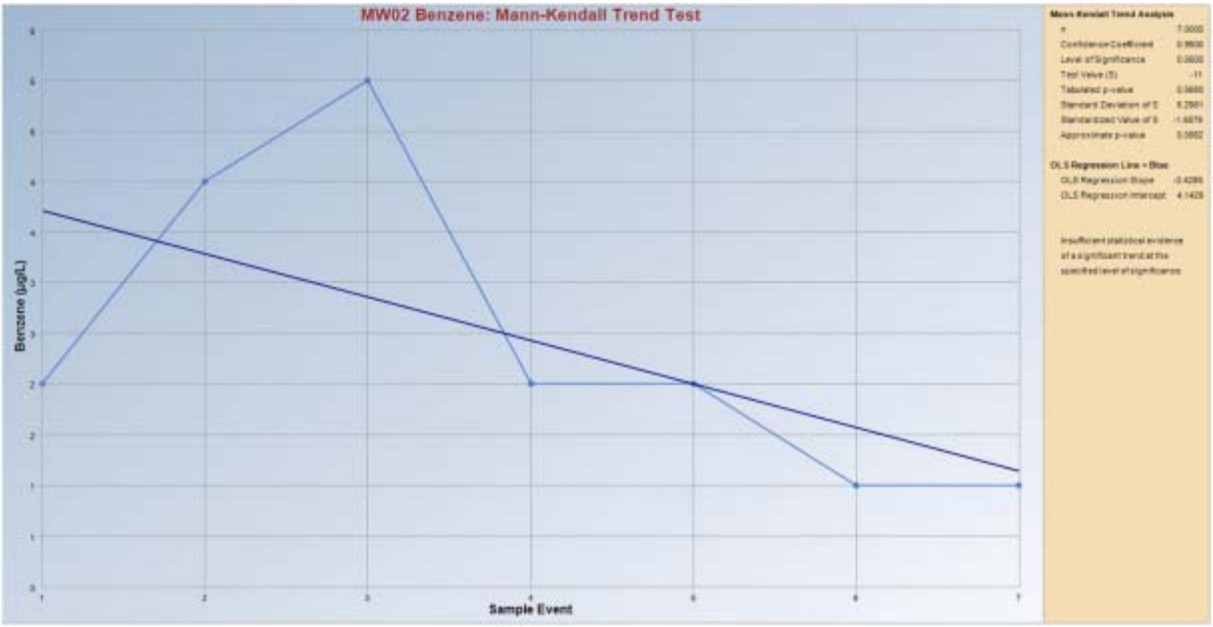

Figure 5 Statistical trend analysis for benzene concentrations at MW02

3.3.3 MW03

pH levels recorded at MW03 for this reporting period ranged from 7.47 to 8.43, with values above background levels recorded at the site. pH values at this location have increased steadily since records began. As shown in **Figure 6** there is evidence of a trend in the data. However given the small sample size used in calculations, the trend is not considered to be statistically significant at this stage.

Total Recoverable Hydrocarbons (TRH) concentrations were below Laboratory limits of reporting (LOR) at MW03 and were consistent with background levels established for the site. TRH fractions have not been recorded at MW02 since records began, apart from one recorded low concentration in the >C16-C34 fraction (380µg/L) in October 2013.Overall, TRH concentrations appear to be stable at below LOR since October 2013.

BTEX concentrations were also below the LOR at MW03 and while no statistically significant trend is apparent at this stage, it appears BTEX concentrations are stable below the LOR at MW03.

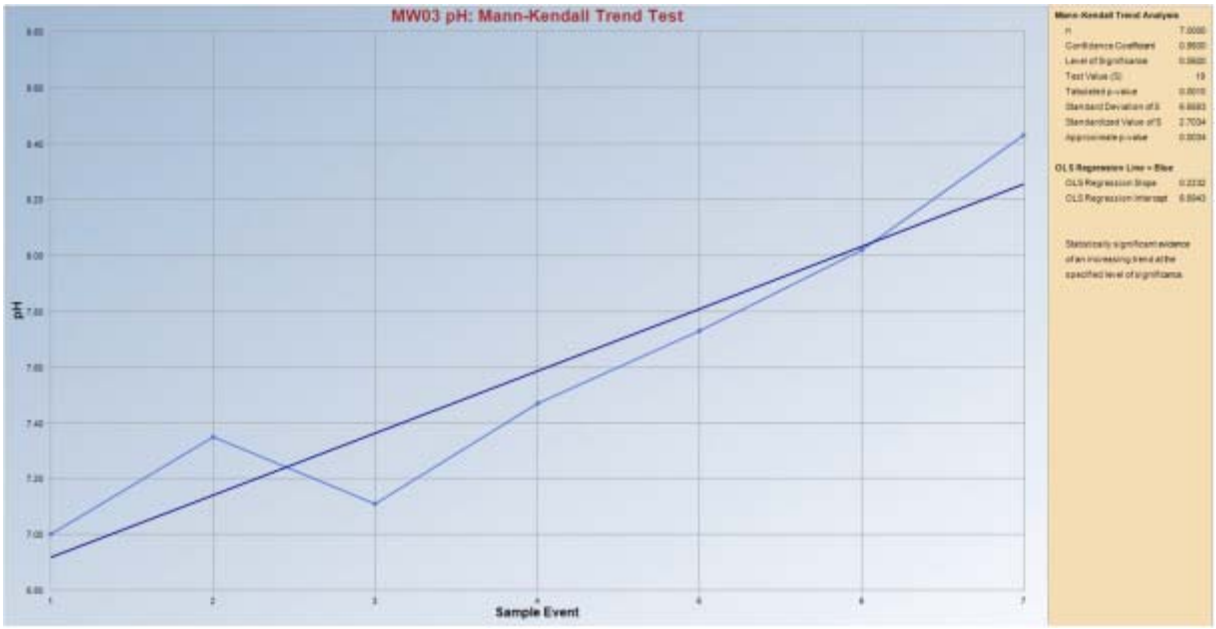

Figure 6 Statistical trend analysis for pH levels at MW03

3.3.4 MW04

pH levels recorded at MW04 for this reporting period ranged 8.37 to 8.81, with values below background levels recorded at the site. pH at MW04 has decreased overall, showing a downward trend since monitoring began in October 2013. Trend analysis conducted on this data indicates statistical evidence of a downward trend in pH at this location as presented in **Figure 7** However due to the small sample size used in calculations, the trend is not considered significant at this stage.

TRH concentrations were below the LOR at MW04 and were consistent with background levels established for the site. BTEX concentrations were also below the LOR at MW04 and while no statistically significant trend is apparent at this stage, it appears BTEX concentrations are stable below the LOR at MW04.

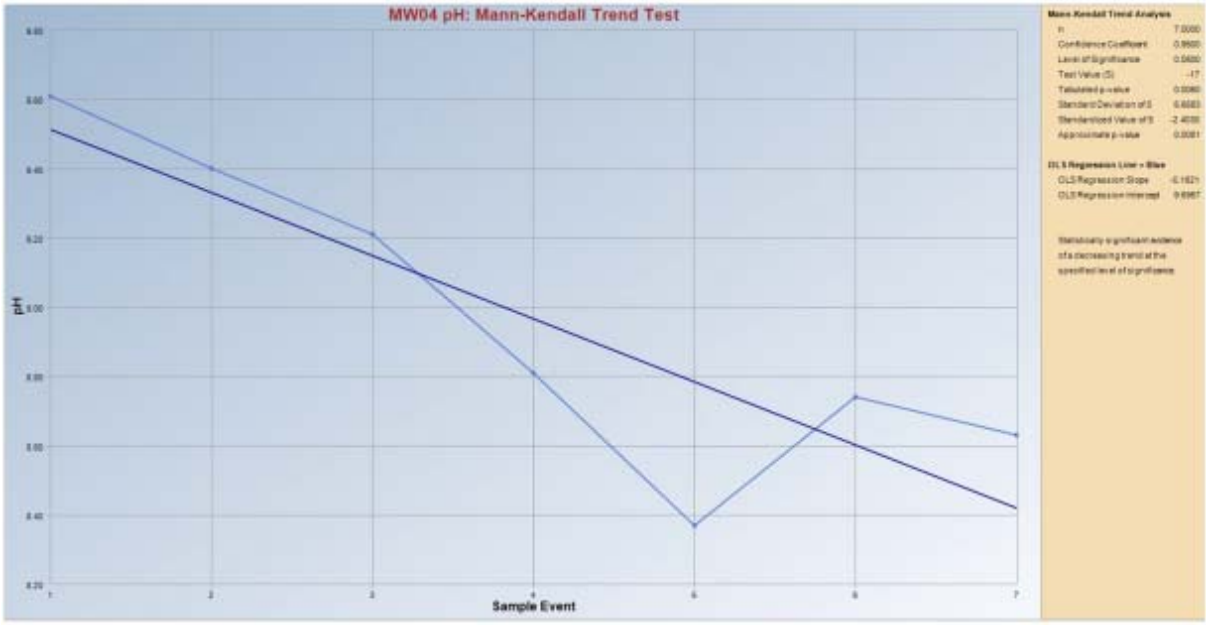

Figure 7 Statistical trend analysis for pH levels at MW04

3.4 Summary of Groundwater Results

Where appropriate, statistical trend analysis was undertaken on individual analytes using an upper confidence level of 95% at selected monitoring well locations. Trend analysis recorded varying results due to the small number of data sets available at this stage of assessment.

Trends in TRH and BTEX concentrations were largely non-calculable given the small dataset available for analysis and the high proportion of Non-Detect values in the data (caused by data points with results below LOR concentrations).

Some preliminary trends were identified for pH at MW03 and MW04, and Benzene at MW02. However given the small dataset these trends are not considered scientifically robust to make decisions on possible corrective actions at this stage of assessment.

Further data from future monitoring events will be required to give credence to the preliminary trends identified above. While statistically significant trends were not available for TRH and BTEX results at MW01 - MW04, it is noted that all results for these analytes are below the GAC for the Site and in most cases, below the LOR. These results are also consistent with historic TRH and BTEX data at the Site. All parameters analysed were compliant with GAC criteria.

4.0 Storm Water

4.1 Stormwater Monitoring

Monitoring of stormwater discharges is undertaken as part of the Site's Stormwater Management Plan (SWMP) to assess the efficiency of stormwater runoff quality controls implemented at the Site. Monitoring of stormwater at the Site consists of:

- Visual inspection of the site and areas receiving runoff from the site; and
- Water quality monitoring undertaken monthly and after rainfall events.

Indicators of potential adverse water quality impacts as assessed through water quality monitoring include:

- Evidence of erosion and scouring around the stormwater pipe discharge outlets;
- Changes in clarity, colour and odour of receiving waters;
- Presence of debris and rubbish;
- Evidence of stress on flora or fauna ;
- Presence of an oily film on water surfaces; and
- Orange/brown coating on banks, water surfaces or substrate.

There are currently six concrete covered bund walls around the Site's bulk storage area designed to contain any spills onsite and prevent environmental harm. The bunds are referred to as Bund 1, Bund 2, Bund 3, Bund 5, Bund 6 and Bund 7. After every rainfall event all bunds are sampled and tested before and internal transfer to Bund 7 and then released through the Puraceptor on Site according to the SWMP. In order to ensure the quality of stormwater collected from the bunds, the outlet from the bunds is kept closed at all times.

The Puraceptor is a water quality and hydrocarbon detector located at the Site's licenced discharge point at the Hunter River. In order to confirm that stormwater measures implemented at the site do not adversely impact on the Hunter River, samples are collected following a rainfall event that result in sufficient stormwater discharge to collect surface water samples. The water samples are analysed prior to discharge for the pollutants as shown in **Table 8**. Concentration limits are taken from EPL 20193. Once water quality results are obtained for the water in the Puraceptor, water is discharged into the Hunter River via an outfall drain. If water quality is found to be noncompliant with the parameters prescribed in the site's EPL it is treated further and then retested until the water is of an acceptable quality to be discharged.

Table 8 Water Quality Criteria (EPL 20193)

Pollutant	Units of Measure	Frequency	Method	100 percentile concentration limit
Biological Oxygen Demand (BOD)	Milligrams per litre	Weekly during any discharge	Grab sample	20
Dissolved Oxygen	Milligrams per litre	Weekly during any discharge	Grab sample	>2
Oil and Grease	Milligrams per litre	Weekly during any discharge	Grab sample	10
pH	pH	Weekly during any discharge	Grab sample	6.5 – 8.5
Total Suspended Solids	Milligrams per litre	Weekly during any discharge	Grab sample	30
Volume	Megalitres per day	Continuous during discharge	Special Method 1	

4.2 Stormwater Monitoring Results

Results from stormwater monitoring are presented below. Water quality results from water discharged from the Site's licenced discharged point are presented in **Table 9** and water quality results from bund water sampling is summarised in **Table 10**. A full copy of the data from stormwater monitoring is provided in **Appendix A**.

Table 9 Discharged Water Quality Results

Sample Date	Biological Oxygen Demand (BOD) (mg/L)	Dissolved Oxygen (mg/L)	Oil and Grease (mg/L)	pH	Total Suspended Solids	Volume discharged (L)
18/02/2014		5.98		7.79		
24/04/2014	<2	6.77	<2	7.47	11	30,000
13/05/2014	6	7.71	<2*	7.46	19	35,000
30/05/2014	3	9.03	<2	8.25*	18	40,000
14/06/2014	3	9.44	<2	8.04		20,000
28/07/2014	<2	7.45	<2	8.16	28	
18/08/2014	4	7.25	<2	7.22	29*	
25/08/2014	2	9.44	<2	8.2	17*	
11/10/2014	<2	7.3	2	7.4	21	
06/11/2014	4	6.28	<2	7	5*	

Note: * = sample retested after treatment.

Table 10 Bund Water Quality Results

	Maximum	Minimum	Average
pH	8.15	6.10	7.31
Total Dissolved Solids (ppm)	90.10	12.80	50.90
Dissolved Oxygen	61.30	4	27.73
Conductivity (µS/cm)	173.20	30.0	75.88

4.3 Analysis of Results

4.3.1 Discharged Water Quality Results

The results of water quality analysis of water discharged from the site are summarised in **Table 9** and are analysed below. Water discharged from the site was complaint with all conditions of the site's EPL. Considering the small samples size of available water quality data, it should be noted only preliminary trends have been identified in the data and these trends could be subject to significant change in later reporting periods.

Biological Oxygen Demand (BOD)

The recorded BOD levels for discharged water at the site were compliant with the Site's EPL, remaining significantly below the prescribed maximum concentration limit of 20 mg/L as shown in **Figure 8**. BOD levels were recorded at an average 3.7 mg/L, with a maximum recording of 6 mg/L which was still 14mg/L below the EPL concentration limit for the Site. While the sample size remains small, available data suggests BOD levels at the site remain stable within the range of 1 – 6 mg/L.

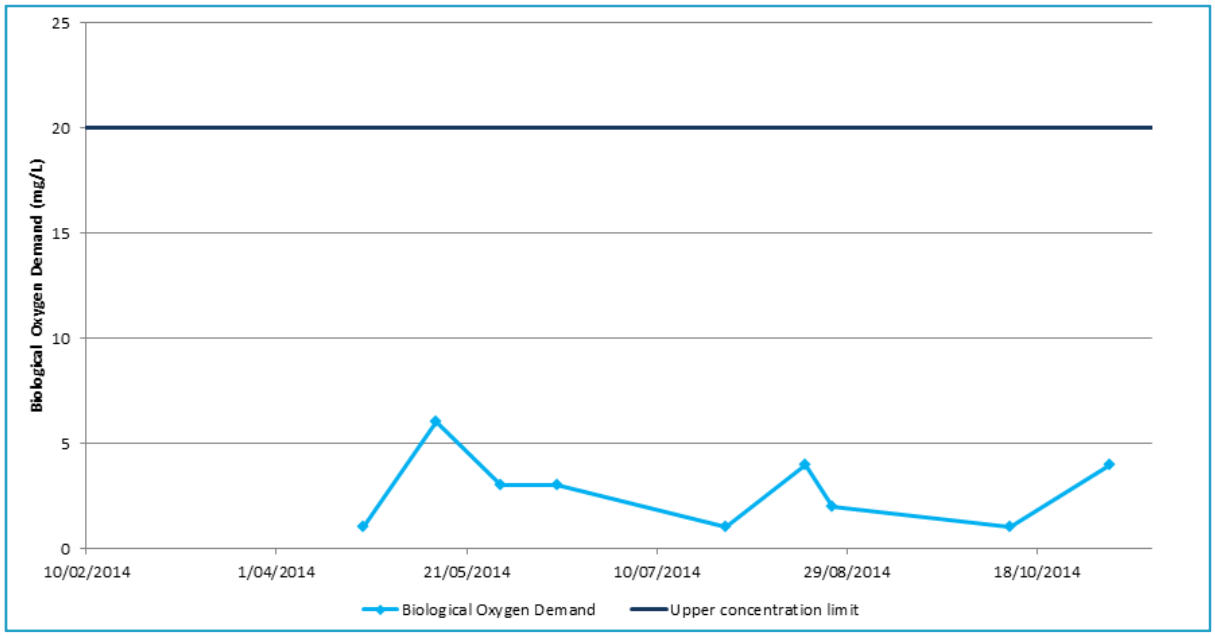

Figure 8 BOD levels for discharge water at the Site.

Note: Concentrations recorded as below LOR (<2) represented in the figure as 1 mg/L.

Dissolved Oxygen

The recorded dissolved oxygen levels for discharged water at the site were compliant with the Site's EPL, remaining above the prescribed minimum concentration limit of 2 mg/L as shown in **Figure 9**. Dissolved Oxygen was recorded at an average of 7.7 mg/L with a minimum recording of 6 mg/L, which was still well above the minimum EPL concentration limit for the site of 2 mg/L. While the sample size remains small, available data suggests that dissolved oxygen levels at the site remain stable within a range of 6 to 9.5 mg/L.

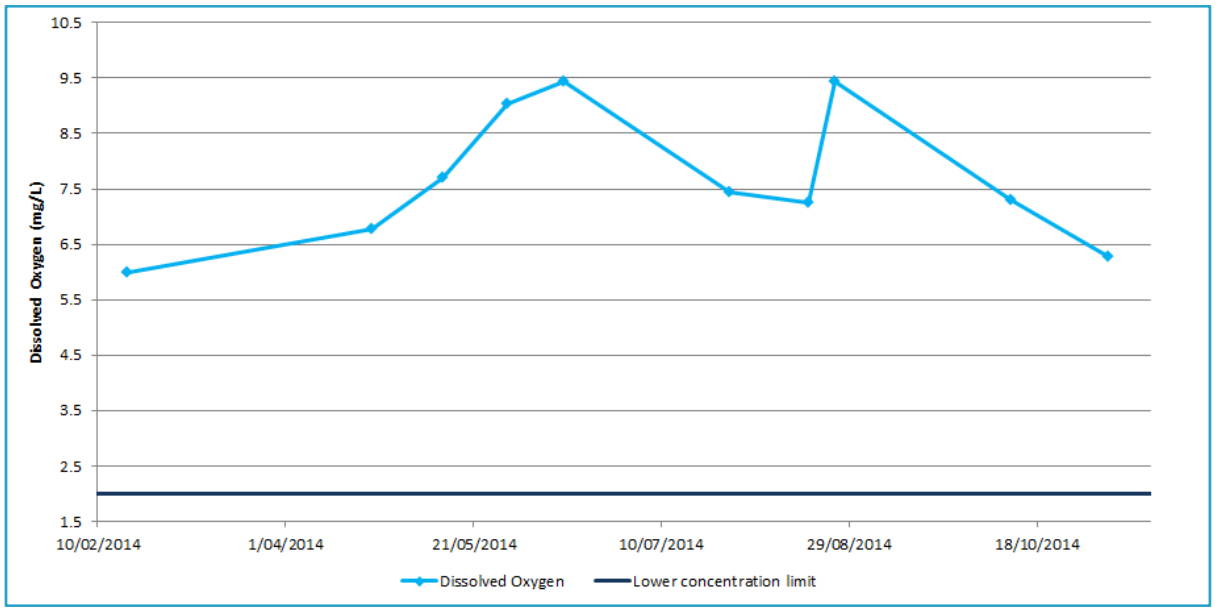

Figure 9 Dissolved Oxygen levels for discharged water at the Site

Oil and Grease

The recorded Oil and Grease levels for discharged water at the site were compliant with the Site's EPL, and did not exceed the maximum concentration limit of 2 mg/L as shown in **Table 9**. Oil and Grease levels were below LOR (2 mg/L) for all discharge events except on 11/10/2014 where Oil and Grease was recorded at 2mg/L. While the sample size remains small, available data suggests that Oil and Grease levels at the site remain stable below LOR.

pH

The recorded pH levels for discharged water at the site were compliant with the Site's EPL, remaining in the prescribed pH range of 6.5 – 8.5 as shown in **Figure 10** pH was recorded at an average of 7.7 with a maximum recording of 8.25 and a minimum recording of 7. While the sample size remains small, available data suggests that pH at the site remains stable within a range of 7 to 8.25.

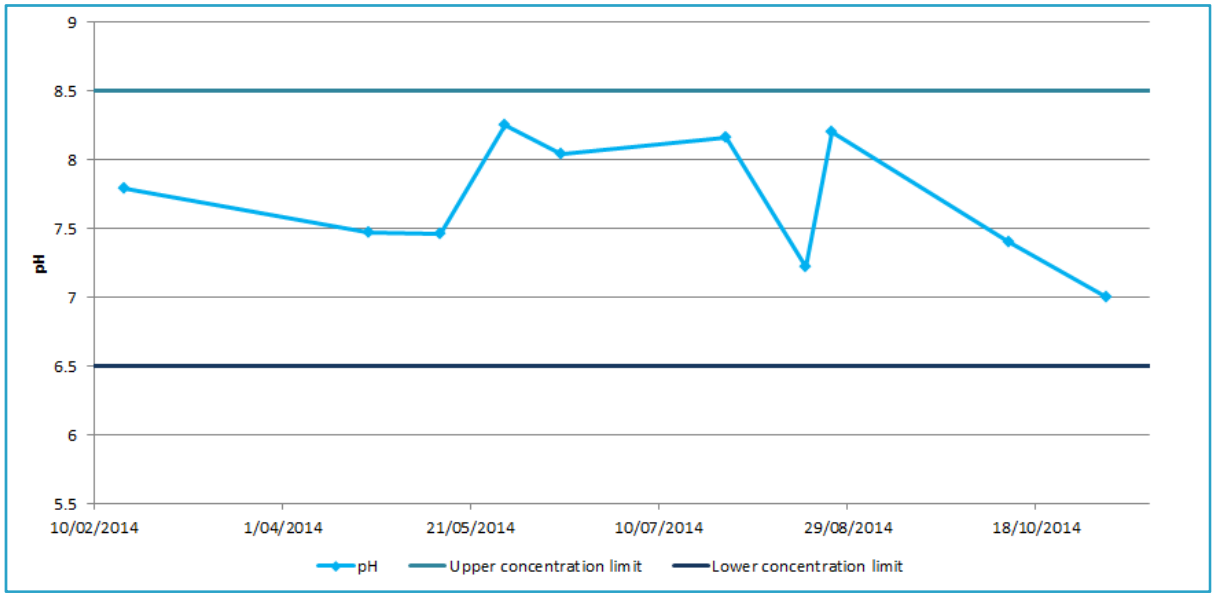

Figure 10 pH levels for discharged water at the Site

Total Suspended Solids

The recorded Total Suspended Solids (TSS) levels for discharged water at the site were compliant with the Site's EPL, remaining significantly below the prescribed maximum concentration limit of 30 mg/L as shown in **Figure 11**. TSS levels were recorded at an average 19 mg/L, with a maximum recording of 29 mg/L which remained below the EPL concentration limit for the Site. While the sample size remains small, available data suggests TSS levels at the site remain stable within the range of 5 – 30 mg/L.

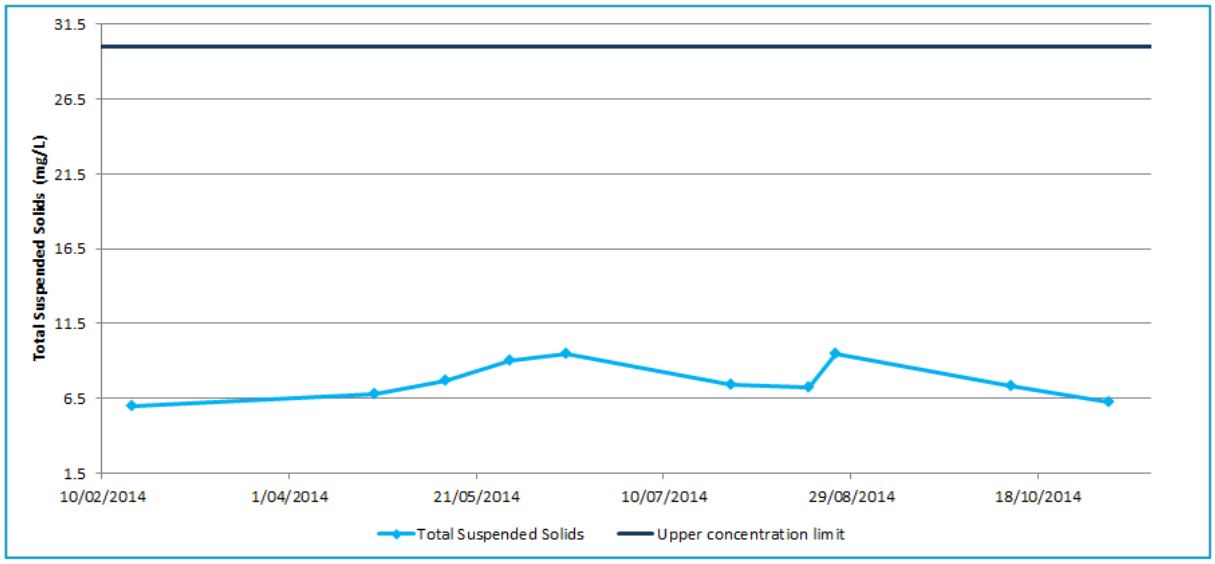

Figure 11 Total Suspended Solids Levels for discharged water at the Site.

4.3.2 Bund Water Quality Results

The results of water quality analysis of bund water following rainfall events is summarised in **Table 10** and are analysed below. There are currently no specific limits for bund water quality as they do not discharge into waterways. Bund water is sampled following rainfall and then treated before it is released through the Puraceptor out of the Site's licenced discharge point after water quality analysis confirms the water can be safely discharged into the Hunter River.

Bund water quality will be compared against the Site's own baseline data and significant deviations from this baseline data will be highlighted and assessed. In future reporting periods, the data series will grow in accuracy and bund water quality trends and issues will be identified with greater confidence and appropriate management measures can be recommended to address any issues identified.

It should be noted that samples taken on the 28/12/2013, 38/01/2014, 20/02/2014 and 31/03/2014 were not analysed until over a month after sampling was conducted. The data received for these sampling events is therefore not an accurate representation of water quality.

pH

pH levels at the site ranged from 6.10 to 8.15 and were recorded at an average of 7.25. pH levels in the bunds were recorded as being below the minimum concentration limit given for the Site's licenced discharged point on seven occasions but as discussed above, these pH levels were identified in water quality analysis of the bunds and the water was then treated until the pH was above the minimum concentration limit before it was discharged. As shown in **Figure 12** there is a very slight increasing linear trend in pH although this is not of concern to Stolthaven considering the magnitude of the trend and the treatment measures in place to control the pH of water discharged from the Site.

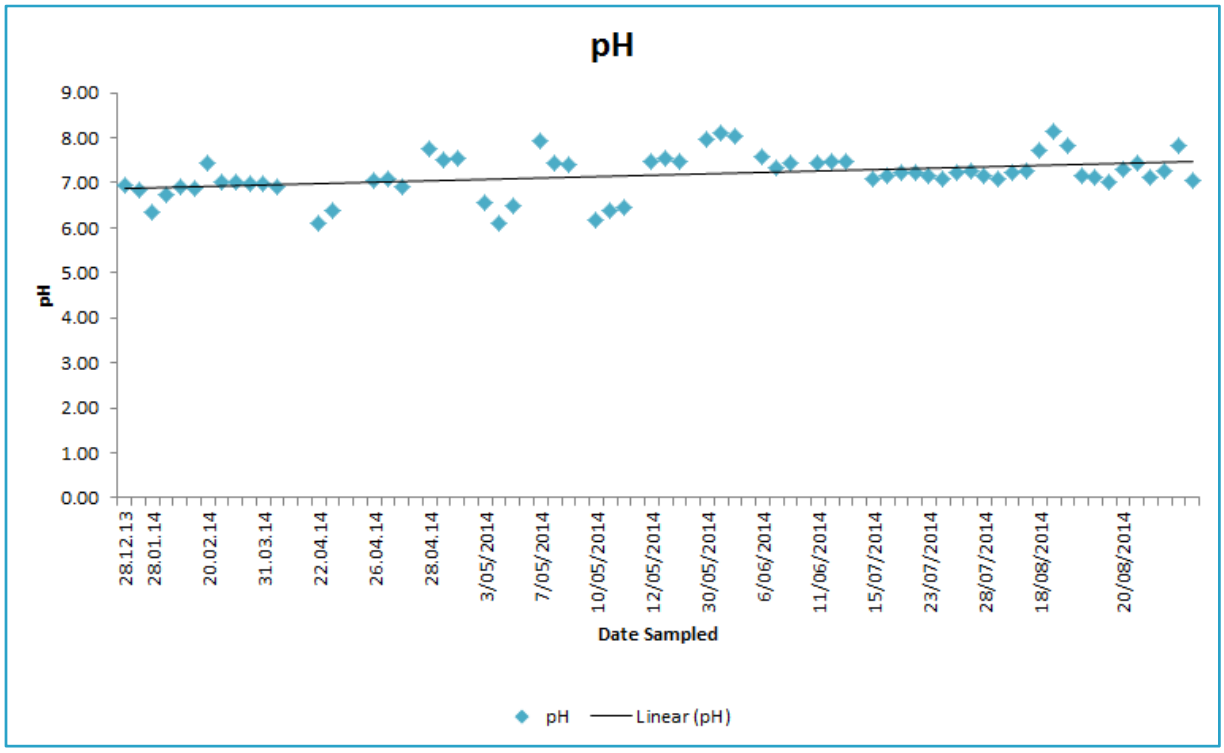

Figure 12 pH levels for Bund Water at the Site

This initial data series represents growing baseline data for pH at the Site. As the data series grows with future monitoring, significant issues with pH will be identified with greater confidence.

Total Dissolved Solids (TDS)

TDS levels at the site ranged from 0.10 to 387ppm and were recorded at an average of 56ppm. The very high TSS readings of 185, 154 and 387ppm from samples taken on the 28/01/2014 were not analysed until 3 months after sampling had taken place and are therefore not an accurate representation of water quality. As shown in **Figure 13**, TDS levels in the bund water at the site were fairly stable between 0-100ppm omitting the unreliable concentrations from early in the reporting period. There is a slight decreasing linear trend in TDS concentrations over the reporting period which indicates increasing water quality and the effectiveness of surface water management measures on site.

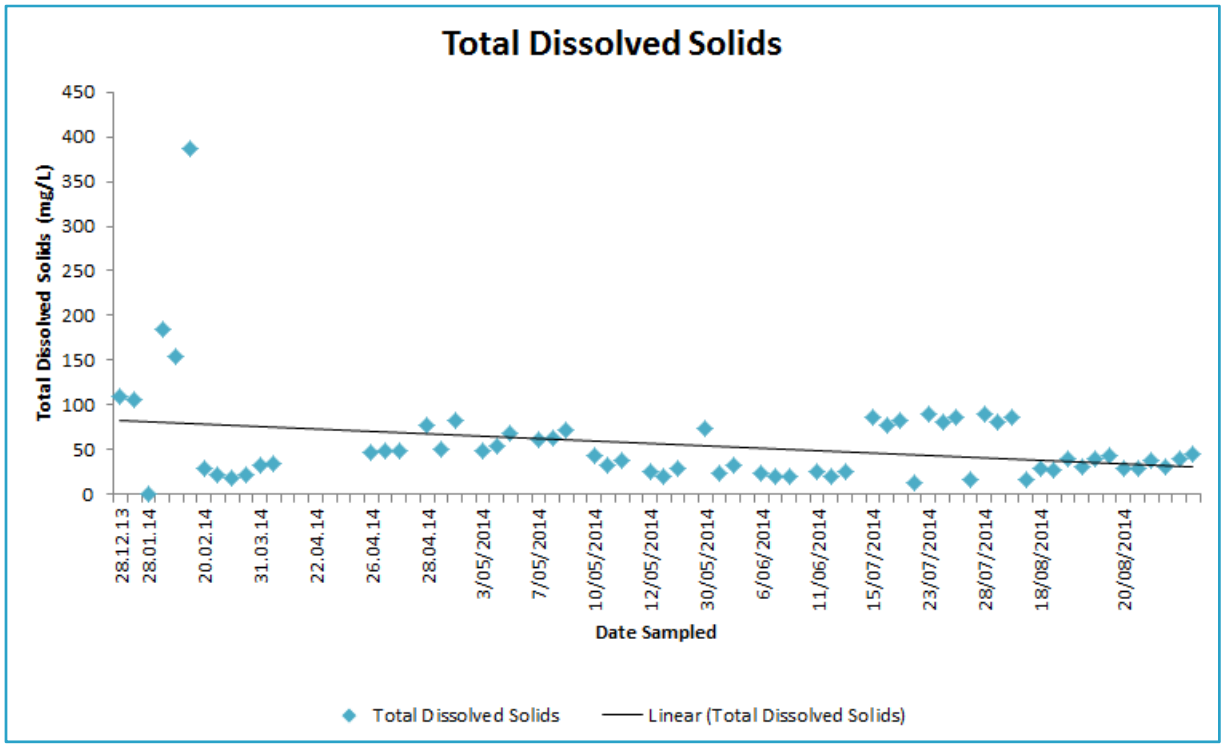

Figure 13 Total Dissolved Solids Concentrations for Bund Water at the Site.

This initial data series represents growing baseline data for TDS concentrations at the Site. As the data series grows with future monitoring, significant issues with TDS will be identified with greater confidence.

Dissolved Oxygen

Dissolved oxygen concentrations at the site ranged from 4 to 62 mg/L and were recorded at an average of 28 mg/L. pH levels in the bunds were recorded as being above the minimum concentration limit given for the Site's licenced discharged point for all sampling events. As shown **Figure 14,** dissolved oxygen concentrations were quite varied over the reporting period and a decreasing linear trend in concentration was identified. This trend should be considered in light of the small data sample size and monitored in future reporting periods. As discussed above, even if low dissolved oxygen concentrations levels are identified in the bund water, this water is treated before it is discharged from the Site.

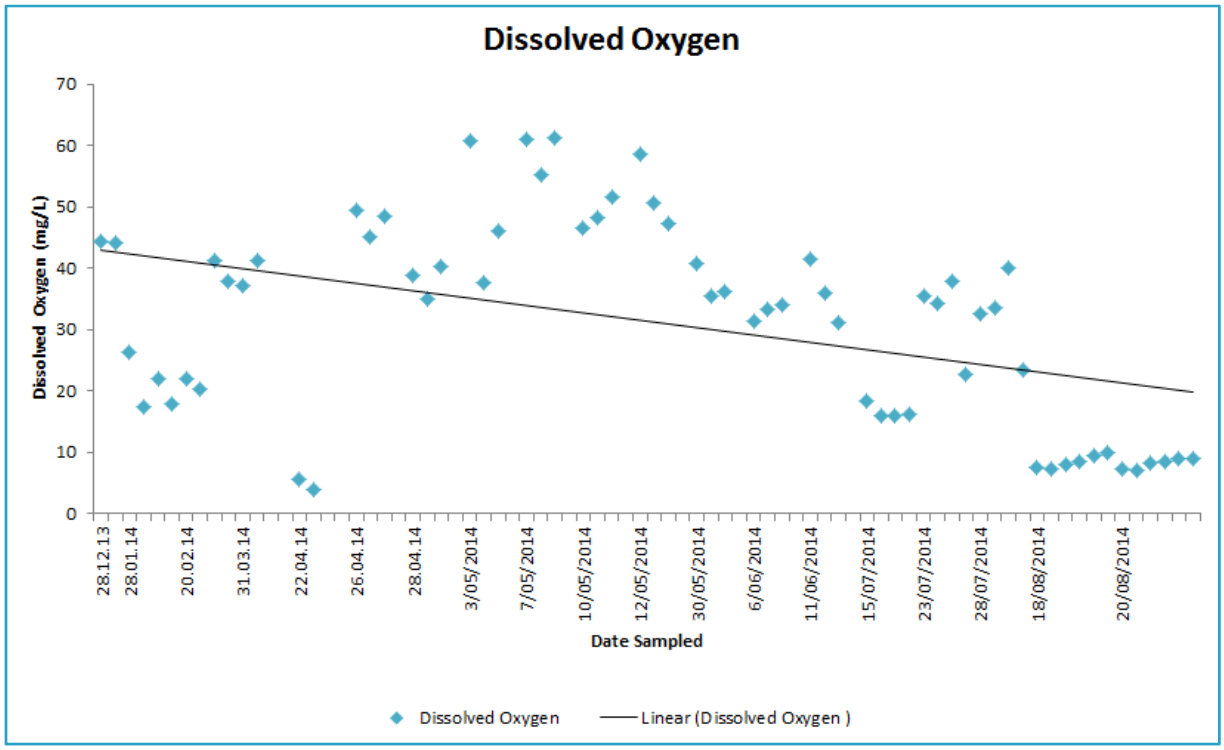

Figure 14 Dissolved Oxygen Concentrations for Bund Water at the Site

This initial data series represents growing baseline data for dissolved oxygen concentrations at the Site. As the data series grows with future monitoring, significant issues with dissolved oxygen will be identified with greater confidence.

Conductivity

Conductivity levels at the site ranged from 30 to 173 µS/cm and were recorded at an average of 71 µS/cm. As shown in **Figure 15** conductivity levels in the bund water at the site were quite varied over the reporting period but no real trend could be identified in the data available.

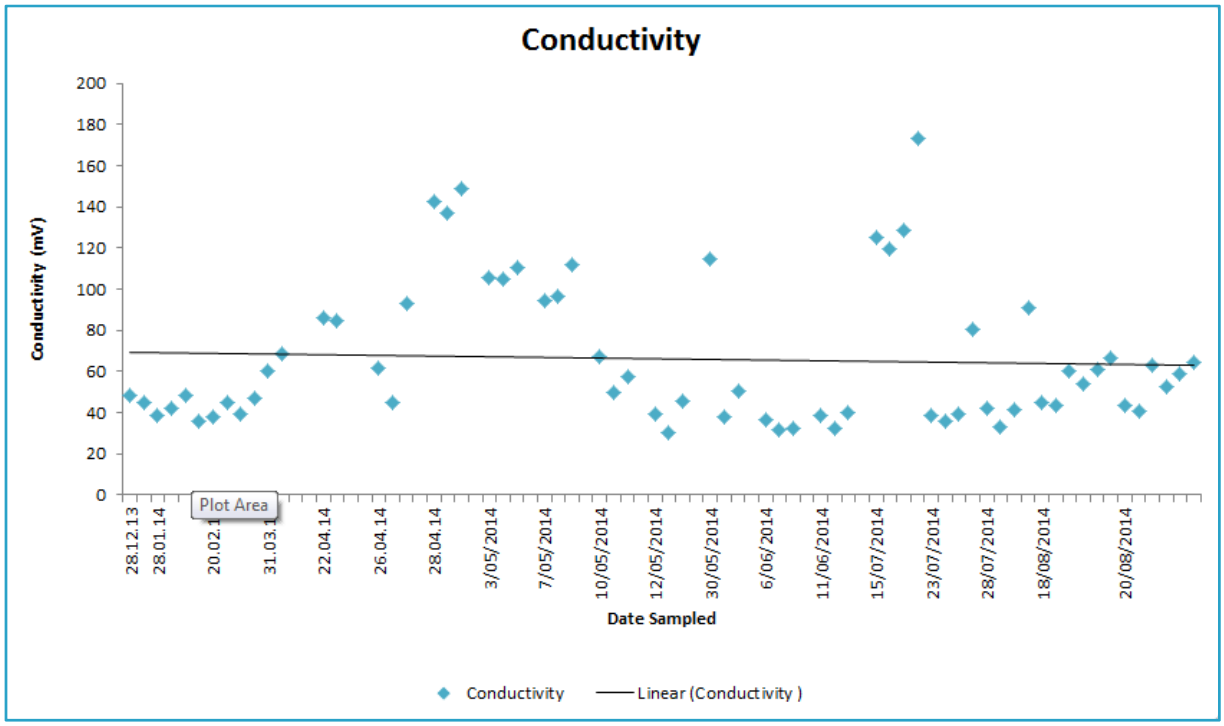

Figure 15 Conductivity Levels for Bund Water at the Site.

This initial data series represents growing baseline data for conductivity levels at the Site. As the data series grows with future monitoring, significant issues with conductivity will be identified with greater confidence.

4.4 Conclusion

Storm Water management and monitoring measures implemented at the Site have been successful in preventing environmental harm in this reporting period. All stormwater discharged from the Site was compliant with the requirements of EPL 20193. Consistent future monitoring of bund water after rainfall events will improve the Site's available baseline data and ability to identify trends and issues as well as to identify necessary environmental management measures to improve the environmental performance of the Site.

5.0 Noise

5.1 Operational Noise

Operational noise generation is managed and monitored according to the Site's Noise Management Plan. The main noise sources at the site are summarised in **Table 11**. During operations, haulage ships will dock at M4 and pump fuel into storage tanks to be blended and held on site. Haulage trucks receive the blended fuels and transport it through an access road leading to the intersection of Industrial Drive and Ingall Street. All these operations have the potential to result in noise emissions.

Table 11 Noise emitters at the Site

Internal Private Access Roads	Moving trucks, idling trucks
Industrial Noise Sources	Fuel pumps
	Haulage tanker trucks filling
	Ships in berth filling/depositing (currently at M4), as such these operations fall under Condition 5.11 of the Consent Condition DA-293-08-00 MOD 9, dated 29 August 2013).

The nearest residential areas to the site are located to the south-west of the Facility at Mayfield, with the closest receivers in Crebert Street, approximately 900 m away. To the south east there are residential receivers located in Carrington, approximately 2 km away. To the south east there are residential receivers located in Stockton, approximately 3 km away.

Operational noise levels at the Site are required to be within limits as prescribed by Condition 23 of the Project Approval. The operational noise criterion that has to be met as prescribed by the Project Approval is shown in **Table 12**. As the Facility lies within the Mayfield Concept Plan (MCP) approval area, it requires noise emissions from the site to be with the environmental assessment requirements of the MCP Approval.

Table 12 Operational Noise Criteria

Location		Day	Evening	Night	
		L_{Aeq} (15min)	L_{Aeq} (15min)	L_{Aeq} (15min)	LA1 (1min)
R1, R2, R3, R4, R7, R8	Mayfield	35	35	35	35
R5	Carrington	35	35	35	
186 Fullerton Road	Stockton	35	35	35	35
R9	Mayfield East	35	N/A	N/A	N/A

Noise emissions from the site have been modelled and the results are presented in **Section 5.2**.

5.2 Noise Modelling Results

Day, evening and night-time noise emissions were predicted to each of the required assessment locations and compared against the site noise limits, in accordance with the requirements of the Project Approval. Noise emissions were assessed under worst case wind and temperature inversion conditions in two different operations scenarios on site as required by the Project Approval. The results of this assessment are provided in **Table 13** and **Table 14**.

Table 13 Worst case condition 1: Three trucks filling during 15 minute period

Period	Day/Evening/Night								
Assessed meteorological condition	Neutral			3/ms source to receiver winder			Temperature inversion (F-Class, 3ºC/100 m)		
Receiver	Predicted noise level, $L_{Aeq\ (15min)}$, dB(A)	Criteria dB(A)	Compliance with noise criteria, dB(A)	Predicted noise level, $L_{Aeq\ (15min)}$, dB(A)	Criteria dB(A)	Compliance with noise criteria, dB(A)	Predicted noise level, $L_{Aeq\ (15min)}$, dB(A)	Criteria dB(A)	Compliance with noise criteria, dB(A)
R1	26	35	Yes	31	35	Yes	30	35	Yes
R2	36	35	Yes	**41**	35	**No (+6)**	**40**	35	**No (+5)**
R3	28	35	Yes	32	35	Yes	32	35	Yes
R4	36	35	Yes	**41**	35	**No (+6)**	**40**	35	**No (+5)**
R5	20	35	Yes	26	35	Yes	25	35	Yes
R7	27	35	Yes	32	35	Yes	31	35	Yes
R8	27	35	Yes	31	35	Yes	31	35	Yes
R9[1]	33	45	Yes	38	N/A	N/A	37	N/A	N/A
R10	18	35	Yes	24	35	Yes	24	35	Yes

Table 14 Worst case condition 1: One truck filling during the 15 minute period, two trucks arrive and two leave the facility.

Period	Day/Evening/Night								
Assessed meteorological condition	Neutral			3/ms source to receiver winder			Temperature inversion (F-Class, 3ºC/100 m)		
Receiver	Predicted noise level, $L_{Aeq\ (15min)}$, dB(A)	Criteria dB(A)	Compliance with noise criteria, dB(A)	Predicted noise level, $L_{Aeq\ (15min)}$, dB(A)	Criteria dB(A)	Compliance with noise criteria, dB(A)	Predicted noise level, $L_{Aeq\ (15min)}$, dB(A)	Criteria dB(A)	Compliance with noise criteria, dB(A)
R1	28	35	Yes	32	35	Yes	32	35	Yes
R2	34	35	Yes	**39**	35	**No (+4)**	**38**	35	**No (+3)**
R3	30	35	Yes	34	35	Yes	33	35	Yes
R4	34	35	Yes	**39**	35	**No (+4)**	**38**	35	**No (+3)**
R5	20	35	Yes	25	35	Yes	25	35	Yes

Period	Day/Evening/Night								
R7	29	35	Yes	33	35	Yes	32	35	Yes
R8	29	35	Yes	33	35	Yes	32	35	Yes
R9[1]	33	35	Yes	38	N/A	N/A	37	N/A	N/A
R10	17	35	Yes	23	35	Yes	23	35	Yes

Notes:

1) The approval condition states a noise level criteria of 35 dB(A), to which the following note applies, "Noise limits for Mayfield East Public School is an internal noise level for the noisiest 1-hour period when in use". As such a 10 dB reduction was been assumed between external and internal noise levels based upon a window being open for adequate natural ventilation for the purposes of assessing an external noise level. Additionally, "N/A" is noted for the evening and a night period as the school is not in use during these times.

5.3 Analysis of Results

Compliance has been found for the assessments during all scenarios at all receiver locations, except for the following:

1) Receiver 2 (2 Crebert St, Mayfield) for day, evening and night reasonable 'worst' case 15-minute intrusive scenarios.

2) Receiver 4 (21 Crebert St, Mayfield) for day, evening and night reasonable 'worst' case 15-minute intrusive scenarios.

It should be noted that these two locations are essentially the same location, and are separated by approximately 40m. For the two above locations where exceedances are predicted, it is noted that the key noise contributor is the operation of the motor/pumps, followed by the operations of the trucks on site. However, with regards to the exceedances the following points should be noted as these exceedances are manageable and not considered significant:

Noise impacts are significantly below the background noise level at the receiver locations
The background noise level ($L_{A90\ 15\ minute}$ noise level) at receiver R2, which is across the road from R4 was 49 dB(A) at 1:21am. The worst case noise emission result from the Site at the two receivers is below this level at 41 dB(A). Calculations for the background noise level did not take into account temperature inversion conditions and so the background noise level at the two receivers could increase even further.

Noise impacts comply with the derived criteria in accordance with the EPA Industrial Noise Policy (INP).
The conditions of consent criteria was given as 35 dB(A) $L_{Aeq\ 15\ minute}$ for the original site approval conditions, based upon the original noise impact assessment for the Site. Even though the compliance noise emissions exceed the conditions of consent noise limits, it should be noted that the noise emissions meet the EPA INP applicable intrusive criteria as shown in **Table 15**.

Noise emissions comply during neutral meteorological conditions
The compliance noise emission results presented in **Table 13** and **Table 14** show compliance is achieved at all receivers under neutral meteorological conditions.

No noise complaints have been received as a result of operational noise.
Since construction operations began in 2012, no noise complaints have been received by Stolthaven.

Table 15 Comparison of Noise Modelling Results with EPA Industrial Noise Policy Criteria

Period		Night											
Assessed meteorological condition		Neutral				3 m/s source to receiver wind				Temperature inversion (F-Class, 3ºC/100m)			
Receiver	Criteria[1] dB(A)	Scenario 1, $L^{Aeq\ (15\ min)}$, dB(A)	Compliance with noise criteria , dB(A)	Scenario 2, $L^{Aeq\ (15\ min)}$, dB(A)	Compliance with noise criteria , dB(A)	Scenario 1, $L^{Aeq\ (15\ min)}$, dB(A)	Compliance with noise criteria , dB(A)	Scenario 2, $L^{Aeq\ (15\ min)}$, dB(A)	Compliance with noise criteria , dB(A)	Scenario 1, $L^{Aeq\ (15\ min)}$, dB(A)	Compliance with noise criteria , dB(A)	Scenario 2, $L^{Aeq\ (15\ min)}$, dB(A)	Compliance with noise criteria , dB(A)
R1	**42**	26	Yes	28	Yes	31	Yes	32	Yes	30	Yes	32	Yes
R2	**42**	36	Yes	34	Yes	41	Yes	39	Yes	40	Yes	38	Yes
R3	**42**	28	Yes	30	Yes	32	Yes	34	Yes	32	Yes	33	Yes
R4	**42**	36	Yes	34	Yes	41	Yes	39	Yes	40	Yes	38	Yes
R5	**42**	20	Yes	20	Yes	26	Yes	25	Yes	25	Yes	25	Yes
R7	**42**	27	Yes	29	Yes	32	Yes	33	Yes	31	Yes	32	Yes
R8	**42**	27	Yes	29	Yes	31	Yes	33	Yes	31	Yes	32	Yes
R9	**45**	33	Yes	33	Yes	38	Yes	38	Yes	37	Yes	37	Yes
R10	**51**	18	Yes	17	Yes	24	Yes	23	Yes	24	Yes	23	Yes

6.0 Fuel Storage and Transport

6.1 Fuel Transport

A total of 761ML of fuel was transported from the site via trucks who serviced Viva Energy Australia and Glencore over the reporting period. A breakdown of fuel transport is provided in **Table 16** and **Figure 16**. In this reporting period, diesel accounted for 74% of all fuel transported from the site which equates to 563ML. As the data series for fuel throughput increases over time, changes to demand in different fuel types will be able to be analysed and compared with future reporting periods.

Table 16 Summary of Fuel Transported from the Site

	Fuel Type	Fuel Transported (ML)
Viva Energy Australia	D10	77
	SHL DL	472
	Biodiesel (5% ethanol)	3
	Biodiesel (20% ethanol)	27
Total		**580**
Glencore	Biodiesel (5% ethanol)	36
	Diesel	5
	Biodiesel (20% ethanol)	13
	ULSD	70
	137,041	3
	Biodiesel (10% ethanol)	54
Total		**181**
Grand total		**761**

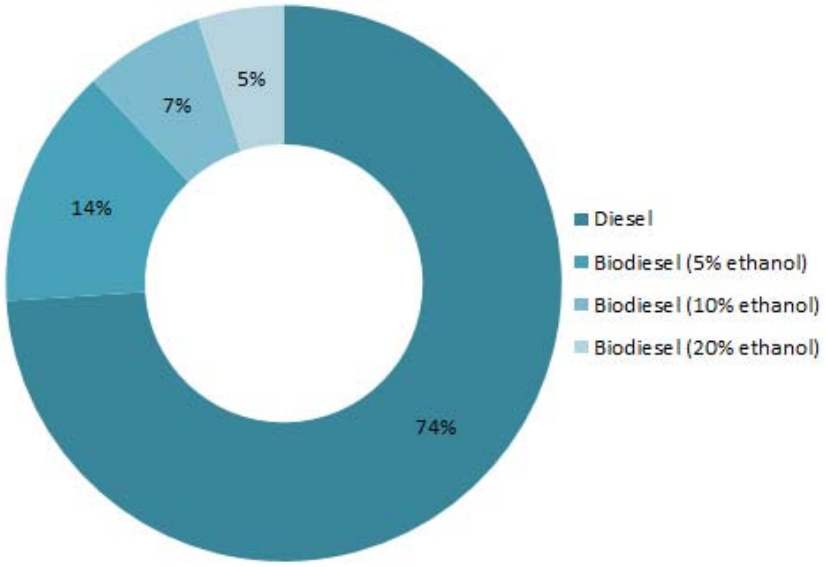

Figure 16 Overall Production Export Percentage

6.2 Truck Movements

A summary of the monthly truck movements that occurred to and from the site are shown in **Figure 17**. Over the reporting period there were a total of 31,088 truck movements at an average of approximately 3100 each month.

A Traffic Impact Assessment (TIA) was conducted as part of the Environmental Assessment for Modification 3 to the Site's Project Approval to increase throughput to 500ML per year. The TIA provided a worst case conservative projection of 112 truck movements per day as a result of the operation of the Site. Assessment of average daily truck movements at the site for this reporting period indicates compliance with this projection for the months of January to June. Exceedances of this projection were experienced in July, August, September and October with average daily truck movements of 118, 120, 130 and 135 per day respectively being calculated at the Site. As exceedances ranged from 6-20 additional trucks per day (24hour period), this would have had a negligible impact on the road network.

As the Site only became operational in December 2013 the general trend of increasing truck movements over the reporting period reflects increasing fuel inputs at the site (starting from no input prior to December 2013) and subsequent increases to the amount of fuel that was approved to be dispatched pursuant to the Project Approval Modifications 1 and 3.

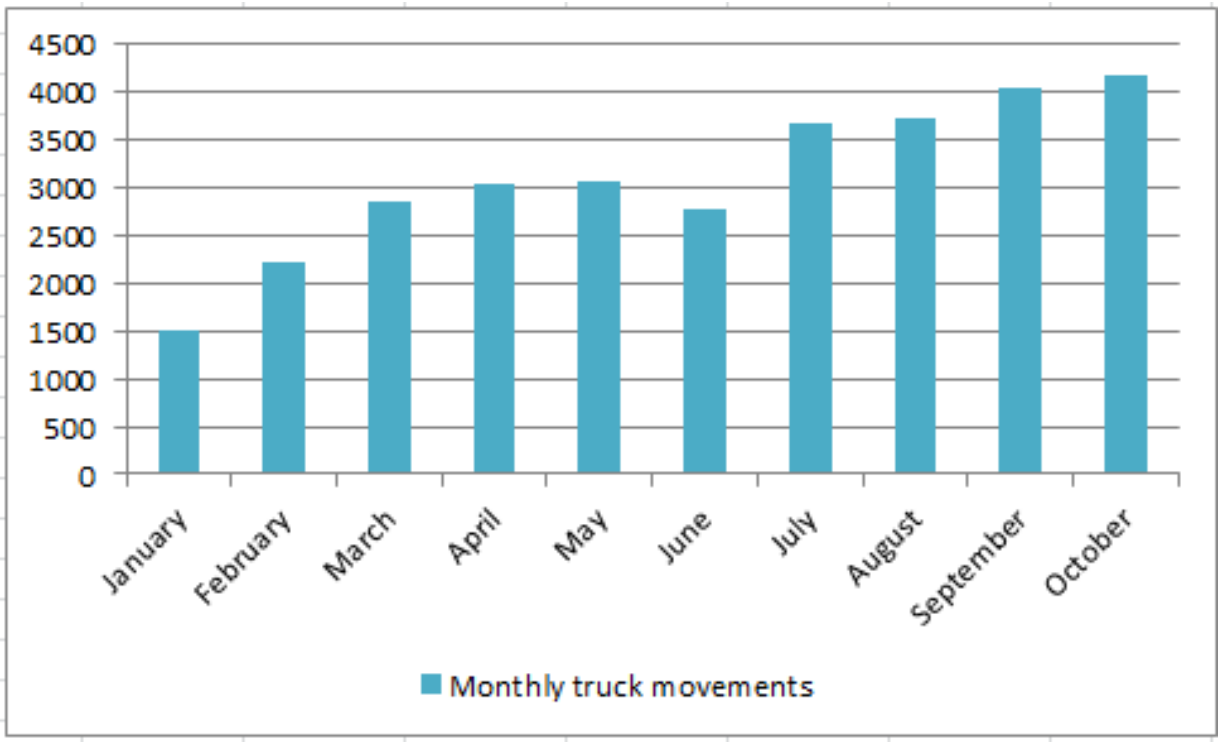

Figure 17 Monthly Truck Movements

7.0 Waste

Waste is managed according to the Site's Waste Management Plan (WMP) and is minimised at recycled where possible. Solid waste is disposed of in appropriate receptacles and removed by local waste contractors.

Liquid waste generated on site is stored in the tanks listed in **Table 17**. Waste is discharged from the site once it has been treated to an acceptable quality or is disposed of by an appropriately licence waste collector. Waste removed from the Site in the current reporting period is summarised in **Table 17**.

Table 17 Waste Removal Totals

Tank	Date	Volume (L)
Septic Tank	30/12/2013	4,000
	16/04/2014	4,500
	27/05/2014	6,000
	06/06/2014	8,500
	10/06/2014	4,000
	17/06/2014	5,000
	24/06/2014	3,500
	01/07/2014	4,000
	10/07/2014	5,000
	29/07/2014	4,000
	12/08/2014	6,000
	19/08/2014	2,300
	26/08/2014	3,000
	09/09/2014	2,500
	16/09/2014	1,700
	24/09/2014	3,500
	30/09/2014	2,300
Effluent Tank (Slops)	31/03/2014	9,000
	30/04/2014	7,000
	27/05/2014	34,100
	13/06/2014	22,000
	12/08/2014	8,200
	13/08/2014	16,600
	11/09/2014	23,500
Misc (Pits cleaned on-site)	31/07/2014	6,500

7.1 Spills and Site Contamination

Records of reportable spills and site contamination are described in the incident register provided in **Appendix B**. All incidents related to spills and site contamination was minor and effectively managed on Site. There are no ongoing issues related to any incidents that occurred during the reporting period.

8.0 Aesthetic

Weed control and vegetation management activities are conducted monthly according to the Site's maintenance checklist. These controls ensure fire and safety risks are managed effectively at the site through the prevention of any vegetation build-up. No complaints were received by Stolthaven regarding aesthetic issues at the Site.

9.0 Compliance

There were no non-compliances as a result of site operations during the reporting period.

9.1 Pipeline Integrity

An Annual Pipeline Pressure Test was conducted at the Stolthaven Terminal on the Wharf pipeline on the 9th November 2014 by Hancock & Owen Services. The test confirmed the integrity of the pipeline following initial certification in November 2013. A copy of the test report is included in **Appendix C**.

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10.0 Complaints

No Complaints were received by Stolthaven during the reporting period.

11.0 Conclusion

The data collected and reviewed for the reporting period indicates that the Site's impact on the surrounding environment is of an acceptable level and in accordance with Project Approval 08_0130 and the site Operational Environmental Management Plan. This level of environmental performance can be attributed to the design and operation of the facility as well as to the environmental management plans and measures undertaken at the Site.

Monitoring data collected and analysed during this reporting period represents the beginning of the consolidation of baseline monitoring data for the Site. In future reporting periods the amount of monitoring data available for analysis will increase and trends in monitoring data will be able to be identified with greater confidence. From the limited data available for this reporting period, no significant trends were identified that would necessitate environmental management actions from Stolthaven for the Site.

Data from the groundwater monitoring program could not identify trends in TRH and BTEX as concentrations were largely non-calculable given the small dataset available for analysis and the high proportion of Non-Detect values in the data (caused by data points with results below LOR concentrations). Some preliminary trends were identified for pH at MW03 and MW04, and Benzene at MW02.

Storm Water management and monitoring measures implemented at the Site have been successful in preventing environmental harm in this reporting period. All stormwater discharged from the Site was compliant with the requirements of EPL 20193. Consistent future monitoring of bund water after rainfall events will improve the Site's available baseline data and ability to identify trends and issues as well as to identify necessary environmental management measures to improve the environmental performance of the Site.

While some exceedances of the Site anticipated traffic generation have been noted they are generally low and have no significant impacts.

Appendix A

Stormwater Monitoring

Appendix A Stormwater Monitoring

FIRST FLUSH RESULTS

Samples Collected:	Samples Tested:	BOD (mg/L)	Dissolved Oxygen (mg/L)	Oil and Grease (mg/L)	pH	Total Suspended Solids (TSS)	Volume (L)	Remarks
18.02.14		-	5.98	-	7.79	-		Colour: 60, Conductivity: 251, TDS: 152
24.04.14		< 2	6.77	< 2	7.47	11	30,000	
13.05.14	13.05.14	6.0	7.71	12	7.46	19		Detection limit raised for Total Oil and Grease due to innsufficent amount of sample.
20.05.14	21.05.14	-	-	< 2	-	-	35,000	Retest for Oil and Grease (conducted by HWC)
30.05.14	30.05.14	3.0	9.03	< 2	8.65	18		Failed pH (upper limit 8.5)
04.06.14	04.06.14	-	-	-	8.25	-	40,000	Retest for pH (conducted by Stolthaven)
14.06.14	14.06.14	3.0	9.44	< 2	8.04	-	20,000	
28.07.14	04.08.14	< 2	7.45	< 2	8.16	28		Stolthaven tested for pH
18.8.14	25.08.14	4.0	7.25	< 2	7.22	32		Failed TSS (max 30mg/L)
25.08.14	26.08.14	-	-	-	-	29		Retest for TSS (Conducted by HWL)
		2.0	9.44	< 2	8.20	79		Failed TSS (max 30mg/L)
25/08/2014	11/09/2014	-	-	-	-	17		TSS Retest Passed (Conducted by HWL) - Post CPI
10/10/2014	16/10/2014	< 2	4.18	< 2	7.00	77		
11/10/2014	16/10/2014	< 2	7.30	< 2	7.20	21		Bund 7 sample after transfer
		-	-	2	7.60	3		Bund 7 sample after transfer
6/11/2014	12/11/2014	4.0	6.28	< 2	7.00	39		Failed TSS (max 30mg/L)
12/11/2014	13/11/2014	-	-	-	-	5		Retest for TSS (Conducted by HWL)

BUND WATER RESULTS

Samples Collected:	Samples Tested:	Location	Temp (°C)	pH	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Conductivity (us/cm)	Appearance	Volume (L)	Remarks
28.12.13	29.04.14	Bund 2 (1225)	24.8	6.96	109.6	44.4	48.3	Clear		Samples were collected on the 28th of December 2013, tests were not carried out until the 29th of April 2014. Therefore, not an
		Bund 2 (1430)	25.1	6.84	105.3	44.2	44.6	Clear		
28.01.14	29.04.14	Bund 1	24.9	6.34	0.1	26.3	38.3	Discoloured	600,000.00	Samples were collected on the 28th of January 2014, tests were not carried out until the 29th of April 2014. Therefore, not an accurate respresentation of water quality.
		Bund 2	24.8	6.73	185	17.3	42.1	Discoloured	400,000.00	
		Bund 3	24.8	6.92	154	22.1	48.2	Discoloured	400,000.00	
		Bund 5	24.8	6.88	387	18.0	35.9	Discoloured	100,000.00	
20.02.14	29.04.14	Bund 1	24.7	7.42	29.3	22.1	38.2	Clear	400,000.00	Samples were collected on the 20th of February 2014, tests were not carried out until the 29th of April 2014. Therefore, not an accurate respresentation of water quality.
		Bund 2	24.5	7.02	22	20.3	45.2	Clear	300,000.00	
		Bund 3	24.4	7.02	18.2	41.3	39.1	Clear	300,000.00	
		Bund 5	24.5	6.98	21.8	37.9	47.2	Clear	300,000.00	
31.03.14	29.04.14	Bund 1	24.5	6.97	32.2	37.1	60.5	Clear	250,000.00	Samples were collected on the 31st of March 2014, tests were not carried out until the 29th of April 2014. Therefore, not an accurate respresentation of water quality.
		Bund 2	24.5	6.92	33.8	41.3	68.8	Clear	250,000.00	
		Bund 3								
		Bund 5								
22.04.14	22.04.14	Bund 1	24.7	6.10		5.5	85.9	Clear	50,000.00	
		Bund 2	26.5	6.37		4.0	84.3	Clear	40,000.00	
		Bund 3								
		Bund 5								
26.04.14	26.04.14	Bund 1	24.5	7.05	47	49.5	61.5	Clear	50,000.00	
		Bund 2	24.6	7.07	49.4	45.1	44.7	Clear	50,000.00	
		Bund 3	24.6	6.90	48.1	48.5	92.7	Clear	50,000.00	
		Bund 5								
28.04.14	28.04.14	Bund 1	22.0	7.75	76.7	38.8	142.6	Clear		
		Bund 2	21.9	7.52	50.1	35.1	136.7	Clear		
		Bund 3	22.0	7.53	82.5	40.4	148.9	Clear		
		Bund 5								
3/05/2014	3/05/2014	Bund 1	17.1	6.57	49.7	60.8	105.5	Clear		
		Bund 2	18.3	6.10	54.7	37.7	105.1	Clear		
		Bund 3	18.6	6.50	68.3	46.1	110.1			
		Bund 5								
7/05/2014	7/05/2014	Bund 1	22.0	7.93	61.5	61.1	94.7	Clear		
		Bund 2	22.5	7.44	62.8	55.1	96.8	Clear		
		Bund 3	22.9	7.39	72.4	61.3	112			
		Bund 5								
10/05/2014	10/05/2014	Bund 1	25.5	6.16	43.4	46.6	67.2	Clear		
		Bund 2	25.8	6.38	32.4	48.2	49.7	Clear		
		Bund 3	25.7	6.45	37.4	51.5	57.6	Clear		
		Bund 5								

Appendix B

Incident Register

Appendix B Incident Register

Stolthaven Australia Pty Ltd

Incident Registers - Incident / Near Miss - NEWCASTLE

Report Period 01/01/1970 to 31/12/2037

ID	Case #	Date	Type	1.Incident Person 2.Reported By	Person Type	Dangerous	Site	Department	Status	Description
248	NEW 001	19/12/2013	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	At approximately 1015 hours AEDST Thursday 19th December, site staff noticed a weep from a tank floor condition monitoring tell-tale – north-side of tank NN2, Newcastle. The tank is on diesel storage service and has just been commissioned post hydro-testing. The weep is of a minor nature and does not present a threat to human health or the environment. The weep is fully contained inside the bund linings and after discovery local spill adsorbent has been used to contain the weep. By scale, the incident is of a minor nature, however a full and comprehensive response has been initiated in accordance with procedures.
249	NEW 002	28/12/2013	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	The fire water was being used to supply water to Tank NN2 for tank integrity checks during floor inspection. The fire pump shutdown unexpectly during this process. Inspection of the fire pump showed a blown cooling water reservoir, damage to engine was unknown at the time.
250	NEW 003	17/12/2013	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	A gasket failed on the unloading biodiesel pump in bay 3, causing a small amount of product to leak from the discharge side of the pump. The pump was not in operation at the time of failure. The failure of the gasket may be due to thermal relief issues. In the interim the discharge valve on the pump has been cracked open to allow thermal back to the tank. The product was contained within the gantry bund area.
252	NEW 004	09/03/2014	Near Miss	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE		Completed	A driver had finished loading and tried to start the truck to move out of the load gantry. A mechanic was called out by the driver and found there was a gear box problem that could not be fixed on site. A heavy haulage tow truck was called in to remove the prime mover and trailer. All work within the load gantry was completed under permit conditions and completed under the supervision of the Site Manager. Load Bay 1 was out of use for 4 hours.
253	NEW 005	03/01/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 3/01/2013 at approx 09:00 Aaron Riding was using the fire pump system to wash down bund NN2 and after a few minutes of using the fire hose the hose has failed causing a tear in the hose. This operation was then halted and Warrick from Form 1 fire protection has been notified and will attend site today to pick up the hose for investigation.
254	NEW 006	19/11/2013	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	We are having issues with receiving the pig at the terminal end. Operations have tried a number of methods to get the pig into the pig receiver without success. A 50mm bypass line does not seem to have the flow rate to allow the pig to keep moving along the 1100 metre X 300mm diameter line.

										The main receipt line needs to be partially open to allow the pig to keep moving. When the pig arrives it gets caught in the barred tee not allowing it get into the pig receiving chamber. The pig is left in this position until shipping operations are complete. Operations pressures up the line a later date to move the pig forward.
255	New 007	24/01/2014	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE		Completed	On Friday 24 January at 7:24pm the fire services were called to site as a call point in Bay 3 had been activated. The auto dialler sent a message to John Buysen, Michael Frost and Nathan McCartney on activation of the fire alarm. John Buysen attended site within 15 minutes of the alarm being received. Fire services were already on site when I arrived. The ESD and fire system was reset once it was determined that it was the call point in Bay 3. We had conducted some testing of the system earlier in the day using this manual call point. The manual call point was reset to normal and confirmed via the Fire Indicator Panel when testing was complete. We are investigating the MCP further as to its integrity. There was a truck loading in the gantry at this time. The ESD system did shutdown the load gantry stopping the driver loading as designed. NSW Fire and Rescue had been onsite the previous day for a familiarisation of the site. Station Officer was glad they had done the familiarisation as they were able to manage the fire panel without any issues.
256	New 008	10/01/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	At approximately 1650hrs - 10/01/14 the dry drain system was found to be leaking in bay 1 whilst on its park stand the sight glass was full of diesel and was running down the framework onto the concrete, immediate actions to empty the dry drain by starting the slops pump and place spill pads out to absorb diesel. I will look to H& O today for some solutions (1" Nrv on dry drains) or something similar
260	New 009	31/12/2013	Incident	1.Buysen, John 2.Buysen, John	Employee	No	Off Site OneSteel Gatehouse	Off site	Completed	A J.L.Pierce road tanker exited the OneSteel Ingall Street gatehouse on the wrong side of the gatehouse. Video footage has been provided by OneSteel. The road tanker veered to the right near the gatehouse and went out the entrance of the gatehouse instead of the exit. A Stolthaven staff car was coming in the opposite direction at the time of the incident. The driver did stop once he had realised he had made a mistake and proceeded with caution on exit.
261	New 010	17/01/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	Today a fire system test was initiated to test the systems capabilities or shortfalls. The plan was to have a pressure drop in the ring main and to observe if the fire system triggered a audible Siren and open the gates as if simulating a emergency , the plan was to then trigger a load bay ESD and a manual fire call point to ensure correct running of the system.
262	New 011	23/01/2014	Incident	1.McCartney, Nathan 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	Earlier this morning routine dewatering was undertaken on NN1 to 3. While NN3 was being dewatered a line-walk was done to check the system due to the

										concerns over the capabilities of it. During the walk, while looking at the line from tank NN1, it was seen to be flowing (at the least a very fast drip) into the tundish. The tank valve and deadmans handle valve were both shut and checked to be properly closed. This was approximately half an hour after dewatering was done on NN1. No overflow took place and the tundish only filled to the level of the grate in the bottom. However the flow was fast enough that I can say that the deadmans valve was definitely passing liquid, the tank ball valve was likely also passing (I wouldn't expect thermal expansion of the small line to give the flow seen) also it was a cool morning.
264	New 012	12/02/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On the 12/02/14 a tank recirculation was scheduled for tank NN3 upon trying to start the recirculation it was noted that the Outlet actuator valve failed to open automatically, then once attempted to open the same valve manually the manual engaging lever also appears to be stuck and we are unable to engage the valve manually. The recirculation of tank NN3 is now on hold. Mike H from Varec is now investigating if a software issue is responsible however, being unable to open this valve manually is also a mechanical issue.
265	New 013	17/02/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	At approximately 15:15 this afternoon whilst attempting to load out trucks from bay 2 a unexpected comms error has prevented us from loading. Mike H from Varec was informed immediately and is investigating and attempting to repair the issue. Several reboots later the issue still exists and now we are experiencing loading issues in bay 1 as well , It appears we can only load 1 truck in 1 bay only at this time as the issue is bouncing between both bays. Since this issue has occurred at 15:15 we have only loaded out 2 trucks to the minute. John and myself are staying on this evening until an outcome is reached.
266	New 014	17/02/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	At 18:30 a Henty Truck with the Rego BV97ZH Presented for loading it was discovered that fuel was leaking from the prime movers left hand side fuel tank onto the ground this truck was SLP passed today and has been rejected from loading and sent away we have locked this truck out of the system pending repairs and a return to service check.
267	New 015	18/02/2014	Incident	1.McCartney, Nathan 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	At 06:40 this morning a truck presented to unload Bio diesel it was discovered that the Bio Diesel unloading pump had leaked through the Top cover plate of the pump through the gasket and bolts overnight estimated product to ground under 10 lts. Immediate actions apply spill pads to absorb the spill, remove lagging to further inspect leak location and tighten bolts on cover plate then inspect for leakage and notify Terminal Manager and continue with operations leaving the lagging removed for periodic inspection
268	New 016	19/02/2014	Incident	1.McCartney, Nathan 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	At approximately 13:15 Today tank NN3 - Duty tank reached its Low set point and tank NN1 was made

										the new duty tank. Tank NN3s outlet Actuator valve has been in a forced open position through the PLC for some time because of incorrect operation/ reliability. Closing of tank NN3 Outlet manual gate valve did not occur due to staff being busy on other operational activities, when the valve was closed after a period of time it was noticed that product movement was occurring whilst closing in the gate valve. Further investigation discovered that tank NN1 was gravity feeding into tank NN3 through both the outlet valves and approximately 450mm of product has unintentionally transferred into tank NN3.
269	New 017	19/02/2014	Incident	1.McCartney, Nathan 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	On the 19th Feb 2014 at 16:08hrs Driver Walter Gardiner (Henty Transport) Has loaded open order number: 831 -BOL 101789 And has had a broken blend on his first 2 compartments it appears he has then finished loading without notifying Terminal staff of the broken blend issue. The Driver has then created a new Load – BOL 101791 and had issues again and finished loading. He has then created another order BOL, - 101792 and continued to load until full then left the terminal without notifying staff of the initial broken blend and without his paperwork for BOL 101789
270	New 018	19/02/2014	Incident	1.McCartney, Nathan 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	On 19/02/14 Henty Driver Robert Grant has loaded order number 276 and it appears he has loaded a split load of Diesel in the front trailer and B5 in the rear trailer as displayed on BOL 101773
271	New 019	24/02/2014	Near Miss	1.McCartney, Nathan 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	At 09:15 24/02/14 Driver – Tony Munro from JLP was emptying slops bucket into pump bay tundish, missed the tundish lip and spilled contents onto ground approx,under 5 lts to ground. Tony then immediately applied spill absorbent and reported the incident to operations
272	New 020	24/02/2014	Near Miss	1.McCartney, Nathan 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	A hydrant was used to fill a water tank for asphalting. This set off the fire pumps and alarms. The asphalting contractor had recently mobilised to site under the supervision of Daracon. They had been informed of the correct location for supply of water but did not follow this advice. Operations staff investigated why the pumps were set off and shut down after discovering the tank being filled. All members of asphalting contractor and Daracon were assembled and reminded of correct fill points and importance of not using hydrants unless during an emergency event.
275	New 021	18/02/2014	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	Henty Transport (Glencore carrier) was having issues loading in the load gantry. Varec were on site when the issues occurred. Varec did something within the loading system to get the load going. The driver loaded his truck, got his paperwork and left the site. A phone call was recieved from the drivers supervisor later in the day when the driver was unloading indicating the driver did not have paperwork for 2 loaded compartments. A check was done on the meters and found a variation of 15597 litres was

										missing. A new BOL was created for the missing quantity.
276	New 022	12/03/2014	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	During routine dewatering of the diesel tank NN1, the high level alarm was activated on the dewatering tank. The operator stopped the transfer immediately and investigated the alarm. He initially thought it was Varec doing some system tests without notifying him. Investigation of the dewatering tank had shown he had overflowed the tank. Product was contained within the area of the tank. Approximately 20 litres was spilt.
277	New 023	14/03/2014	Incident	1.McCartney, Nathan 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	The driver of Henty Transport (Glencore carrier) was loading B5 into compartment 4 on his B trailer and noticed a leak coming from the API coupler on the truck. He stopped the load immediately and went to the terminal operator to ask for assistance. Operational staff were on duty due to ship discharge. The operator went to the truck immediately and noticed the driver had not closed the internal valves of the truck to slow down the leak from the API coupler. Other Operational staff were called in to assist with the clean up operation and assist with the shipping operations. The line to the compartment was drained, this stopped the leak. A patch was put around the API coupler, the truck loading was completed with diesel on the other compartments as the truck had a broken blend due to the stoppage. The BOL indicated 2450 litres had been loading into compartment when stopped. A dip was taken of the compartment showing 2450 litres. Estimated produdt spill was 30 litres. All product was contained within the load gantry area.
279	New 024	14/03/2014	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	A 890CFM air compressor is used to blow the line from the pig launcher at the wharf to the pig reciever. When moving the compressor into position with a forklift using the draw bar on the compresor, while turning the forklift the counter weight of the forklift has hit the draw bar and bent it. The moving of the compressor is done by Newcastle Stevedores on behalf of Stolthaven Terminals. No-one reported the damage at the time it happened, it was reported when the compressor was taken back to the hiring company. The damage has been inspected at the hiring company.
282	New 025	19/03/2014	Near Miss	1.Petroleum, Hunter 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	Hunter Petroleum Driver Jason Spurway presented to the control room at 07:50 this morning and reported a scully trip on compartment 1 it was found that compartment 1 has a safe fill of 3010 lts and the actual volume in compartment 1 was 3210Ltrs loaded from arm 3 in bay 1 Arm 3 was left on comp 1 when the compartment was completed, then a new batch was selected to load in arm 3 compartment 4 and the load commenced connected to compartment 1 arm 3 and delivered approx- 200 lts tripping the scully overfill alarm. Jason was advised to transfer 200 lts from comp 1 to another compartment so the scully light would go out and he could continue loading Jason then made the decision to stop loading and go out with what

										was already on board rather than potentially have another issue, empty his tanker then come back fresh to load.
284	New 026	20/03/2014	Near Miss	1.Tankers, Hills 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	ON 20/03/2014 at approximately 10:30 in bay 2 a Hills tanker presented for loading for the first time the tanker was in a brand new condition and was inspected by operations staff accordingly prior to loading. On commencement of loading compartment 1, a leak was detected from the underside of the tanker barrel and emergency stop button was immediately pushed and the internal shut off valve was activated in an attempt to stem/ stop the flow. Upon inspection of the under carriage of the tanker, it was noticed that a flange was loose and the bolts were finger tight, these bolts were tightened and the leak stopped. Being a new tanker and only just certified this is a unusual occurrence, however the risk was too high to continue the loading process. Compartment 1 had 46 lts loaded and it was estimated 10 lts to ground, the remainder of the tankers compartment was emptied to the slops system The BOL for the tanker is 103141. The tanker was disconnected and ejected from the terminal , loading cards were revoked and the tanker company has been advised not to return this tanker to site without repairs and recertification taking place. The customer (Shell) have been notified of the incident.
286	New 027	27/03/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	At Approximately 12:30Hrs 27/03/14 Henty Driver Richard (Les) Davey was loading BOL 103501 out of load bay 1 it was noticed that his phone was ringing from inside his prime mover, Les was made aware of the fact his phone was ringing and instructed to turn it off which he did immediately, Les said he simply forgot to turn off his phone when questioned. The driver wil not be allowed entry into the terminal for one week due to breach of safety rules. His access card has been taken off him.
287	New 028	25/03/2014	Near Miss	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	A circiut breaker has tripped in the swichroom cutting power to the load gantry. On inspection by electricians, there was failure of 2 solenoids in the load bays. There was a failure in Bay 1 Arm 2 and Bay 2 Arm 3. The impact from this failure was significant down time in the load gantry. The issue with the solenoids may have been caused by washing down the load bays. On inspections of the solenoids it was noted that the glands were loose. The issue was finally resolved on 26/03/14 at 10:00hrs
291	New 029	01/04/2014	Near Miss	1., Henty Transport 2.Buysen, John	Third Party	No	NEWCASTLE	Operations	Completed	On 1 April at 23:00hrs,truck driver Walter Gardiner left the terminal without BOL paperwork due to a broken blend. When a broken blend occurs in the load gantry the load system will not print out paperwork until operational staff check the blend specification. The driver calls the on call operational person to verify the load specification. Once the blend specification is checked

										and within specification the operational staff will manually print out papaerwork for the driver and allow the product to be released to market. An operational staff member was on site during a ship discharge, the driver did not approach operational staff to fix the papaerwork issue. The same driver has had the same issue on 19 February 2014 with leaving the terminal without BOL paperwork. Further investigation still required.
297	New 030	10/04/2014	Near Miss	1., Hill & Co 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	At approximately 16:20 10/04/14. A Hill & CO tanker Rego WUP852 / L53402 was loading B5 – BOL 104187 in bay 1 and it was noticed during the load process a strong ULP smell coming from the tanker. Upon inspection the vapour connection points on top of every compartment were brittle and had holes present allowing ULP vapour to free vent into the loading bay area. This Vehicle had just passed Pass to load on 09/04/14.The load was immediately stopped due to safety concerns and the truck was ejected from the terminal and locked out pending repairs.
299	New 031	09/04/2014	Near Miss	1., McCoskers Transport 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	On 9/04/14 A McCosker truck Rego -J87528 SAP ID: NCL_MCO_02 presented to be inspected for loading at the terminal it was found that the paperwork provided by Shell SAP which had been inputted into the Stolthaven Fuels Manager system in preparation for the trucks arrival and to ensure no SAP interface issues occurred, the tanker had incorrect Safe fill compartment details listed they are listed as follows: Compartment 1 – 8550 Compartment 2 -8550 Compartment 3 – 8600 Compartment 4 – 8600 Compartment 5 – 8750 Upon Physical inspection by Stolthaven terminal Staff it was found that the safe fill details were as follows: Compartment 1 – 8300 Compartment 2 -8300 Compartment 3 – 8350 Compartment 4 – 8300 Compartment 5 – 8500 Shell has been contacted to rectify the compartments to reflect the actual maximum Safe fill compartment levels.
301	NEW032	11/04/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	At approximately 16:30 JLP Driver Daniel Colby Loading in bay 1 BOL 104234 approached Operations staff and advised of a scully trip on compartment 3 of his B trailer. Upon inspection compartment 3 was over safe fill by approximately 255lts, the driver experienced wrong arm wrong compartment loading 2 quantities of product into the same compartment. Operations staff assisted the driver in draining the overfilled compartment into compartment 2 until compartment

										3 reached safe fill volume. Being a scheduled order the driver was unable to recommence loading and operations staff forced the load to end ensuring paperwork was printed out. Once the driver had the necessary documentation he then proceeded to drain his transfer hose, and dropped it spilling approximately 10 lts to ground. The driver then cleaned up the spill and exited the terminal.
302	New 033	15/04/2014	Incident	1., Henty Transport 2.Buysen, John	Third Party	No	NEWCASTLE	Operations	Completed	On 15 April @ 16:45hrs a Henty Transport driver Rodney Daw was wearing an ear piece in each ear while loading in the load gantry. I approached the driver and asked him why he was wearing the ear pieces, he indicated he was listening to music. I indicated to him this was not acceptable practice and to remove the ear pieces immediately. I asked him to leave site as he had finished loading. His access to the terminal has been revoked indefinitely.
306	New 034	18/04/2014	Near Miss	1., Woodham Petroleum 2.Buysen, John	Third Party	No	NEWCASTLE	Operations	Completed	A Woodham Petroleum driver Dean Walker left site on 18 April at 2:30am without a BOL 104570 due to paprework not printing, this was due to the load having a broken blend. This was noticed when the Site Manager was going through the load data on the same morning. The product was within specification. The customer was notified of this occurance.
311	NEW 035	04/05/2014	Near Miss	1., Henty Transport 2.Buysen, John	Third Party	No	NEWCASTLE	Operations	Completed	John Buysen recieved a call from Henty Transport driver Ronald Warden 4 May @ 14:25hrs indicating he could not a green light for his scully. He indicated he had checked his probes and scully plug and that he had already commenced loading and the system shutdown. I told him not to proceed any further until I came to site. On inspection of his roadtanker compartment 1 was already full. The driver had only loaded 116 litres into compartment 1. We drained enough product from his compartment to allow the scully to activate. Each compartment that was loaded was dipped and the rest of his load was done under supervision. Henty Transport haver been notified of the near miss.
312	New 036	03/05/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 3/05/14 at approximately 13:00 whilst Removing the Hydrocarbon tin from the CPS unit a spill occurred of diesel approximately 5lts product to ground which was cleaned up with spill containment Pads.
322	New 037	05/05/2014	Near Miss	1., Hancock & Owen 2.Buysen, John	Third Party	No	NEWCASTLE	Operations	Completed	The fire pumps were started when a contrctor opened a valve cock to get water for some work he was doing in the tank bunds. Operations immediately investigated and shutdown the fire pumps.
323	New 038	13/05/2014	Near Miss	1.Riding, Aaron 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	At approximately 11:30am a Hills Tanker driver pushed the ESD instead of the deadman button while loading in the load gantry. The driver was being buddy trained by another experienced driver. Operational staff investigated immediately and found the ESD had been pushed by mistake and had been misguided by the experienced driver. The drivers were briefed on the consequence of pushing the ESD. The terminal ESD was reset and loading recommenced.

326	New 039	14/05/2014	Near Miss	1., Macinnes Transport 2.Buysen, John	Third Party	No	NEWCASTLE	Operations	Completed	At 5:30am 14 May 2014 a Macinnes Transport truck broke down in the load gantry, this was due to a failure of the clutch. The truck was removed from the load gantry by a heavy haulage tow truck. Bay 1 was out of action for 2.5 hours.
328	New 040	17/05/2014	Near Miss	1., J.L.Pierce 2.Buysen, John	Third Party	No	NEWCASTLE	Operations	Completed	Site Manager recieved a calll at 9:45am 17 May from J.L.Pierce driver indicating a gas strut had broken on load arm 2 bay 2. Site Manager attended site and locked out and tagged out arm. Driver was on site when the Site Manager arrived, the drivers explaination was that the truck was low, he asked for assistance from another driver to put the load arm onto the API adaptor and the gas strut broke.
329	NEW 041	21/05/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On the 21/05/14 a Hopes truck presented for loading and was unable to enter the gate due to a SLP expiration. It was then discovered that the details for the vehicle combination were incorrect, the truck that presented for loading is as follows: Rego -U21125 - Compartment Safe Fills - 8050,5750,8200 Rego -U21128 – Compartment Safe Fills – 8600,8100,8350,8350 The load card the driver had in his possession was NCL_HOP_07. This load card was incorrect and should have been NCL_HOP_01 NCL_HOP_07 is a non-existent Vehicle (on confirmation from Hopes Transport – Rob Hope) combination provided to Terminal staff via a SAP email of this equipment from SCOA, this information was obtained from Hopes Transport On investigation the vehicle particulars for NCL_HOP_07 are as follows Rego – U22125 - Compartment Safe Fills 8600,8100,8350,8350 Rego - U22128 - Compartment Safe Fills 8600,8100,8350,8350 There was a data entry error made by terminal staff by issuing NCL_HOP_07 to Vehicle Rego combination U21125 & Y21128 This should have been NCL_HOP_01
330	NEW 042	20/05/2014	Near Miss	1., J.L.Pierce 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	ON the 20/05/14 JLP Driver Nathan Guy loading BOL 106124- Approached Operations Staff advising he was having difficulty loading compartment 5 on his single trailer. It was found after investigation that the driver already had compartment 5 loaded on his BOL. Compartment 5 was empty once physical checks took place Further Investigation found that compartment 2 was loaded and the pre-set used was compartment 5, the driver experienced " Wrong arm Wrong compartment" Being a scheduled load the driver was unable to rectify his load and left the terminal one compartment short loaded.
331	NEW 043	22/05/2014	Near Miss	1., Henty Transport 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	On 22/05/14 at 12:00 hrs. a third party approached operations staff regarding the load process of Henty Driver Peter Graham, When Operations staff approached Peter, he was experiencing difficulty

										loading his rear trailer Rego 706QWM on BOL 106262. On Investigation it was found that Peter was attempting to load arm 3 on compartment 3, however arm 3 was parked on the load park not on compartment 3.Peter attempted to start loading, Arm 1 was connected to compartment 3 and was unable to load on arm 1 also. Peter has experienced "wrong arm wrong compartment" on 2 occasions in this instance and also attempted to start a parked arm, Operations staff intervened and finished the load off for this Driver.
335	New 044	26/05/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On the 26/05/14 at Approximately 10:30 hrs. it was noticed that the Toilet facilities in the drivers room had been vandalised. The Toilet roll holder was Jimmied open to allow theft of toilet paper. This has been an ongoing issue the theft of toilet paper, however the vandalism is a new occurrence. The toilet facilities are now in an out of order status.
336	NEW 045	27/05/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 27/05/14 at Approximately 12:30 Hrs. Whilst loading a slops truck, on disconnection the dry break coupling and API fitting on the slops truck failed to close causing a small spill < 5 Lts to ground, the spill was quickly contained and cleaned up using spill absorbent. On investigation it was found that Zip Tie cuttings were blocking the dry break coupling and API valve. On inspection of the Slops Tundish it was found that more Zip Tie cuttings were present, these cutting have made their way through the slops system causing the blockage resulting in spillage. Zip Tie cuttings are a by-product of electrical wiring during construction, the electrical contractors have been advised not to discard cuttings in the Slops system and to remove off site.
337	New 046	25/05/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On the 25th May 2014 during shipping operations tank NN3 was due for product quality testing before release to the load gantry. The product (Diesel) failed on conductivity with a result of 55 pS/m instead of the minimum allowance of 100 pS/M to be classed as on specification. Tank NN3 was Stadis 450 dosed at a rate of 3.6 lts / 1000mT. Tank NN2 was filling from the ship and a planned changeover to tank NN1 was to take place once NN2 reached safe fill. Due to tank NN3 being out of specification, tank NN1 was kept onto the load gantry for as long as possible prior to being shipped into to fulfil customer requirements. While tank NN2 was undergoing settling, tank NN1 commenced filling. This resulted in no product being available to go to market. Customer and carrier companies were informed of the short delay.
339	NEW 047	29/05/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 29/05/14 at approximately 13:55 Ian rich Asphalt worker - William Leyshon was spotted on the side access road of the terminal near tank NN3 talking on his mobile phone. When approached and informed of operations observations William Admitted to using his phone. When

										asked if he was aware of the site rules he commented yes he knew he shouldn't be on his phone William was instructed to immediately remove himself offsite.
340	NEW 048	30/05/2014	Incident	1., J.L.Pierce 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	On 30/05/14 at approximately 14:20 JLP Driver Adam Quinell was loading BOL 106720 in load bay 2 and moved his B double truck forward to load the rear trailer. Adam then proceeded to use the dry drain system on compartment 1, Adam noticed that the compartment was taking a long time to drain and removed the dry drain system from his compartment without closing his API Valve and had a spill to ground of approximately 50Lts. The Driver informed Operations of the spill he was instructed to dip compartment 1 and it was noted to be full. the Driver has returned a full compartment to the Terminal and failed to close compartment 1 prior to removing the dry drain. The spill was quickly contained by Operations staff and the rear trailer continued to load. Being that JLP load scheduled loads Operations had to force the load to complete on the fuels manager system.
342	NEW 049	03/06/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On the 3/06/14 at approximately 07:15hrs Operations staff were completing morning checks, part of this check is general inspection of the Drivers Room. It was noted that this morning the toilet roll holder has once again been vandalised, the locking mechanism has been "Jimmied" open and the toilet paper was stolen. This has occurred sometime between 07:15 02/06/14 and 07:15 03/06/14 this is the 2nd occurrence in 8 days.
343	NEW 050	03/06/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On the 3/06/14 at approximately 14:20 It was noted the toilet roll holder has once again been vandalised, the locking mechanism has been "Jimmied" open and the toilet paper was stolen. This has occurred sometime between 07:15 03/06/14 and 14:20 03/06/14 this is the 2nd occurrence today.
349	NEW 051	12/06/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 12/06/14 at approximately 10:20 Operations staff noted that the Puraceptor was overfilling. Upon inspection the Puraceptor lids were raised due to liquid backing up in the Puraceptor system, further inspection found that the Puraceptor actuator valve was in a closed position presumed from ESD resets due to Scada being upgraded and tested. All water releasing was stopped immediately and booms were deployed to the creek outfall as a precautionary measure.
355	New 052	20/06/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 20/06/14 at approximately 10:50 hrs. IOR Driver Donald Warden arrived onsite with a load of biodiesel to be unloaded into tank NN4. Upon arrival into bay 3 the driver uncapped one of his API caps and had a spill of approximately 20 lts to ground. On inspection the truck appears to have travelled from Sydney to Newcastle with the compartment on the truck open, however Still Capped. The driver indicated that the compartment valves were not checked prior to loading as he was "Top Loaded" The Spill was contained using spill booms and fibre absorbent.

356	NEW 053	25/06/2014	Near Miss	1., J.L.Pierce 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	On the 25/06/14 at Approximately 18:28 hrs. The on call Phone was rung by JLP driver Daniel Kozis explaining he had an invalid load number and was unable to load from Load Bay 2, and explained he had been trying for nearly an hour unsuccessfully. The Driver had placed several calls to Shell Scheduling to be rescheduled but loading attempts remained unsuccessful. The driver was requested to provide the following details: Equipment card used – N380031A Tanker Trailer rego Details: Prime Mover- Ac51TJ (PF381) A Trailer – V73553 (PS031) B Trailer – V73554 (PS032) The driver was then requested to provide details off his load authority as follows: Vehicle No – J38001BA Prime Mover – PF380 Trailer A – W36264 Trailer B - 36265 Upon inspection of the SAP file sent - 25180855 the file included details for the following tanker: Vehicle No – J38001BA Prime Mover – PF380 Trailer A – W36264 Trailer B - 36265 The driver was then told the card group details and load authority details provided by Shell did not match and he will not be able to load.
357	NEW 054	30/06/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 30/06/14 at Approximately 15:00 Hours Operation Staff went to the Mayfield 4 Wharf to assess the status of the Wharf Setup by Hancock & Owen, Upon arrival a large puddle of liquid was on the ground near the diaphragm pump and running into the drain basin on the wharf. Operations staff inspected the liquid and found it to be a water and Bio/ Diesel combination. Upon Inspection of the drain, a quantity of diesel was found floating on the water. H&O were instructed by operations to pump out and flush the drain to remove the fuel.
359	NEW 056	02/07/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 2/07/14 at approximately 16:00hours during shipping operations Circuits 6-8 (Tank Instruments) started tripping out on the circuit breakers causing loss of tank gauging, and shut the inlet actuator valve on the receiving tank and pressurising the wharf line back to the ship manifold. When noticed the ship was instructed to stop pumping immediately. Pumping resumed once the circuits were reset. On Discussion with Mike from Varec he was able to disable the logic for the actuator valve to shut on loss of instruments in case the circuits tripped out again, which occurred 5 more times in a couple of hours. Emerson were called and remote into site to adjust radars on tank NN5 and ODG was called in to look

										for electrical issues, A circuit breaker was replaced in the switch room. Once Interim repairs were carried out and the issues stabilised it was also noted that tank NN5 was short filled .
360	New 055	03/07/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 3/07/14 at approximately 10:00 hrs. it was noticed that the outlet gate valve on tank NN5 was leaking from the Valve Stem gland. The Gland was tightened up to seal the leak and spill pads were placed on the ground to absorb product spilled, the approximate product to ground was 10 Lts.
361	NEW 057	10/07/2014	Near Miss	1., J.L.Pierce 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	On 10/07/14 at approximately 22:23 hrs Received a call from JLP Driver Daniel Kosis indicating that he was loading shipment number 4904272 and was unable to load compartment 2 on his A trailer. Upon investigation in the data station logs it was found that "compartment 2 was not on order" Indicating that no order was placed from Shell SAP for Compartment 2.
365	NEW 058	19/07/2014	Near Miss	1., OneSteel 2.Buysen, John	Third Party	No	NEWCASTLE	Operations	Completed	Below is email wording from OneSteel. There has now been 2 reported incidents of security officer intimidation by tanker drivers en-route to Stolthaven. They verbally abuse the officers when the boom gates are down and when given directions to stop. The security officers are merely following OneSteel procedures and protocols around access control and are not going out of their way to make entry to Steelworks Road a difficult affair. I don't believe they are delayed any more than is necessary to control traffic movements around the gatehouse, and their aggressive behaviour is not going to grant them unimpeded access. I therefore I urge you to convey this message to all drivers and impress on them the need for cooperation and common courtesy when passing the gatehouse.
380	NEW 059	01/08/2014	Incident	1., Henty Transport 2.Buysen, John	Third Party	No	NEWCASTLE	Operations	Completed	As the roadtanker was entering the terminal on the external roadway, diesel was spilt onto the roadway from the prime movers running tanksfrom the fill nozzle on the running tank. The spill on the roadway was cleaned up immediately. The cap on the may have been loose or the breather pipe blocked pressurizing the running tank. The spill was approximately 5 litres.
381	NEW 060	07/08/2014	Incident	1.Riding, Aaron 2.Riding, Aaron	Employee	No	NEWCASTLE	Operations	Completed	On the 7/8/2014 it was noticed that there was a weep on a flange on the transfer line adjacent to the slops tundish. There was approximately 5 litres of product. The spill was cleaned up with spill pads. The blow back point was used to blow the line clear back to NN6 to remove all product from the line. There is no thermal relief on this line. We will continue to monitor this gasket.
382	NEW 061	08/08/2014	Incident	1.Riding, Aaron 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	During daily terminal checks there was a small weep noticed on the outlet actuator valve on Tank NN7. Upon further inspection of the weep, the bolts on the flange connecting pipe work were loose. the bolts were tightened up. The tank had been in service for a

										month
383	NEW 062	18/08/2014	Near Miss	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE	Operations	Completed	A random Site Emergency Evacuation exercise was conducted on 18 August at 10:00am. All personel onsite evacuated in a timely manner. There were findings that occurred during the Site Emergency Evacuation that need addressing. 1) Two contractors were working onsite under permit conditions had left site without signing out. 2) One of the contractors had not signed in at all. 3) There are two sign in books for site, a visitor sign in and contractor sign in book, these need to be picked up for roll call. 4) Personel working in construction huts need to remain in construction evacuation area and have radio contact with Emergency Controller.
386	NEW 063	04/09/2014	Near Miss	1.Riding, Aaron 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	Peter O'Neill from Hunter Petroleum loading for Glencore was undergoing a supervised load from the terminal with Aaron Riding. Peter is currently not competent to load unsupervised from the Terminal and during preloading procedures Peter activated the site ESD unknowly, Peter was intending on activating the "deadman Button" which is not in the same location as the ESD. Peter had been explained the functionality of all buttons and switches during his induction site tour. Because of the site ESD being activated loading was stopped for approximately 5 minutes to all loading bays. Peter has been locked out pending investigation.
387	NEW 064	04/09/2014	Near Miss	1., Hancock & Owen 2.Riding, Aaron	Third Party	No	NEWCASTLE	Operations	Completed	At approximately 13:30hrs H&O Contractor Brett Halton was found to be onsite within the terminal area without being logged into our contractors sign in register. Brett entered the terminal area via the construction area entrance. Brett was also not wearing mandatory site PPE (Hard Hat) and was also found to be in a permitted working area without being signed onto the permit. Brett has been Inducted onto site and is aware of site Policy/Procedure.
389	NEW 065	15/09/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	At approximately 14:00 hrs Fenrose liquid Haulage driver Aaron Thomas reported that his truck rego - L49207 Has broken down in load bay 3, The driver is making arrangements for the truck to be repaired / Started so that it can be moved. Elisa Nyguen at Glencore has been informed via a phone call and email that until the truck is able to move load bay 3 is unable to be utilised and there may be delays to loading for Glencore at the Terminal.
390	New 066	15/09/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	At 15:24 hrs the Site ESD alarm was activated. The Terminal was evacuated and persons accounted for. On investigation it was found to be load bay 4 ESD Button that was activated. Hopes Driver Kelvin Worboys Activated the Site ESD accidently, the ESD was reset and loading Operations recommenced once the all clear was given. Loading stopped for approximately 5-10 mins.
391	NEW 067	19/09/2014	Incident	1., J.L.Pierce 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	At approximately 15:00 JLP Driver Colin Williams was loading BOL 113168 in Load bay 1 whilst filling compartment 1 trailer Rego 719QXK - Safe fill 8390Lts. The

										trailer has a Scully overfill light illuminated on completion of Compartment 1, Greg then used the dry drain system to drain compartment 1 so that the scully light went out and once this occurred disconnected the drain dry system from his tanker and did not shut his manual compartment valve resulting in a spill of approximately 20lts to ground and on the driver. The driver then proceeded to use the eyewash safety shower and reported the incident to Operations. Operations temporarily closed load bay 1 to assess the conditions of the spill and clean up using spill absorbent pads, and refilling the eyewash unit. This driver has been locked out pending investigation.
392	NEW 068	19/09/2014	Near Miss	1., J.L.Pierce 2.McCartney, Nathan	Third Party	No	NEWCASTLE	Operations	Completed	At approximately 15:48 JLP driver Greg Dennis has entered load bay 2 to start the loading process and was found to have entered the terminal without being in possession of his hard hat, Contradicting the terminal site rules. Greg as an inducted driver is well aware of the conditions with wearing PPE whilst onsite. Greg has been locked out pending investigation.
393	NEW 069	23/09/2014	Near Miss	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	At approximately 20:30 a driver reported an incident with the Ricoh Load Authority Printer within the drivers room. Upon investigation it was found that the printer had a broken component within the paper feed; this has rendered the machine "out of use".
396	NEW 070	25/09/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	At Approximately 14:06 during discharge of the ship Global Spirit a provisions truck entered the declared hazardous zone to unload stores to the ship. A wharf attendant was asked to approach the stores truck and ask to turn off all electrics and wait for clearance from the shore officer, this request was denied by the truck driver, Stolthaven Shore officer immediately stopped discharged once this occurred. SNP security were then asked to become involved until the Shore officer spoke with the Ships Chief Officer. The Chief Officer of Global Spirit wanted to load the Stores onto the ship which was agreed upon by the Shore Officer and no Cargo operations would commence until the stores truck left the Hazardous zone, Cargo Operations resumed at 14:48 Hrs causing a delay of 42 minutes. SNP security have been asked to provide an incident report to the event that stores truck was allowed to enter the declared hazardous area.
407	NEW 071	12/10/2014	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE		Underway	During discharge of product from the Tamiat Navigator at 13:40hrs, as pressure was increased a weep from a gland on a ball valve appeared. The discharge was stopped immediately and the weep assessed. The gear box wheel was removed from the ball valve and the gland tightened. The gear box wheel was replaced and discharge commenced at 14:10hrs. There was a delay of 30 minutes. The weep was contained with a bucket and spill pads.
408	NEW 072	12/10/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Underway	On 12/10/14 at 17:45 hrs Macquarie valley fuels driver – Jeremy Hancock entered the terminal to load. Jeremy is not

										Authorised to load from the terminal unsupervised and Operations intervened to prevent Jeremy from loading. Upon inspection of this drivers loading status it was also noted that the driver also loaded unauthorised on 10/10/14 at 05:46 hrs The drivers responded that he was unaware of the terminal requirement for a load assessment to be conducted prior to unsupervised loading. The Terminal Manager was informed of this issue immediately, The driver has been locked out pending investigation.
409	NEW 073	12/10/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Underway	On 12/10/14 at approximately 15:30 IOR driver Brett Howe reported to Operations that he had ran over and damaged 2 drain tins in load bay 3. Brett has been instructed to inform IOR management to replace the damaged trays. Replacement trays have been put in load bay 3 to continue operations.
411	New 074	13/10/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Underway	On 13/10/14 at approximately 19:25 hrs during discharge of Tamiat Navigator emergency stop was given as a short strong storm blew over the wharf and the ship drifted approximately 10-15 meters off the berth the wharf hoses slipped in between the berth fenders and the ship. The terminal manager was initially called to be informed of what was known at that current point in time. Upon the Shore officers (Nathan McCartney) arrival to the berth it was found that the ship had drifted back into the berth and had partially crushed the two wharf stringers, the wharf attendants were instructed to move to a safe location and Security was informed to contact VTIC and report the incident. When the shore officer reached the security hut a call was made to VTIC and a request for Tugs and a ships Pilot were made to stabilise the ship and prevent the wharf hoses being further damaged by ship movement. Once the ship was stabilised the hoses were drained and blown clear of product and disconnected from the ship. The hoses were then sent offsite to be hydrostatically tested for integrity before any assessment can be made to recommence discharge
418	NEW 075	10/11/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Underway	On the 11/11 14 it was reported that a full set of skid marks were present from the truck waiting area of the terminal through load bay 4, upon investigation of the surveillance footage it was noted to be Walter Gardiner from the previous day loading at approximately 18:00 BOL 116625 from IOR transport. It appears that Walter had his trailer brakes locked up due to a lack of air and dragged his truck/ trailer to load bay 4 and loaded his A Trailer. Walter then proceeded to move his truck forward to load the B trailer and had further air issues could not load and exited the terminal.

Appendix C

Pipeline Integrity Test Report

Appendix C Pipeline Integrity Test Report

SYNERTEC

Form

Project / Department:	Newcastle Terminals	**Document:**	FRM499
Client:	Stolthaven	**Revision:**	1.03 - 17-AUG-2013

Document Title: **Pressure Test Certificate** No: # Mart #1

Project No: Stolthaven M120206 Date: 14/11/13

Description of pipe line: Mart Pipeline 300MB Location of Test: M4 to Terminal

Line No & Drawing Ref: 300-CS-1600, 300-CS-1001, 50-CS-1002

Test Carried out by : Stolthaven John Bajada, Sam Corbett

Test Medium (Water/Air/Gas) : Water

Test code / standard : ASME B31.3

Acceptance Criteria

Test Pressure: 24 bar / 2400kPa Test Duration: 4 hours

Test Temp (if required): Pressure Source : Hydrants (Town supply)

Test Equipment

Pressure Gauge / Transmitter No: Rigid Precision Test Gauge Serial # 9351

Calibration Cert Reference: 229-000 478

Temperature Transmitter/Thermometer Reference: NA

Comments: Visual inspection completed. See photos.

RESULTS

Interval	Time	Pressure / Temp
0 hr	6:45am	24 bar
2 hr	7:45am	24 bar
3 hr	8:45am	24 bar
4 hr	9:45am	24 bar

Test : Pass (C or DNC)

Signed : Sam Corbett

Witnessed :

Date : 14/11/13

Hancock & Owen Services

Specialising in Fuel Industry System, Construction and Maintenance

Hancock & Owen Services Pty Ltd ABN 80 002 973 613

38 Parker Street
Carrington NSW 2294

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13th November 2014

Stolthaven Australia Pty Ltd
Lot 2 Steelworks Road
Mayfield NSW 2304

Attention: John Buysen

Dear John,

This letter is to confirm that a Pipeline Pressure Test was conducted at the Stolthaven Newcastle Terminal on the Wharf line on the 9th November 2014.

The test was conducted at 9.45am and was testing over a 1 hour period.

Testing Pressure was 1500 kPa.

Kind Regards

Russell Hancock
Director